

**THE DESIGNATION AND STRINGENT PRUDENTIAL REGULATION
OF SYSTEMICALLY IMPORTANT BANKS IN SOUTH AFRICA**

by

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DECLARATION OF ORIGINALITY

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DEDICATION

I dedicate this thesis to my late Parents, ***Mr Monyane Lichaba*** and ***Mrs Malisebo Lichaba***, whose love and inspiration endure forever.

“I will never forget your precepts, for by them you have preserved my life.”

Psalm 119:93

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I come from humble beginnings in the remote rural area of Lesotho. Growing up as a bibliophile and follower of legal content on the radio inspired me to pursue undergraduate and postgraduate law studies. My doctorate is the outcome of a long, arduous academic research journey that offered me valuable insights and great contentment. It marks the beginning of yet another much anticipated time of opportunity for development and growth in knowledge.

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ABSTRACT

The designation and regulation of systemically important banks is a recent subject of ongoing global research dedicated to analyse measures designed to address the “Too-Big-To-Fail” conundrum of systemically important financial institutions associated with systemic risk and moral hazard. This approach is incorporated in the Financial Stability Board SIFI Framework, which is well-recognised as part of financial stability reforms by the G-20 after the 2008 Global Financial Crisis. To implement the SIFI Framework in the context of banking regulation, the Basel Committee on Banking Supervision issued the G-SIB Framework in 2011, updated it in 2013 and 2018, thereby establishing an assessment methodology for identification of banks that are systemically relevant at a global level and imposing an additional loss absorbency requirement. In 2012, the Basel Committee extended this Framework to a domestic financial system by issuing the Basel D-SIB Framework. An overhaul of legislative frameworks for the implementation of the Basel D-SIB Framework is in progress in G-20 jurisdictions. In South Africa, it was implemented in 2013 through the amendment of the Banks Act of 1990 and revised in 2019 to give effect to the relevant provisions of the Financial Sector Regulation Act 9 of 2017. Accordingly, this research reviews the consistent implementation of the Basel D-SIB Framework assessment methodology and the Higher Loss Absorbency requirement, as well as other appropriate prudential requirements, within South Africa’s financial sector specificities. Insights are drawn from the United States and also from the Netherlands as an EU Member State. Recommendations are accordingly made for South Africa in view of the guidance taken from best international practices and standards. The research further interrogates the available legal remedies for challenging SIFI-bank designation and prudential regulation.

Key words: Too-Big-To-Fail financial institutions; Systemically important financial institutions; Banks; Domestic systemically important banks; SIFI-bank designation; D-SIB identification; stringent prudential regulation; South Africa.

LIST OF ACRONYMS

ABS	Asset-Backed Securities
AFM	Authority for the Financial Markets
AIG	American International Group
ASF	Available Stable Funding
AT1	Additional Tier 1
BCBS	Basel Committee on Banking Supervision
BCPs	Basel Core Principles for Effective Banking Supervision
BHCs	Bank Holding Companies
BIS	Bank for International Settlements
BRRD	Bank Recovery and Resolution Directive
BSD	Bank Supervision Department
CCAR	Comprehensive Capital Analysis and Review
CCvB	Capital Conservation Buffer
CCyB	Countercyclical Capital Buffer
CCPs	Central Counterparties
CCR	Counterparty Credit Risk
CDOs	Collateralised Debt Obligations
CFPB	Consumer Financial Protection Bureau
CET1	Common Equity Tier 1
CFR	Code of Federal Regulations
CFTC	Commodities Futures Trading Commission
CGFS	Committee on the Global Financial System
CJEU	Court of Justice of the European Union
CLAR	Comprehensive Liquidity Analysis Review
CLF	Committed Liquidity Facility
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payment and Settlement Systems
CRD IV	Capital Requirements Directive IV
CRD V	Capital Requirements Directive V
CRR	Capital Requirements Regulation
CRR II	Capital Requirements Regulation II

DFAST	Dodd-Frank Act Stress Testing
DGS	Deposit Guarantee Scheme
DNB	De Nederlandsche Bank
D-SIBs	Domestic Systemically Important Banks
DSTI	Debt Service-to-Income
EBA	European Banking Authority
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EGRRCPA	Economic Growth, Regulatory Relief, and Consumer Protection Act
EIOPA	European Insurance and Occupational Pensions Authority
ESAs	European Supervisory Authorities
ESCB	European System of Central Banks
ESFS	European System of Financial Supervision
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FAIS	Financial Advisory and Intermediary Services Act
FBOs	Foreign Banking Organizations
FDIC	Federal Deposit Insurance Corporation
FHFA	Federal Housing Finance Agency
FRRC	Financial Regulatory Reform Committee
FSAP	Financial Sector Assessment Program
FSCA	Financial Sector Conduct Authority
FSC	Financial Stability Committee
FSB	Financial Stability Board
FSCF	Financial Stability Contingency Forum
FSF	Financial Stability Forum
FSLAB	Financial Sector Laws Amendment Bill
FSOC	Financial Stability Oversight Committee
GAO	Government Accounting Office
GALA	General Administrative Law Act
GDP	Gross Domestic Product

GFC	Global Financial Crisis
GSEs	Government-Sponsored Enterprises
G-SIBs	Global Systemically Important Banks
G-SIIs	Global Systemically Important Institutions
HLA	Higher Loss Absorbency
HQLA	High Quality Liquid Assets
IASB	International Accounting Standards Board
IAIS	International Association of Insurance Supervisors
ICAAP	Internal Capital Adequacy Assessment Program
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
LCR	Liquidity Coverage Ratio
LGD	Loss-Given-Default
LISCC	Large Institution Supervision Coordinating Committee
LTD	Long-Term Debt
LTI	Loan-to-Income
LTV	Loan-to-Value
MBS	Mortgage-Backed Securities
MDA	Maximum Distributable Amount
MOU	Memorandum of Understanding
MPOE	Multiple-Point-of-Entry
MREL	Minimum Requirements for Own Funds and Eligible Liabilities
NCR	National Credit Regulator
NCUA	National Credit Union Administration
NSFR	Net Stable Funding Ratio
OCC	Office of the Comptroller of the Currency
OECD	Organisation for Economic Co-operation and Development
OFR	Office of Financial Research
O-SIIs	Other Systemically Important Institutions
OTC	Over-the-Counter
OTD	Originate-to-Distribute
OTS	Office of the Thrift Supervision
PA	Prudential Authority

PAJA	Promotion of Administrative Justice Act
QFCs	Qualified Financial Contracts
RCAP	Regulatory Consistency Assessment Programme
RSF	Required Stable Funding
RWAs	Risk-Weighted Assets
SAMOS	South African Multiple Option Settlement
SARB	South African Reserve Bank
SCB	Stress Capital Buffer
SCCL	Single Counterparty Credit Limit
SEC	Securities and Exchange Commission
SHCs	Securities Holding Companies
SIBs	Systemically Important Banks
SIFIs	Systemically Important Financial Institutions
SLHCs	Savings and Loan Holding Companies
SMEs	Small and Medium-sized Enterprises
SPV	Special Purpose Vehicle
SPOE	Single-Point-of-Entry
SREP	Supervisory Review and Evaluation Process
SRB	Single Resolution Board
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
SyRB	Systemic Risk Buffer
TARP	Troubled Asset Relief Program
TBTF	Too Big-To-Fail
TEU	Treaty on the European Union
TFEU	Treaty on the Functioning of the European Union
TLAC	Total Loss-Absorbing Capacity
UK	United Kingdom
US	United States
USD	United States Dollar

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CHAPTER ONE

THE “TOO-BIG-TO-FAIL” CONUNDRUM AND SUBSEQUENT INTERNATIONAL FINANCIAL REGULATORY REFORMS

1.1 The emergence of Too-Big-To-Fail (TBTF) financial institutions

Over the course of several decades, the global financial system saw the emergence and rise of the phenomenon of so-called “Too-Big-To-Fail” (TBTF) financial institutions.¹ Simply put, TBTF financial institutions are giant financial conglomerates that have over the years come to be regarded as being too big to be allowed to fail because their exit from the financial system would cause significant disruption due to their unique characteristics: a very large size, high interconnectedness and complexity.²

¹ The concept of a financial institution being TBTF dates back a few decades ago but was popularised with the financial distress and near-collapse of Continental Illinois National Trust and Trust Company (Continental Illinois), which was then one of the largest banks in the United States. For this, see Nurisso GC *et al* (2017) “The 1970s origins of Too Big to Fail” available at <https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentary/2017-economic-commentaries/ec-201717-origins-of-too-big-to-fail.aspx> (accessed 19 August 2016). Steward McKinney coined the concept of TBTF by referring to Continental Illinois as a “wonderful” and “too-big-to-fail” bank when the former US Comptroller of the Currency testified before Congress that the bank could not be allowed to fail to avoid systemic crisis. According to Conover, it was necessary to prevent the demise of Continental Illinois to avoid the possibility of a nation-wide or international financial crisis. For this, see *Inquiry into Continental Illinois Corp. and Continental Illinois National Bank: Hearings before the Subcommittee on Financial Institutions Supervision, Regulation, and Insurance of the Committee on Banking, Finance, and Urban Affairs, House of Representatives, ninety-eleventh Congress, second session, September 18, 19 and October 4, 1984* available at <https://fraser.stlouisfed.org/title/inquiry-continental-illinois-corp-continental-illinois-national-bank-745> (accessed 31 May 2016); See further, O’Hara M *et al* (1990) “Deposit insurance and wealth effects: the value of being “Too Big to Fail” *XLV The Journal of Finance* 1587; Shull B “Too big to fail in financial crisis: motives countermeasures, and prospects” Levy Economics Institute of Bard College Working Paper June 2010 available at <https://www.econstor.eu/bitstream/10419/57000/1/629700370.pdf> (accessed 19 August 2016); Kaufman GG (2003) “Too big to fail in the U.S. banking: quo vadis” available at <https://www.rbnz.govt.nz/-/media/project/sites/rbnz/files/events/27apr2004/27apr04-kaufman1.pdf> (accessed 31 May 2016); Wall LD (2016) “Ending too big to fail: Lessons from Continental Illinois” available at <https://www.frbatlanta.org/cenfis/publications/notesfromthevault/1604> (accessed 22 August 2016); Gup EB “What does Too Big to Fail mean?” – Chapter 2 – In Gup BE (Ed.) (2004) *Too Big to Fail: Policies and practices in government bailouts* 30.

² Bernanke states that “A too-big-to-fail firm is one whose size, complexity, interconnectedness, and critical functions are such that, should the firm go unexpectedly into liquidation, the rest of the financial system and the economy would face severe adverse consequences”. For this, see Statement by Ben. S Bernanke, Chairman, Board of Governors of the Federal Reserve, on *Causes of the recent financial and economic crisis before the Financial Crisis Inquiry Commission* Washington D.C. September 2, 2010 available at <https://www.federalreserve.gov/newsevents/testimony/bernanke20100902a.htm>

According to Nurisso and Prescott, the origin of TBTF financial institutions dates back to the seventies³ with the advent of a massive wave of consolidation of financial services following an era of deregulation of financial markets across many countries.⁴ As explained by Delong, the financial services industry predominantly converged through acquisitions and sectoral, cross-sectoral and cross-jurisdictional mergers, primarily in pursuit of economies of scale, profit maximisation and diversification of financial services and products.⁵ Taylor further points out that the deregulation of the financial service sector “blurred the boundaries” between banks, securities firms and insurance companies.⁶ This means that banks increasingly engaged in the securities

(accessed 31 May 2016).

³ Nurisso GC *et al* (2017) “The 1970s origins of Too Big to Fail” available at <https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentary/2017-economic-commentaries/ec-201717-origins-of-too-big-to-fail.aspx> (accessed 19 August 2016).

⁴ Group of Ten *Consolidation in the financial sector Summary Report* (January 2001) available at <https://www.imf.org/external/np/g10/2001/01/eng/pdf/FSCSsum.pdf>

(accessed 31 May 2016); DeYoung R *et al* (2009) “Mergers and acquisitions of financial institutions: A review of post-2000 literature” 36 *Journal of Financial Services Research* 87 at 88.

⁵ Delong GL (2002) “Focusing versus diversifying bank mergers: analysis of market reaction and long-term performance”

available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=256164 (accessed 6 July 2016) states that a firm exhibits economies of scale when a joint production of goods is cheaper than producing goods separately. See further, Saunders A *et al* (2012) “Financial architecture, systemic risk and universal banking” 24 *Financial Markets and Portfolio Management* 39 at 50; Claessens S (2002) “Benefits and costs of integrated financial services provision in developing countries” available at https://www.researchgate.net/publication/228608221_Benefits_and_Costs_on_Integrated_Financial_Services_Provision_in_Developing_Countries (accessed 22 August 2016); Kenyon-Slade S (2004) *Mergers and takeovers in the US and UK: law and practice* at 15 defines a merger as the consolidation of more than one ‘constituent corporations’ into one corporation that is one of the merging corporations.

⁶ Taylor M (2009) “‘Twin Peaks’ revisited... a second chance for regulatory reform” Centre for the Study of Financial Innovation (September 2009) available at

<https://static1.squarespace.com/static/54d620fce4b049bf4cd5be9b/t/55241044e4b03769e017208a/1428426820095/Twin+Peaks+Revisited.pdf> (accessed 31 May 2016); Taylor M “Twin peaks”: a regulatory structure for the new century” Centre for the Study of Financial Innovation December 1995 available at

<https://static1.squarespace.com/static/54d620fce4b049bf4cd5be9b/t/55241159e4b0c8f3afe1d11e/1428427097907/Twin+Peaks+A+regulatory+structure+for+the+new+century.pdf>

(accessed 24 November 2016).

activities of the capital markets and securities firms,⁷ which in turn, commenced certain banking activities.⁸

The integration of institutions that performed different financial services gave rise to large financial conglomerates, typically consisting of a bank, a securities firm and an insurance company.⁹ Further, interbank mergers and acquisitions created outsized banks due to their amplified asset-size.¹⁰ Wilmarth points out that “super” mergers and acquisitions, being mergers between very large financial institutions, exponentially increased the size and complexity of financial institutions.¹¹ Also, the integrated

⁷ Fein ML (2020) *Securities activities of banks* 4th ed 1.02, 4.01-402; Kurucz RM *et al* (1998) “Securities and investment activities of banks” 53 *The Business Lawyer* 1145-1154; Kurucz RM *et al* (1988) “Securities and investment activities of banks” 43 *The Business Lawyer* 1107-1121; Kurucz RM *et al* (1991) “Securities and investment activities of banks” 46 *The Business Lawyer* 1265-1274; English WB *et al* (1994) “Profits and balance sheet developments at U.S. commercial banks in 1993” 80 *Federal Reserve Bulletin* 483; Berger AN *et al* (1994) “Did risk-based capital allocate bank credit and cause a “credit crunch” in the United States?” 26 *Journal of Money, Credit & Banking* 585 at 586-589; Whalen G “The securities activities of the foreign subsidiaries of U.S. banks: Evidence on risks and returns” Office of the Comptroller of the Currency Economics Working Paper (February 1998) available at <https://www.occ.treas.gov/publications-and-resources/publications/economics/working-papers-archived/pub-econ-working-paper-1998-2.pdf> (accessed 19 June 2016).

⁸ Allen F *et al* (1998) “The theory of financial intermediation” 21 *Journal of Banking & Finance* 1461; Allen F *et al* (2001) “What do financial intermediaries do” 25 *Journal of Banking and Finance* 271; Ramasastry AS *et al* (2006) “Is the role of banks as financial intermediaries decreasing? A helicopter tour” 41 *Economic and political Weekly* 1063 at 1064; The Federal Reserve of New York The evolution of banks and financial intermediation Economic Policy Review July 2012 available at <https://www.newyorkfed.org/medialibrary/media/research/epr/2012/EPRvol18n2.pdf> (19 June 2016); Edwards FR *et al* “The decline of traditional banking: implications for financial stability and regulatory policy National Bureau of Economic Research Working paper series July 1995 available at <https://ideas.repec.org/a/fip/fednep/y1995ijulp27-45nv.1no.2.html> (accessed 19 June 2016); Congress of the United States: a CBO study – The changing business of banking: A study of failed banks from 1987 to 1992 Congressional Budget Office June 1994 available at <https://www.cbo.gov/sites/default/files/103rd-congress-1993-1994/reports/doc30.pdf> (accessed 18 June 2016); Emmons WR *et al* “Twin information revolutions and future of financial intermediation” In Amihud Y and Miller G (2009) *Bank mergers and acquisitions* 37 at 41-47.

⁹ Amel D *et al* (2000) “Consolidation and efficiency in the financial sector: A review of the international evidence” available at <https://www.federalreserve.gov/pubs/feds/2002/200247/200247pap.pdf> (accessed 6 July 2016); Group of Twenty *The structure of financial supervision – approaches and challenges in a global marketplace* (2008) available at http://group30.org/images/uploads/publications/G30_StructureFinancialSupervision2008.pdf (accessed 22 August 2016); Saunders A *et al* (2009) “Enhanced regulation of large, complex financial institutions” 18 *Financial Markets, Institutions and Instruments* 153.

¹⁰ Jones KD *et al* (2009) “The effect of industry consolidation and deposit insurance reform on the resiliency of the U.S. bank insurance fund” 5 *Journal of Financial Stability* 57; Ruding HO (2002) “The transformation of the financial services industry” Financial Stability Institute (March 2002) available at <http://www.bis.org/fsi/fsipapers02.pdf> (accessed 6 July 2016); Group of Thirty *Financial reform: A framework for financial stability* (January 2009) available at http://group30.org/images/uploads/publications/G30_FinancialReformFrameworkFinStability.pdf (accessed 31 May 2016).

¹¹ Wilmarth AE (2009) “The dark side of universal banking: financial conglomerates and the origins of the subprime financial crisis” 41 *Connecticut Law Review* 963; See further, Laeven L *et al* “Bank size and systemic risk” IMF Discussion Note (May 2014) available at

financial sector accelerated greater inter-linkages among financial institutions,¹² while cross-jurisdictional mergers created negative cross-border spill-over effects.¹³ A salient feature of the convergence of the various financial services was the emerging practice of “universal banking” in terms of which financial institutions offered a wide range of complex and risky financial services and products.¹⁴

During the period of wide-scale financial deregulation in the 1990s,¹⁵ financial institutions established a heavy presence in certain toxic financial activities of the capital markets amid lax risk-management standards and light-touch regulation.¹⁶ These complex and risky financial products, over time, caused excessive credit expansion in the face of the market upswing, and thus, financial institutions became highly leveraged.¹⁷ The securities activities of the financial markets included new services and products such as securitisation¹⁸ and over-the-counter (OTC)

<https://www.imf.org/external/pubs/ft/sdn/2014/sdn1404.pdf> (accessed 22 August 2016).

¹² Boot WA *et al* “The accelerating integration of banks and markets and its implication for regulation” Amsterdam Center for Law & Economics Working Paper (March 2011) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1108484 (accessed 19 June 2016).

¹³ Allen F *et al* (2011) “Cross-border banking in Europe: implications for financial stability and macroeconomic policies” available at <https://cadmus.eui.eu/handle/1814/20202> (accessed 19 June 2016) states that negative spill-over effects may arise in cases where a home jurisdiction with internationally active banks is negatively affected by the regulatory policies of the foreign jurisdiction arising from its exposure to that jurisdiction.

¹⁴ Carnell RS *et al* (2009) *The law of banking and financial institutions* 4th ed 27-29, 465-470; Benston GJ (1994) “Universal banking” 8 *Journal of Economic Perspectives* 121 at 122; Wilmarth AE (2000) “The transformation of the U.S. financial services industry, 1975-2000: competition, consolidation, and increased risk” 2000 *University of Illinois Law Review* 215.

¹⁵ Group of Ten *Consolidation in the financial sector Summary Report* (January 2001) available at <https://www.imf.org/external/np/g10/2001/01/eng/pdf/FSCSsum.pdf> (accessed 31 May 2016) notes that there was a high-level of mergers and acquisitions during the 1990s that saw the emergence of massive and complex financial institutions.

¹⁶ Congress of the United States A CBO Study - *The changing business of banking: A study of failed banks from 1987 to 1992* Congressional Budget Office (June 1994) available at <https://www.cbo.gov/sites/default/files/103rd-congress-1993-1994/reports/doc30.pdf> (accessed 18 June 2016); Merkley J *et al* (2011) “The Dodd Frank Act restrictions on proprietary trading and conflicts of interest: New tools to address evolving threats” 48 *Harvard Journal on Legislation* 515; The Volker Rule available at http://www.skadden.com/newsletters/FSR_The_Volcker_Rule.pdf (accessed 8 June 2016).

¹⁷ Avgouleas E (2009) “The global financial crisis, behavioural finance and financial regulation: in search of a new orthodoxy” 9 *Journal of Corporate Law Studies* 23 at 37.

¹⁸ Securitisation entails the originate-to-distribute model (OTD model), which packages and splits mortgage loans into tranches that are rated by credit risk agencies for the purposes of distribution to investors by a Special Purpose Vehicle (SPV). For this, refer to Boot AWA *et al* “Commercial banking and shadow banking: The accelerating integration of banks and markets and its implications for regulation” Washington University, Saint Louis – John M. Olin School of Business Working Paper August 2013 available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318623 (accessed 18 June 2016); Duffee G (2009) “Moral hazard and adverse selection in the originate-to-distribute model of bank credit” 56 *Journal of Monetary Economics* 744. In contrast to the traditional intermediation role involving the careful screening of borrowers by banks and the resultant loss-absorption in case of the default risk,

derivatives,¹⁹ which elevated “shadow banking” and regulatory arbitrage, given that these new services and products were initially unregulated.²⁰

Financial conglomeration occurred in most countries across the globe but for purposes of this thesis the focus will fall on the deregulation developments in the United States (US) and the European Union (EU) as it is in these two jurisdictions where some of the largest financial conglomerates operate and where the most influential developments relating to TBTF institutions appeared to occur.

securitisation dis-incentivised banks from being vigilant because this risk was shifted to oblivious investors. For this, see Allen F *et al* (2009) “An overview of the crisis: causes, consequences and solutions” available at

<http://apps.eui.eu/Personal/Carletti/IRF-Overview-Allen-Carletti-26Nov09-final.pdf> (accessed 22 August 2016);

¹⁹ Morris CR (2008) *The two trillion dollar meltdown: easy money, high rollers and the great credit crash* 1 Davidson A *et al* (2003) *Securitization: restructuring and investment analysis* 3; Culp CL (2004) 1st ed. *Risk transfer: derivatives in theory and practice* 1. A derivative transaction is defined as a financial contract the value of which is based on an underlying financial asset. For this definition, see DeYoung *et al* (2004) “Noninterest income and financial performance at U.S. commercial banks” 39 *Financial Review* 101; De Nicolo G *et al* (2002) “Systemic risk and financial consolidation: are they related?” 26 *Journal of Banking & Finance* 861. A derivative transaction is designed to transfer the credit risk from one party to another with respect to a specified underlying debt obligation. For instance, an OTC derivative transaction such as a credit default swap (CDS) is directly traded between the contracting parties, and it transfers the credit risk of mortgage defaults to insurance companies. For this, refer to Mengle D (2007) “Credit derivatives: an overview” 92 *Economic Review* 1; Figlewski S “Derivatives risks, old and new” New York University, Leonard N. Stern School Finance Department Working Paper Series January 1997 available at

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1297084 (accessed 2 June 2016); Abken PA (1994) “Over-the-counter financial derivatives: risky business” 79 *Economic Review* 1 at 5-11; Huang PH (2000) “A normative analysis of new financially engineered derivatives” 73 *Southern California Law Review* 471 at 478-79; Smith M (2017) “A privatized approach to derivatives regulation: the CPMI-IOSCO’s proposed unique transaction identifier scheme and its practical effects on transparency and regulatory arbitrage” 45 *Georgia Journal of International & Comparative Law* 411 at 422; Hudson A (2000) *Modern financial techniques, derivatives and law* 7.

²⁰ FSB *Shadow banking: strengthening oversight and regulation – Recommendations of the Financial Stability Board* (October 2011) available at

https://www.fsb.org/wp-content/uploads/r_111027a.pdf?page_moved=1

(accessed 2 June 2016); FSB *Strengthening oversight and regulation of shadow banking – Policy framework for strengthening oversight and regulation of shadow banking entities* (August 2013) available at

https://www.fsb.org/wp-content/uploads/r_130829c.pdf (accessed 2 June 2016). In the stated documents, the FSB defines shadow banking as “credit intermediation involving entities and activities outside the regular banking system”. Regulatory arbitrage is the migration of regulated activities to a less stringently regulated sector within a group for purposes of circumventing the capital requirements. For this, see Laas D *et al* (2017) “Basel III versus solvency II: an analysis of regulatory consistency under the new capital requirements” 84 *The Journal of Risk and Insurance* 1231 at 1232.

1.2 Deregulation of the US financial system and its effect on financial conglomeration and TBTF

In the US, *the Banking Act of 1933* (commonly known as *the Glass-Steagall Act*) for many years prohibited the affiliation of commercial banks and securities firms.²¹ However, this prohibition came to be viewed as too restrictive and in 1987 the *Permissible Activities by Board Order* of the US Federal Reserve Bank²² permitted a restricted engagement of commercial banks in securities activities.²³ Eventually the *Financial Services Modernization Act of 1999* (popularly referred to as the *Gramm-Leach-Bliley Act*) repealed *the Glass-Steagall Act*, and became the main statute that deregulated the US financial markets.²⁴ The abolition of *the Glass-Steagall Act* was followed by the amendment of the *Bank Holding Company Act of 1956*²⁵ (Bank Holding

²¹ Glass-Steagall Act – Pub. L. 73-66; See further, Dale R (1990) “Glass-Steagall and US banks’ securities activities” 58 *Journal of International Banking* 321; Sherman M (2009) “A short history of financial deregulation in the United States” available at <http://cepr.net/documents/publications/dereg-timeline-2009-07.pdf> (accessed 7 July 2016); Komai A *et al* “A brief history of regulations regarding financial markets in the United States” National Bureau of Economic Research September 2009 available at <https://www.nber.org/papers/w17443.pdf> (accessed 7 July 2016); Narayanan PR *et al* (2002) “Welfare effects of expanding banking organisation opportunities in the securities arena” 42 *Quarterly Review of Economics and Finance* 505 at 506-13; Robbins L (1934) *The Great Depression* 30-72; Eichengreen B *et al* “The Great Depression as a credit boom gone wrong” BIS Working paper September 2003 available at <http://www.bis.org/publ/work137.pdf> (accessed 14 June 2016); Willis HP *et al* (1934) *The banking situation: American post-war problems and developments* 97-118, 535-633; FDIC History of the eighties: lessons for the 80s available at <https://www.fdic.gov/bank/historical/history/>(accessed 14 June 2016).

²² See paragraph 3.2 for discussion on the establishment and role of the US Federal Reserve Bank.

²³ In *the Permissible Activities by Board Order of 1987*, the Federal Reserve Bank established the “Section 20 subsidiaries” that were permitted to engage in debt underwriting and equity securities to a limited extent. This Order lifted some of the restrictions which were imposed by sections 23A, 16, 20, 21 and 32 of the Banking Act of 1933 that were termed as the Glass Steagall Act separating the commercial and investment banking. Refer to *Permissible Activities by Board Order (Section 4(c)(8) of the BHC Act)* available at <https://www.federalreserve.gov/publications/files/3000p5.pdf> (accessed 7 July 2016). See further, *Decision of the Comptroller of the Currency on the application by Zions First National Bank, Salt Lake City, Utah to commence new activities in an operating subsidiary* December 11, 1997 available at <https://www.occ.gov/news-issuances/news-releases/1997/nr-occ-1997-110a.pdf> (accessed 7 July 2016).

²⁴ Gramm-Leach-Bliley Act of 1999 – Pub. L. 102-106; See further, William J. Clinton J Statement on signing the Gramm-Leach-Bliley Act (November 1999) available at <https://www.presidency.ucsb.edu/documents/statement-signing-the-gramm-leach-bliley-act> (accessed 7 July 2016).

²⁵ The Bank Holding Company Act of 1956 – Pub.L 84-511; See further, Bhatia AV “Consolidated regulation and supervision in the United States IMF Working Paper January 2011 available at <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Consolidated-Regulation-and-Supervision-in-the-United-States-24607> (accessed 7 July 2016); *Permissible securities activities under commercial banks under Glass-Steagall Act (GSA) and Gramm-Leach Bliley Act (GLBA) Congressional Research Service* (April 2010) available at

Company Act) in 1987 by *the Competitive Equality Banking Act*, effectively authorising bank holding companies (BHCs) to own subsidiaries of banks, investment banks and insurance companies.²⁶

The integration of these financial services by Wall Street financial firms mainly occurred between 1999 to 2001.²⁷ However, Jones observes that the deregulation era actually took place throughout the period of 1990 to 2005 and saw an enormous increase of the size of the biggest US banks, resulting in a significant decline of small banks and the emergence of a number of huge financial conglomerates.²⁸ For instance, the first “super-merger” was the merger between Citigroup, a US bank holding company, and Travelers, a financial conglomerate that comprised insurance and securities firms, and which led to the formation of Citigroup Inc. in 1998.²⁹ Other subsequent major consolidation trends were common.³⁰ The (then) renowned US financial conglomerates included the Bank of America Corporation, JP Morgan Chase, Citigroup Inc., Goldman Sachs, Lehman Brothers Holdings Inc., Morgan Stanley, the American International Group (AIG), Bear Stearns, Merrill Lynch and Wachovia.³¹

https://www.everycrsreport.com/files/20100412_R41181_1c1c7fa3b392d2e53a6a83206e7b3907bca9b857.pdf (accessed 7 July 2016).

²⁶ The Competitive Equality Banking Act of 1987 available at

<https://fraser.stlouisfed.org/title/competitive-equality-banking-act-1987-1028> (accessed 7 July 2016).

²⁷ Federal Reserve System *Order approving the merger of bank holding companies* available at

<https://www.federalreserve.gov/boarddocs/press/bhc/2001/20010813/attachment.pdf>

(accessed 8 June 2016); Hechinger J (1999) “Fleet Financial agreed to acquire BankBoston in stock transaction” *The Wall Street Journal* (March 1999) available at

<https://www.wsj.com/articles/SB921451116514441290> (accessed 8 June 2016); The history of JPMorgan & Chase available at

[https://www.jpmorganchase.com/about/our-](https://www.jpmorganchase.com/about/our-history#:~:text=We%20trace%20our%20roots%20to,Inc.%2C%20Robert%20Fleming%20Holdings%2C)

[history#:~:text=We%20trace%20our%20roots%20to,Inc.%2C%20Robert%20Fleming%20Holdings%2C](https://www.jpmorganchase.com/about/our-history#:~:text=We%20trace%20our%20roots%20to,Inc.%2C%20Robert%20Fleming%20Holdings%2C) (accessed 8 June 2016); Merrick A “Firststar to buy U.S. Bancorp in stock swap valued at \$18.9billion” *The Wall Street Journal* October 2000 available at

<https://www.wsj.com/articles/SB970659371702177114> (accessed 8 June 2016).

²⁸ Jones KD *et al* (2009: 57 at 58).

²⁹ Wilmarth AE (2013) “Citigroup: a case study in managerial and regulatory failures” 47 *Indiana Law Review* 60.

³⁰ Berger AN *et al* (1999) “The consolidation of the financial services industry: causes, consequences and implications for the future” 23 *Journal Banking and Finance* 135 at 138-140.

³¹ DeYoung R *et al* (2004) “Noninterest income and financial performance at U.S. commercial banks” 39 *The Financial Review* 101.

1.3 Deregulation of the EU financial system and its effect on conglomeration and TBTF

In the EU, the deregulation of financial markets was effected by *the Second Banking Directive*, which during 1989, introduced a single banking licence for EU financial institutions and authorised the integration and harmonisation of the EU banking sector and financial markets.³² Large-scale consolidation of EU financial institutions, including “bancassurance” (affiliating banks and insurance companies) occurred during the deregulation period in the EU.³³

Some of the “super-mergers” that occurred in the EU during its deregulation period took place in the United Kingdom (UK), and included Lloyds-TSB and Royal Bank of Scotland-National Westminster while the mergers of BNP-Paribas, Société Générale and Credit Agricole-Lyonnais took place in France, and the largest merger between two Swiss banks produced the USB Group AG, based in Switzerland.³⁴ During this time there was also a takeover of Bankers Trust (which was the eighth largest US financial institution) by the German Bank, Deutsche Bank, as well as the acquisitions of First Boston and Donaldson, Lufkin & Jenrette (US investment banks) by a Swiss

³² Second Council Directive of 15 December 1989 on the coordination of laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions and amending Directive 77/780/EEC available at

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31989L0646&from=EN>

(accessed 27 May 2016); See further, Hofmann C (2017) “Global systemically important banks (GSIBs): operate globally, regulated nationally?” 2 *Journal of Business Law* 155 at 164 notes that the single banking licence, otherwise referred to as the “Single European Pass”, allows EU Member States’ banks that are authorised in the home countries the access to operate throughout the EU by opening branches and providing cross-border financial services without prior authorisation by host Member States.

³³ Graaf F *et al* (2011) “The De Wit Report: “Lost Credit” – First report of the Dutch Parliamentary Committee set up to investigate the causes of the financial crisis” 26 *Journal of International Banking Law and Regulation* 24 at 25. Some authors who dealt with the subject of the deregulation of the EU financial markets include Evans P *et al* (2008) “Deregulation and Convergence of banking: the EU experience” 21 *Finnish Economic Papers* 1; Zavvos G (1989) “Banking integration in the European Union” 9 *Northwestern Journal of International Law and Business* 572 at 575; Adams G (1997) “The regulation of financial conglomerates” 5 *Journal of Financial Regulation and Compliance* 215; Staikouras SK (2006) “Business opportunities and market realities in financial conglomerates” 31 *Palgrave Macmillan Journals* 124; Andenas M (2013) “Financial stability and legal integration in financial regulation” 38 *European Law Review* 335. Mooij J *et al* (2002) “A brief history of the institutional design of banking supervision in the Netherlands” available at

https://ideas.repec.org/h/elg/eechap/3013_2.html

(accessed 27 May 2016) mentions that the Netherlands became one of the pioneers of “bancassurance”.

³⁴ Wilmarth AE (2009: 963 at 976-977).

financial services firm, Credit Suisse.³⁵ In the Netherlands, ABN AMRO Bank and ING Group were among the “super-mergers”.³⁶

1.4 Regulatory problems occasioned by financial institutions being regarded as TBTF

As pointed out by Schoenmaker, TBTF financial institutions were at the centre of contagion that could trigger the system-wide collapse of a financial system through what has come to be known as the “domino effect”.³⁷ Barth and Prabha define contagion as “a risk that the financial distress in a particular financial institution could propagate to other financial institutions, potentially destabilising the entire financial system”.³⁸ Notably, the TBTF-problem that emerged with the growth of financial conglomerates during the course of the Twentieth Century extended beyond banking institutions to also include securities firms and insurance companies.³⁹

The main problem that came with the advent of financial conglomeration was that it led to the formation of complex, supersized entities that were significantly interconnected with other financial institutions, thus constituting fertile ground for the build-up of systemic risk in the financial system. Systemic risk⁴⁰ threatens and can eventually, when it materializes, destroy the stability of a financial system.⁴¹ Financial

³⁵ *Ibid.*

³⁶ DeNederlandscheBank *Perspective on the structure of the Dutch banking sector* available at <https://www.dnb.nl/media/zp3fwoxv/perspective-on-the-structure-of-the-dutch-banking-sector.pdf> (accessed 27 May 2016); Jansen WJ *et al* “Restructuring of the Dutch banking sector: implications for banks and the economy” available at <https://www.bis.org/publ/confp07k.pdf> (accessed 27 May 2016); Hilbers PLC “Financial sector reform and monetary policy in the Netherlands” IMF Working Paper February 1998 available at https://econpapers.repec.org/paper/imfifwpa/1998_2f019.htm (accessed 27 May 2016).

³⁷ Schoenmaker D (1996) “Contagion risk in banking” available at https://web.actuaries.ie/sites/default/files/erm-resources/345_contagion_risk_in_banking.pdf (accessed 16 August 2016).

³⁸ Barth JR *et al* “Breaking (banks) up is hard to do: new perspective on Too Big to Fail” In Acharya VV *et al* (Eds.) (2014) *The social value of the financial sector – Too Big to Fail or just big?* 377. See further, Moghadam R *et al* “Understanding financial interconnectedness” IMF October 4, 2010 available at <https://www.imf.org/external/np/pp/eng/2010/100410.pdf> (accessed 19 June 2016).

³⁹ White LJ “The basics of Too Big to Fail” – Chapter 3 – In Schultz PH (Ed.) (2014) *Perspectives on Dodd-Frank and finance* 25-26; Brewer III E *et al* (2009) “How much did banks pay to become Too-Big-To-Fail and to become systemically important?” 43 *Journal of Financial Services Research* 9-34.

⁴⁰ The concept of systemic risk is defined under paragraph 1.7 below.

⁴¹ Allen F *et al* (2013) “What is systemic risk?” 45 *Journal of Money, Credit and Banking* 121 at 125; Lastra RM (2015) “Systemic risk and macroprudential supervision” available at <https://qmul.qmul.ac.uk/xmlui/bitstream/handle/123456789/11497/Lastra%20Systemic%20Risk%20and%20Macroprudential%20supervision%202015%20Accepted.pdf?sequence=3> (accessed 31 May 2016).

stability is said to be per se a “nebulous” concept⁴² that is often defined in terms of systemic protection of the financial system that translates to real economic growth.⁴³ The financial distress or failure of TBTF financial institutions can potentially pose severe systemic risk and thereby create negative externalities.⁴⁴ As indicated by Acharya, negative externalities arise in instances where the costs of failure of a financial institution are not internalised and losses are subsequently imposed on other financial institutions that are not distressed.⁴⁵ To preserve financial stability, a macro-prudential approach to financial system regulation is adopted, which *inter alia*, seeks to prevent or mitigate systemic risk emanating from TBTF financial institutions.⁴⁶ As observed by Borio, the objective of macro-prudential regulation is to mitigate systemic risk in order to protect the whole financial system.⁴⁷

Allen, Carletti and Leonello point out that the notion of a financial institution being TBTF further became problematic as it attracted its own set of regulatory paradigms, most notably, that of the application of “bail-outs”.⁴⁸ In brief, a bail-out entails the use of

⁴² Ramlall I (2019) *Understanding financial stability* at 14 notes that there is no universally agreed definition of financial stability.

⁴³ Schinasi GJ (2006) *Safeguarding financial stability: theory and practice* at 77 defines financial stability as “the ability of the financial system to facilitate and enhance economic processes, manage risks, and absorb shocks”; See further, Arner DW (2007) *Financial stability, economic growth, and the role of law* at 35 reaffirming the connection between financial stability and real economy by stating that a financial system that functions smoothly is crucial to economic growth. Therefore, Lastra opines that systemic risk poses a threat not only to a financial system but also to the real economy. See Lastra RM (2011) “Systemic risk, SIFIs, and financial stability” 6 *Capital Markets Law Journal* 197 at 202-204.

⁴⁴ Acharya VV *et al* (2010) “Measuring systemic risk” 30 *The Review of Financial Studies* 2.

⁴⁵ Acharya (2010:2); See also, Brunnermeier M *et al* “The fundamental principles of financial regulation” Geneva Reports on the World Economy 11 May 2009 available at https://scholar.princeton.edu/sites/default/files/geneva11_0.pdf (accessed 16 June 2016); Schwerter S (2011) “Basel’s ability to mitigate systemic risk” 19 *Journal of Financial Regulation and Compliance* 337 at 338.

⁴⁶ Padoa-Schioppa T “Global macroprudential regulation” – Chapter 2 – In Claessens S *et al* (2012) *Macroprudential regulatory policies: New road to financial stability?* 11; Yellen JL “Pursuing financial stability at the Federal Reserve” In Evanoff DD, Holthausen C, Kaufman GG and Kremer M (2014) *The role of central banks in financial stability: how has it changed?* 58.

⁴⁷ Borio C “Implementing the macroprudential approach to financial regulation and supervision” Bank de France *Financial Stability Review* (September 2009) available at <https://core.ac.uk/download/pdf/6612218.pdf> (accessed 22 August 2016).

⁴⁸ Allen F *et al* (2015) “Moral hazard and government guarantees in the banking industry” 1 *Journal of Financial Regulation* 30; See further, Morrison AD (2011) “Systemic risks and the “too-big-to-fail” problem” 27 *Oxford Review of Economic Policy* 498-516. Because of this bail-out aspect, TBTF concept is said to refer to government intervention to forestall the failure of these financial institutions. Refer also to Athavale M (2000) “Uninsured deposits and the too-big-to-fail policy in 1984 and 1991” 18 *American Business Review* 123-128; Schwarcz SL (2017) “Too big to fool: moral hazard, bailouts, and corporate responsibility” 102 *Minnesota Law Review* 761; Dabos M “Too Big to Fail in the banking industry: a survey” – Chapter 6 – In Gup BE (Ed) (2004) *Too Big to Fail: policies and practices in government bailouts* 141.

taxpayers' money to prevent the demise of TBTF financial institutions in order to avert systemic crisis. The bail-out conundrum in turn gave rise to another problem, namely that of "moral hazard", which is defined as "an incentive for excessive risk-taking by TBTF financial institutions based on the expectation of implicit government guarantee in flagrant disregard of financial market discipline."⁴⁹ Thus, by extending bail-outs moral hazard is increased as the shareholders and managers of TBTF institutions become more lax about taking the risks they take and, in the case of supersize banks, this spills laxity over to depositors who are also less cautious of the risk profile of the bank where they deposit their money.

1.5 The TBTF-problem during the 2008 Global Financial Crisis

During 2007/2008, a global financial crisis of epic proportions occurred. This seismic financial event became known as the 2008 Global Financial Crisis (2008 GFC or Crisis). The global financial system experienced the most severe liquidity crunch amidst mortgage defaults triggered by sub-prime mortgage lending in the US and substantial engagement of financial institutions in toxic financial assets during the GFC.⁵⁰ In particular, banks became undercapitalised and significantly depleted their liquidity levels through asset fire sales,⁵¹ thus, posing grave threats to financial stability as well as safety and soundness concerns.⁵² The result was that banks were unable

⁴⁹ FSF *Guidance for developing effective deposit insurance systems* (September 2001) available at http://www.fsb.org/wp-content/uploads/r_0109b.pdf?page_moved=1 (accessed 5 July 2016) defines moral hazard as "the incentive for excessive risk taking by banks or those receiving the benefit of protection". See further, Stern GR *et al* (2004) *Too Big to Fail: the moral hazard of bank bailouts 2*. Stern and Feldman argue that the moral hazard issue creates further financial instability because it encourages TBTF banks to continue to engage in toxic and risky activities for lack of market discipline as the creditors of these banks expect that the implicit government support would be legitimate in the event of failure or distress of such banks. See also, Morgan DP *et al* "Too Big to Fail after all these years" Federal Reserve Staff Reports September 2005 available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=813967 (accessed 16 June 2016) share the sentiments that the weaker market discipline accounts for the TBTF problem. See also Mishkin FS (2006) "How big a problem is Too Big to Fail? A review of Gary Stern and Rob Feldman's Too Big to Fail: the hazards of bank bailouts" XLIV *Journal of Economic Literature* 988 at 989.

⁵⁰ Bernanke B (2018) "The real effects of disrupted credit – evidence from the Global Financial Crisis" available at https://www.brookings.edu/wp-content/uploads/2018/09/BPEA_Fall2018_The-real-effects-of-the-financial-crisis.pdf (accessed 8 June 2016); Langley P (2010) "The performance of liquidity in the subprime mortgage crisis" 15 *New Political Economy* 71; Guynn RD (2010) "The global financial crisis and proposed regulatory reform" 2010 *Brigham Young University Law Review* 421 at 432.

⁵¹ Coval J and Stafford E (2007) "Asset fire sales (and purchases) in equity markets" 86 *Journal of Financial Economics* at 479 define asset fire sale as a forced and the immediate sale of assets at prices that are below their fundamental values.

⁵² Steward JB (2009) "Eight days: the battle to save the American financial system" available at https://ypfsresourcelibrary.blob.core.windows.net/fcic/YPFS/NEWYORKER_onepager.pdf (accessed 4 June 2016); See further, Hellwig MF (2009) "Systemic risk in the financial sector: an analysis of the

to fulfil their credit intermediation role; failed to perform their critical economic functions; and also defaulted on their financial obligations to customers.⁵³ Against the backdrop of these undercapitalisation and liquidity crunches, bail-out packages in the form of capital injections and liquidity facilities became necessary to prevent failure or mitigate distress of large and systemically important financial institutions⁵⁴ and in order to safeguard financial stability.⁵⁵

The liquidity crisis during the GFC intensified, given the procyclicality⁵⁶ of the financial markets associated with huge deleveraging,⁵⁷ and withholding of lending by financial institutions during the market downturn.⁵⁸ The maturity transformation role of banks which involves borrowing with short-term liabilities and lending on a long-term basis, further heightened the credit crunch.⁵⁹ In addition, as pointed out by the *BIS Committee on Payment and Settlement Systems* (CPSS), banks that are liquidity providers in respect of payment, clearing, and settlement systems are key financial

sub-prime mortgage financial crisis” 157 *De Economist* 157 at 158; Allen WA (2013) *International liquidity and financial crisis* 12.

⁵³ Brunnermeier MK (2009) “Deciphering the liquidity and credit crunch 2007-2008” 23 *Journal of Economic Perspectives* 77 at 78-79; Acharya VV *et al* (2015) “A crisis of banks as liquidity providers” 70 *The Journal of Finance* 1; Van der End JW *et al* (2009) “When liquidity risk becomes a macroprudential issue: empirical evidence of bank behaviour” 8 *Journal of Financial Stability* 107.

⁵⁴ The concept of systemically important financial institutions is defined under paragraph 1.7 below.

⁵⁵ Arora A (2010) “The global financial crisis: a new regulatory order?” 8 *Journal of Banking Law* 670; Verick S *et al* “The great recession of 2008-2009: causes, consequences and policy responses” The Institute for the Study of Labor May 2010 available at <http://ftp.iza.org/dp4934.pdf> (accessed 24 July 2016); Calomiris CW (1998) “The IMF’s imprudent role as lender of last resort” 17 *Cato Journal* 275 at 275-87; Fischer S (1999) “On the need for an international lender of last resort” 13 *Journal Economic Perspectives* 85 at 85-94 notes that the “bail-out” practice predated the GFC. See also, Flemming MJ (2012) “Federal Reserve liquidity provision during the financial crisis of 2007-2009” 4 *Annual Review of Financial Economics* 161 at 162; Panzera F and Rossi S (2011) “Too-big-to-fail”: risks and remedies” 4 *International Journal of Trade and Global Markets* 311.

⁵⁶ A financial system tends to be pro-cyclical in nature when financial institutions abundantly provide credit in times of benign economic conditions and tighten it during market downturn. Refer to Xiao Chen D *et al* “The countercyclical bank capital buffer: insights for Canada” Bank of Canada *Financial Stability Review* (December 2010) available at <https://www.bankofcanada.ca/wp-content/uploads/2011/12/fsr-1210-xiao.pdf> (accessed 8 June 2016).

⁵⁷ Deleveraging means the inclination of banks to decrease lending as a consequence to the procyclicality of financial markets. For this, see Wehinger G (2012) “Bank deleveraging, the move from bank to market-based financing, and SME financing” OECD Journal; *Financial Markets Trends* Vol 2012/1 available at <http://dx.doi.org/10.1787/fmt-2012-5k91hbvf9g3> (accessed 8 June 2016).

⁵⁸ Kaufman GG (2000) “Banking currency crisis and systemic risk: lessons from recent events” 24 *Economic Perspectives* 9 at 11-18.

⁵⁹ Lyngen N *et al* (2013) “The Financial Stability Board: the new face of international financial regulation” 54 *Harvard International Law Journal* 1 at 2; Russeli ED (2008) *New deal banking reforms and Keynesian Welfare State Capitalism* 34.

market infrastructures and market participants that are susceptible to liquidity shortfalls with potential systemic implications.⁶⁰

Whereas various causes are attributed to the 2008 GFC, there is consensus that TBTF financial institutions were among the key drivers of the Crisis.⁶¹ As evidenced at the inception of the GFC, it was, in particular, the failure of Lehman Brothers in the US at the beginning of the GFC, that highlighted the adverse impact of the failure of a TBTF financial institution on the financial system.⁶² At the time of its failure, Lehman Brothers was the fourth largest investment bank in the US and was alleged to have triggered the collapse of the subprime mortgage industry in September 2008 because of its massive dealings in OTC derivatives and securitisation activities.⁶³ Notably, the US Federal Reserve decided not to extend a bail-out to Lehman Brothers, thus leaving it to fail, as a result of which the GFC ensued given Lehman's interconnectedness in the global financial system.⁶⁴

⁶⁰ BIS Committee on Payment and Settlement Systems – Technical Committee of the International Organization of Securities Commissions *Principles for financial market infrastructures* (April 2012) available at

<https://www.bis.org/cpmi/publ/d101a.pdf>

(accessed 27 April 2018); BIS Committee on Payment and Settlement System *Core Principles for Systemically Important Payment Systems* (January 2001) available at

<https://www.bis.org/cpmi/publ/d43.pdf> (accessed 27 April 2012); Martinez-Jaramillo S, *et al* "The role of financial market infrastructures in financial stability: an overview" – Chapter 2 – In Diehl M, *et al* (2016) *Analyzing the economics of financial market infrastructures* 20.

⁶¹ Financial Crisis Inquiry Commission United States of America *The Financial Crisis Inquiry Report – Final Report of the National Commission on the causes of the financial and economic crisis in the United States* (January 2011) available at <https://www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf>

(accessed 27 May 2016); Jickling M "Causes of the financial crisis Congressional Research Service (April 2010) available at

<https://fas.org/sgp/crs/misc/R40173.pdf> (accessed 13 June 2016); Merrouche O *et al* "What caused the Global Financial Crisis? – evidence on the drivers of financial imbalances 1999-2007 IMF Working Paper December 2010 available at

<https://www.imf.org/external/pubs/ft/wp/2010/wp10265.pdf> (accessed 13 June 2016).

⁶² Gilliams H (2011) "Stress testing the regulator: review of state aid to financial institutions after the collapse of Lehman" 36 *European Law Review* 3.

⁶³ Financial Crisis Inquiry Commission United States of America *The Financial Crisis Inquiry Report – Final Report of the National Commission on the causes of the financial and economic crisis in the United States* (January 2011) available at

<https://www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf> (accessed 27 May 2016); Subprime mortgage lending means the extension of funds to uncreditworthy borrowers. For this, see Mills PS *et al* "Money for nothing and checks for free: recent developments in U.S. subprime mortgage markets" IMF Working Papers July 2007 available at

<https://www.imf.org/external/pubs/cat/longres.aspx?sk=21200.0> (accessed 2 June 2016); Kiff J *et al* (2009) "Lessons from subprime turbulence" 7 *Professional Accountant* 25; Baker D (2008) "The housing bubble and the financial crisis" available at <http://www.paecon.net/PAEReview/issue46/Baker46.pdf> (accessed 8 June 2016) states that credit skyrocketed as credit markets dried up during mortgage defaults.

⁶⁴ *Ibid.*

In the wake of the GFC, US financial institutions, including banks, were severely distressed as liquidity in the financial markets plummeted and the stock market plunged amid significant under-capitalisation.⁶⁵ However, AIG, the largest US insurance company, which held a substantial amount of credit default swaps⁶⁶ that could trigger financial system collapse, was ultimately bailed out at 85 (eighty-five) billion USD as it encountered a liquidity crisis.⁶⁷ The Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), which are the leading US government-sponsored enterprises (GSEs), succumbed to subprime mortgage defaults that preceded countless foreclosures during the real estate bust.⁶⁸ With government intervention, JP Morgan Chase, the biggest US bank, purchased Bear Stearns, at that time one of the biggest US securities firms, which experienced increased subprime mortgage defaults due to securitization.⁶⁹ Bank of America, the second largest banking institution in the US, received government support to acquire Merrill Lynch, another US investment bank

⁶⁵ IMF United States Financial Sector Assessment Program – *Detailed assessment of observance of the Basel Core Principles for Effective Banking Supervision* (April 2015) available at <https://imf.org/external/pubs/ft/scr/2015/cr1589.pdf> (accessed 31 May 2016); IMF *United States: 2010 Article IV Consultation-Staff Report; Staff Statement; and Public Information Notice on the Executive Board Discussion* (imf.org) (accessed 31 May 2016); *United States: 2011 Article IV Consultation -- Staff Report; IMF Country Report 11/201; July 7, 2011* (accessed 31 May 2016).

⁶⁶ A credit default swap is a type of an OTC derivative directly traded between the contracting parties and it is designed to transfer the credit risk of mortgage defaults to insurance companies. For this, see Hudson A *et al* (2000) “Modern financial techniques, derivatives and law” 7.

⁶⁷ O’Harrow R *et al* (2008) “Downgrades and downfall” available at <http://www.washingtonpost.com/wp-dyn/content/article/2008/12/30/AR2008123003431.html> (accessed 4 July 2016); D’Silva A *et al* (2008) “Hedges in the warehouse: the banks get trimmed” available at

<https://www.chicagofed.org/publications/policy-discussion-papers/2008/pdp-5> (accessed 4 July 2016).

⁶⁸ Freddie Mac website available at <http://www.freddiemac.com/> (accessed 5 June 2016); Fannie Mae website available at <https://www.fanniemae.com/> (accessed 5 June 2016). These GSEs provide assistance to home mortgages lenders. Bethel JE *et al* (2011) “Legal and economic issues in litigation arising from the 2007-2008 credit crisis” available at

<http://stopforeclosurefraud.com/2011/04/10/harvard-paper-legal-and-economic-issues-in-litigation-arising-from-the-2007-2008-credit-crisis/> (accessed 4 July 2016) mentions that some of the financial institutions that were distressed amid the subprime mortgage crisis included Lehman Brothers, Bear Stearns, Morgan Stanley, Chase, Credit Suisse, Bank of America, Deutsche, RBS, Merrill, Goldman, Citigroup, Countrywide and Wachovia. See further, Utt RD (2008) “The subprime mortgage market collapse: a primer on the causes and possible solutions” available at <http://www.heritage.org/research/reports/2008/04/the-subprime-mortgage-market-collapse-a-primer-on-the-causes-and-possible-solutions> (accessed 5 May 2016).

⁶⁹ Summary of terms and conditions regarding JPMorgan Chase facility (March 2008) available at <https://www.newyorkfed.org/newsevents/news/markets/2008/rp080324b.html> (accessed 8 June 2016); See further, Labonte M (2015) “Systemically important or “too-big-to-fail” financial institutions” Congressional Research Service (September 2018) available at <https://www.fas.org/sgp/crs/misc/R42150.pdf> (accessed 27 May 2016).

which also suffered significant losses as a result of toxic mortgage assets.⁷⁰ Goldman Sachs and Morgan Stanley, being US investment banks that were also affected severely by mortgage-backed securities (MBS), were converted to BHCs in order to enable their bail-out.⁷¹

Subsequently, the *Emergency Economic Stabilization Act of 2008* created the *Troubled Asset Relief Program* (TARP) to purchase the toxic assets of the troubled TBTF US financial institutions.⁷² The major recipients of the TARP, that also featured prominently in the consolidation and deregulation era, included AIG, the Bank of America, Citigroup Inc., Goldman Sachs, JP Morgan Chase, Morgan Stanley, Wells Fargo, the U.S. Bancorp, Fannie Mae and Freddie Mac.⁷³

The contagion from the toxic assets of US financial institutions spread to the EU financial market because of its heavy exposure to the US financial system.⁷⁴ The systemic instabilities in the EU were particularly intensified in light of the coinciding of the GFC with the “Eurozone Crisis”, which were collectively termed the “Twin Crises”.⁷⁵ The Eurozone Crisis referred to the sovereign defaults of some Euro countries such as Greece and Spain,⁷⁶ that were accompanied by an inability to bail-out distressed

⁷⁰ Mollenkamp C *et al* “Lehman files for bankruptcy; Merrill sold; AIG seeks cash” (September 2008) available at

<https://www.nytimes.com/2008/09/15/business/15lehman.html> (accessed 24 July 2016).

⁷¹ Labonte M (2015) “Systemically important or “too-big-to-fail” financial institutions” Congressional Research Service (September 2018) available at <https://www.fas.org/sgp/crs/misc/R42150.pdf> (accessed 27 May 2016).

⁷² The Emergency Economic Stabilisation Act of 2008 – Pub. L. 110-343. For more discussion on TARP, see also Baker D *et al* (2009) “The value of “Too Big to Fail” big bank subsidy” Centre for Economic and Policy Research available at

https://www.researchgate.net/profile/Dean_Baker3/publication/46465053_The_Value_of_the_aToo_Big_to_Faila_Big_Bank_Subsidy/links/543bcaa60cf204cab1db3210/The-Value-of-the-aToo-Big-to-Faila-Big-Bank-Subsidy.pdf (accessed 24 July 2016).

⁷³ Ericson M *et al* (2009) “Tracking the \$700 billion bailout” available at

http://www.nytimes.com/packages/html/national/200904_CREDITCRISIS/recipients.html

(accessed 24 July 2016); Labonte M “Systemically important or “Too-Big-to-Fail” financial institutions” Congressional Research Service (September 2018) available at <https://www.fas.org/sgp/crs/misc/R42150.pdf> (accessed 27 May 2016).

⁷⁴ Allen F *et al* (2011) “Cross-border banking in Europe: implications for financial stability and macroeconomic policies” available at

<https://cadmus.eui.eu/handle/1814/20202> (accessed 19 June 2016); Ringe WG *et al* (2015) *Legal challenges in the Global Financial Crisis: bail-outs, the Euro and regulation* 333.

⁷⁵ Black L *et al* (2016) “The systemic risk of European banks during the financial and sovereign debt crises” 63 *Journal of Banking and Finance* 107.

⁷⁶ Hofmann C (2013) “A Legal Analysis of the Euro Zone Crisis” 18 *Fordham Journal of Corporate and Financial Law* 519 at 525–530; Blundell-Wignall (2012) “Solving the financial and sovereign debt crisis in Europe” OECD Journal: Financial Market Trends available at <https://www.oecd.org/daf/fin/public-debt/49481502.pdf> (accessed 22 August 2016).

banks without the financial assistance of other Euro countries.⁷⁷ As a result, support measures were put in place to deal with the collapses or near-collapses of the Eurozone financial institutions, which measures included the *European Stability Mechanism* (ESM).⁷⁸

The Netherlands, being the EU Member State selected for purposes of comparative study in this thesis, did unfortunately not escape the turmoil of the 2008 GFC. Reportedly, the record high mortgage exposure of the Netherlands from US financial institutions accounted for the harsh effects of the GFC on the Dutch financial system.⁷⁹ This was the case despite the Twin Peaks model of financial regulation (Twin Peaks model), as discussed in detail in Chapter Four hereinafter, having at that stage been introduced in the Netherlands because its full implementation occurred only in 2007 at the onset of the GFC, which was too late to significantly ward off the Crisis.⁸⁰

⁷⁷ Paulus CG (2014) "The interrelationship of the sovereign debt and distressed banks: European perspective" 49 *Texas International Law Journal* 201 at 207-209; Seyad SM (2011) "A Legal Analysis of the European Financial Stability Mechanism" 26 *Journal of International Banking Law and Regulation* 421 at 424-426; Zandstra D (2011) "The European Sovereign Debt Crisis and Its Evolving Resolution" 6 *Capital Markets Law Journal* 285 at 288; Schoenmaker D (2012) "Banking supervision and resolution: the European dimension" 6 *Law and Financial Markets Review* 52-60.

⁷⁸ Treaty Establishing the European Stability Mechanism (2012) available at https://www.esm.europa.eu/sites/default/files/20150203_-_esm_treaty_-_en.pdf (accessed 10 November 2019); See further, Glencross A "The EU Response to the Eurozone Crisis: democratic contestation and the new fault lines in European integration" Europa-Kolleg Hamburg Discussion Paper July 2013 available at <https://www.econstor.eu/bitstream/10419/82634/1/766849171.pdf> (accessed 27 May 2016).

⁷⁹ IMF *Kingdom of The Netherlands 2013 Article IV Consultation* (May 2013) available at <https://www.imf.org/external/pubs/ft/scr/2013/cr13115.pdf> (accessed 22 August 2016); IMF *Kingdom of the Netherlands-Netherlands Financial Stability Assessment Program:: Technical note – Financial stability and stress testing of the banking, household, and corporate sector* (April 2013) available at <https://www.imf.org/en/Publications/CR/Issues/2017/04/13/Kingdom-of-the-Netherlands-Netherlands-Financial-Sector-Assessment-Program-Technical-Note-44820> (accessed 27 May 2016); Van der Crujssen C *et al* (2015) "Trust and financial crisis experiences" available at https://ideas.repec.org/a/spr/soinre/v127y2016i2d10.1007_s11205-015-0984-8.html (accessed 27 May 2016); Masselink M and Van den Noord P (2009) "The Global Financial Crisis and its effects on the Netherlands" available at http://ec.europa.eu/economy_finance/publications/pages/publication16339_en.pdf (accessed 27 May 2016); Dijkstra MA *et al* (2014) "High mortgage rates in the low countries: what happened in the spring of 2009?" 10 *Journal of Competition Law and Economics* 843; Priemus H (2010) "The credit crunch: impacts on the housing market and policy responses in the Netherlands" 25 *Journal of Housing and the Built Environment* 95.

⁸⁰ IMF *Kingdom of The Netherlands – Netherlands: Financial Stability Assessment Program* (June 2011) available at <https://www.imf.org/external/pubs/ft/scr/2011/cr11144.pdf> (accessed 27 May 2016); IMF *Kingdom of the Netherlands: Publication of Financial Sector Assessment Program Documentation – Technical Note on Financial Sector Supervision: Twin Peaks Model* (July) 2011 available at <https://www.imf.org/external/pubs/ft/scr/2011/cr11208.pdf> (accessed 31 May 2016). The Dutch Twin Peaks Model is fully detailed in Chapter Four.

Some of the Dutch banks imported toxic mortgage assets from US financial institutions and subsequently received government support when they encountered distress as a result of events occurring during the GFC. ING was bailed out, whereas SNS, Fortis and ABN AMRO were nationalised.⁸¹ Additionally, the Dutch government guaranteed the payment of deposits of Icesave, the Landsbanki branch in the Netherlands, to avert the systemic losses that would have been likely inflicted as a result of its failure.⁸² Landsbanki, together with Glitnir and Kaupthing, were major banks in Iceland that were hit hard by the GFC.⁸³ In the UK, Northern Rock, the former British bank, was nationalised subsequent to a “bank run”⁸⁴ at the beginning of the GFC which caused the severest liquidity crunch on the financial markets in the UK.⁸⁵

1.6 The impact of the GFC on South Africa

The *Financial Sector Assessment Program* (FSAP) that was conducted by the International Monetary Fund (IMF)⁸⁶ on South Africa in 2008, records that South Africa however, experienced no bank failures during the GFC.⁸⁷ The South African financial system emerged relatively unscathed from the GFC, mainly because it had limited exposure to the toxic financial activities described above.⁸⁸ Nonetheless, the IMF FSAP Report noted that the presence of financial conglomerates accounted for a

⁸¹ Timmermans S (2010) “Aid to banks during the credit crisis in the Netherlands” 3 *Bankers’ Law* 40; Daily Mail Reporter “ING in £7bn Dutch bailout” (October 2008) available at <https://www.thisismoney.co.uk/money/news/article-1645505/ING-in-7bn-Dutch-bailout.html> (31 May 2016).

⁸² *Final report ‘Credit Lost II – taking stock’ presented* available at <https://www.houseofrepresentatives.nl/news/final-report-%E2%80%99credit-lost-ii-%E2%80%93-taking-stock%E2%80%99-presented> (accessed 27 May 2016).

⁸³ Gunnarsson EG (2011) “The Icelandic regulatory responses to the financial crisis” 12 *European Business Organization Law Review* 1-39.

⁸⁴ Calomiris CW (1999) “Runs on banks and the lessons of the great depression” 22 *Regulation* 4-7 notes that the concept of “a run on the bank” arises in instances of massive and simultaneous deposits withdrawals based on the financial market panic that a bank would become insolvent, and thereby drying up its liquidity. Gorton G (1988) “Banking panics and business cycles” 40 *Oxford Economic Papers* 751 states that a “bank run” occurs when customers withdraw large scale deposits from panic that a bank is likely to run a risk of insolvency. Kaufman G (1987-1988) “Bank runs: causes, benefits, and costs” 7 *Cato Journal* 559 observes that a “bank run” may likely aggravate liquidity crisis given its potential contagious effect on other solvent financial institutions.

⁸⁵ House of Commons - Treasury Committee *The run on the Rock: Fifth Report of Session 2007-2008* (January 2008) available at <https://www.publications.parliament.uk/pa/cm200708/cmselect/cmtreasy/56/56i.pdf> (accessed 23 July 2016); Shin HS “Reflections on Northern Rock: the bank run that heralded the Global Financial Crisis” 23 *Journal of Economic Perspectives* 101.

⁸⁶ See the history of the IMF and the explanation of the FSAP at paragraph 1.7 below.

⁸⁷ IMF *South Africa: Financial System Stability Assessment, Including Report on the Observance of Standards and Codes on the following topic: Securities regulation* (October 2008) available at <https://www.imf.org/external/pubs/ft/scr/2008/cr08349.pdf> (accessed 22 August 2016).

⁸⁸ *Ibid.*

highly concentrated banking sector in South Africa, coupled with a high degree of interconnectedness between banks and non-bank financial institutions, thereby signalling a risk of contagion.⁸⁹

The IMF FSAP Report however further noted that certain South African financial conglomerates, which also happen to include banks, were perceived to be TBTF.⁹⁰ Consequently, the Report concluded that the (then) micro-prudential supervision approach to the regulation of the South African financial system was insufficient to address cross-sectoral risks occasioned by the presence of these TBTF institutions.⁹¹ In view of this inadequacy, the IMF recommended at the time that South Africa should brace itself against any potential systemic instabilities.⁹²

1.7 Reform of the regulatory framework in respect of systemically important financial institutions

In order to deal with the TBTF-problem that was experienced particularly during the GFC, the FSB⁹³ released a Report in October 2010, titled *Reducing the moral hazard*

⁸⁹ Refer to paragraph 1.4 above for the description of a risk of “contagion”.

⁹⁰ IMF *South Africa: Financial System Stability Assessment, Including Report on the Observance of Standards and Codes on the following topic: Securities regulation* (October 2008) available at <https://www.imf.org/external/pubs/ft/scr/2008/cr08349.pdf> (accessed 22 August 2016).

⁹¹ *Ibid*; See further, Schmulow A (2017) “Financial regulatory governance in South Africa: the move towards twin peaks” 25 *African Journal of International and Comparative Law* 393 at 400-401. See Chapter Five for the discussion of the regulation of the South African financial system.

⁹² IMF *South Africa Financial System Stability Assessment* (December 2014) available at <https://www.imf.org/external/pubs/ft/scr/2014/cr14340.pdf> (accessed 8 June 2016).

⁹³ The FSB was created in April 2009 as a successor to the Financial Stability Forum (FSF) to make recommendations regarding the global financial regulatory reforms to the international standard-setting bodies and national authorities aimed at the consistent implementation of financial regulation and supervision across sectors and jurisdictions with the overarching objective of financial stability. The FSF, which predeceased the FSB, was established in 1999 by the Group of Seven (G7) Finance Ministers and Central Bank Governors with the goal of promoting the global financial stability. The G7 is explained below. The membership of the FSF was expanded with the formation of the FSB consequent to the GFC to enable the FSB to address the vulnerabilities of the global financial system at a larger scale by formulating sound regulatory and supervisory frameworks to be implemented by the global standard-setting bodies and national authorities in order to uphold financial stability. The history of the origins of the FSB is available at <https://www.fsb.org/history-of-the-fsb/> (16 June 2016). The explanation on the structure and mandate of the FSB are elaborated on the FSB website available at <https://www.fsb.org/about/fsb-members/> (accessed 16 June 2016); See further, Weber RH *et al* (2014) “Financial Stability Board: mandate and implementation of its systemic risks standards” 2 *International Journal of Financial Studies* 82. The member institutions of the FSB are member jurisdictions, international financial institutions and international standard-setting and other bodies. The member jurisdictions of the FSB include the US, the Netherlands and South Africa, being the selected jurisdictions of this research and these member jurisdictions are subject to assessment of the FSB Framework for Strengthening Adherence to International Standards (January 2010) available at

posed by systemically important financial institutions (also known as the *SIFI Framework*).⁹⁴ Important to note is that the FSB defines systemically important financial institutions (SIFIs) as: “financial institutions whose distress or disorderly failure, because of their size, complexity and systemic interconnectedness would cause significant disruption to the wider financial system and economic activity.”⁹⁵ Thomson observes, regarding the *FSB SIFI framework*, that the importance of SIFIs is communicated in a positive light in terms of their vitality for the smooth functioning of the financial system, as well as in a negative sense by signalling the potential for systemic disruption in the event of their failure during material financial distress.⁹⁶

Given their systemic importance, SIFIs are viewed through the regulatory lens as financial institutions posing a “TBTF-problem” occasioned by their elevated potential for systemic risk, and thus warranting more stringent prudential regulation relative to other financial institutions that are not systemically important.⁹⁷ The elevated risk

https://www.fsb.org/wp-content/uploads/r_100109a.pdf (accessed 16 June 2016). The international financial institutions which are members of the FSB are Bank for International Settlements (BIS), International Monetary Fund (IMF), The World Bank and Organisation for Economic Co-operation and Development (OECD). BIS was established in 1930 and is founded by sixty-two central banks including the central banks of the US, the Netherlands and South Africa. It acts as a central bank for central banks from around the world for cooperation in pursuit of monetary and financial stability objective. See BIS website available at

<https://www.bis.org/about/index.htm?m=1%7C1> (accessed 16 June 2016). Established in 1944, the IMF is responsible for ensuring the stability of the international monetary system and global economic growth by extending support to financially troubled member countries. The membership of the IMF includes the US, the Netherlands and South Africa. See the IMF website available at

<https://www.imf.org/external/index.htm> (accessed 16 June 2016). The World Bank was established in 1944 as an institution that seeks to alleviate poverty and promote the economic development by providing technical and financial support to countries around the world, especially developing countries. See the World Bank website available at <https://www.worldbank.org/en/about/what-we-do> (accessed 16 June 2016). The OECD is an intergovernmental organization founded in 1961 with the aim of stimulating economic progress and global trade. A list of OECD member countries which includes the US, the Netherlands and South Africa is available on the OECD's website available at <https://www.oecd.org/> (accessed 16 June 2016). The international standard-setting bodies that form part of the FSB are explained in due course.

⁹⁴ FSB *Reducing the moral hazard posed by systemically important financial institutions* (October 2010) available at

https://www.fsb.org/wp-content/uploads/r_101111a.pdf (accessed 19 June 2016).

⁹⁵ As defined in the SIFI framework.

⁹⁶ Thompson JB (2010) “On systemically important financial institutions and progressive systemic mitigation” 8 *De Paul business & commercial law journal* 135 at 136; See further, Weistroffer C (2011) “Identifying systemically important financial institutions (SIFIs)” available at <https://ideas.repec.org/p/ess/wpaper/id4383.html> (accessed 22 August 2016); Ligere E (2016) “Identifying system risk-a risky business?” 133 *Banking Law Journal* 364.

⁹⁷ Tammero R (2010-2011) “Reigning in systemically important financial institutions” 30 *Review of Banking & Financial Law* 595 at 597; Wilmarth AE (2010) “Reforming financial regulation to address the Too-Big-To-Fail problem” 35 *Brooklyn Journal of International Law* 707 at 718-733. Freixas X *et al* (2013) “Taming systemically important financial institutions” 45 *Journal of Money, Credit and Banking* 37; Kleinow J *et al* (2015) “Determinants of systemically important banks: the case of Europe” 7 *Journal*

posed by SIFIs (also popularly referred to as TBTF during the GFC) is ascribed to their unique characteristics, namely a huge asset-size, interconnectedness and complexity which accounts for the systemic risk⁹⁸ and the associated moral hazard it engenders.⁹⁹ The *FSB SIFI framework* consequently recommended a series of measures for addressing the TBTF conundrum of systemic risk and moral hazard associated with financial institutions that are identified as SIFIs.¹⁰⁰ This framework constitutes one of the key post-GFC financial regulatory reforms undertaken by the G20¹⁰¹ and focuses on the elimination of the problem of bail-outs of TBTF financial institutions whose distress or failure posed systemic risk. The *FSB SIFI framework* is thus aimed at promoting and preserving financial stability and incorporates regulatory and resolution measures aimed at ending the TBTF-problem connected to SIFIs.¹⁰²

The FSB indicated that the *SIFI framework* establishes a regulatory framework to enhance the resilience of SIFIs and to reduce their probability of default in times of financial distress. These prudential measures were sought to be further complemented by the setting of international standards for effective resolution regimes aimed at the

of *Financial Economic Policy* 446 at 453; Morrison AD (2011) “Perlow M (2011) “Money market funds-preserving systemic benefits, minimizing systemic risks” 8 *Berkeley Business Law Journal* 74.

⁹⁸ The *FSB SIFI framework* describes systemic risk as: “a risk of disruption of financial services that is caused by an impairment of all or parts of the financial system and which has the potential to have serious negative consequences for the real economy.”

⁹⁹ Labonte M “Systemically important or “Too Big to Fail” financial institutions” Congressional Research Service (September 2018) available at

<https://www.fas.org/sgp/crs/misc/R42150.pdf> (accessed 7 May 2016) reiterates that these financial institutions are termed “systemically important”, otherwise popularly known as “too big to fail”.

Weistroffer C (2011) “Identifying systemically important financial institutions (SIFIs)” available at <https://ideas.repec.org/p/ess/wpaper/id4383.html> (accessed 22 August 2016) observes that SIFIs are large and interconnected financial institutions whose failure greatly destabilise a financial system.

¹⁰⁰ *Ibid.*

¹⁰¹ The G20 was originally established in 1999 as the G7 countries constituted of the advance economies with the aim of reforming policies to achieve the international financial stability. In the aftermath of the GFC, the G7 broadened with the formation of the G20 consisting of heads of governments and central bank governors of nineteen countries including the EU. The US, the Netherlands, as an EU member country, and South Africa are member jurisdictions of the G20. See the Group of Twenty: a history available at <http://www.g20.utoronto.ca/docs/g20history.pdf> (accessed 16 June 2016).

¹⁰² FSB *Addressing SIFIs* available at

<https://www.fsb.org/work-of-the-fsb/policy-development/addressing-sifis/> (accessed 16 June 2016); Calvo D *et al* “Financial supervisory architecture: what has changed after the crisis?” Financial Stability Institute insights on policy implementation (April 2018) available at

<https://www.bis.org/fsi/publ/insights8.pdf> (accessed 16 June 2016); IMF *Lessons of the financial crisis for future regulation of financial institutions and markets and for liquidity management Monetary and Capital Markets Department* (February 2009) available at <https://www.imf.org/external/np/pp/eng/2009/020409.pdf> (accessed 16 June 2016).

orderly resolution of SIFIs to mitigate their systemic impact with the overarching objective of eliminating the bail-out problem.¹⁰³

In the context of resolution of failing SIFIs, the FSB recommended that countries align their frameworks for dealing with failing SIFI-banks with the *FSB Key Attributes of Effective Resolution Regimes for Financial Institutions* (FSB Key Attributes) issued in October 2011.¹⁰⁴ In terms of the *FSB Key Attributes*, resolution authorities have a broad range of resolution powers at their disposal such as the newly introduced “bail-in”-measures which, instead of encouraging the bail-out of financial institutions, seek to hold shareholders and creditors responsible to recapitalise non-viable financial institutions so that losses are absorbed by them instead of by taxpayers as usually happens in case of a bail-out.¹⁰⁵

A main feature of the *FSB SIFI framework* is that it introduces a *Higher Loss Absorbency (HLA) requirement* which is a stringent prudential regulatory tool targeting the heightened systemic risk posed by SIFIs relative to non-systemically important financial institutions.¹⁰⁶ The primary objective of the HLA requirement is to enhance the loss-absorbing capacity of SIFIs during financial market distress.¹⁰⁷ The *FSB SIFI framework* further proposed the development of other stringent prudential requirements to supplement the HLA requirement for SIFIs.¹⁰⁸ In order to reinforce prudential regulatory measures, the FSB also proposed enhanced prudential

¹⁰³ FSB *Policy measures to address systemically important financial institutions* (November 2011) available at

http://www.fsb.org/wp-content/uploads/r_111104bb.pdf?page_moved=1 (accessed 31 May 2016); FSB *Progress and next steps towards ending “Too-Big-To-Fail” (TBTF)* (September 2013) available at http://www.fsb.org/wp-content/uploads/r_130902.pdf?page_moved=1 (accessed 19 June 2016); See further, Block CD (2012) “A continuum approach to systemic risk and too-big-to-fail” 6 *Brooklyn Journal of Corporate, Financial & Commercial Law* 292.

¹⁰⁴ The *FSB Key Attributes of Effective Resolution Regimes for Financial Institutions* (October 2011) available at

https://www.fsb.org/wp-content/uploads/r_111104cc.pdf (accessed 14 June 2016); See an updated version of the *FSB Key Attributes of Effective Resolution Regimes for Financial Institutions* (October 2014) available at http://www.fsb.org/wp-content/uploads/r_141015.pdf (accessed 14 June 2016).

¹⁰⁵ See paragraph 3.5 of the *FSB Key Attributes*; See further, Goodhart C *et al* (2015) “Critical reflections on bank bail-ins” available at

<https://www.bis.org/bcbs/events/bartnf/avgouleasgoodhart.pdf> (accessed 9 November 2019); Janssen L (2017) “Bail-in from an insolvency Law Perspective” 26 *Norton Journal of Bankruptcy Law and Practice* 1 at 5-6.

¹⁰⁶ Paragraph II of the *FSB SIFI framework*.

¹⁰⁷ Paragraph I of the *FSB SIFI framework*.

¹⁰⁸ *Ibid.*

supervision for SIFIs in its Report titled *Intensity and Effectiveness of SIFI Supervision - Recommendations for enhanced supervision* (FSB SIE Report) released in November 2010.¹⁰⁹

To implement the *FSB SIFI framework* in the banking sector, the Basel Committee on Banking Supervision (BCBS) subsequently published a framework on *Global systemically important banks: assessment methodology and additional loss absorbency requirement* (Basel G-SIB framework) in November 2011, which has been revised in July 2013 and July 2018, respectively.¹¹⁰ As discussed in detail in Chapter Two,¹¹¹ the *Basel G-SIB framework* seeks to regulate the systemic risk arising from global systemically important banks (G-SIBs), being banks that are regarded as critical for the proper functioning of the global financial system. To achieve this goal, this framework identifies G-SIBs using an indicator-based measurement approach which is correlated in relation to the categories of: size; interconnectedness; substitutability; complexity and global cross-jurisdictional activity (which have indicators that are each risk-weighted at 20 per cent).¹¹² Banks that obtain a systemic score of 130 basis points under the indicator-based measurement approach, as discussed in more detail in Chapter Two, are identified as G-SIBs.¹¹³ This indicator-based measurement

¹⁰⁹ FSB *Intensity and Effectiveness of SIFI Supervision – Recommendations for enhanced supervision* (November 2010) available at

http://www.fsb.org/wp-content/uploads/r_101101.pdf?page_moved=1 (accessed 31 May 2016).

¹¹⁰ BCBS *Global systemically important banks: assessment methodology and the additional loss absorbency requirements* (November 2011) available at

<https://www.bis.org/publ/bcbs207.pdf> (accessed 10 November 2016); BCBS *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement* (July 2013) available at

<https://www.bis.org/publ/bcbs255.pdf> (accessed 28 October 2016); BCBS *Global systemically important banks: revised assessment methodology and the higher loss absorbency requirement* (July 2018) available at

<https://www.bis.org/bcbs/publ/d445.pdf> (accessed 10 November 2018). This methodology was later updated to give effect to the changes to the *Basel G-SIB framework* published in July 2018 and these changes (which do not affect the discussions in this Chapter) were effective as of November 2021. For this, see BCBS *Scope and definitions – Global systemically important banks* (November 2021) available at

https://www.bis.org/basel_framework/chapter/SCO/40.htm?inforce=20211109&published=20211109 (accessed 15 December 2022).

¹¹¹ See paragraph 2.2 of Chapter Two.

¹¹² See paragraph 2.2, subparagraph 2.2.1, of Chapter Two. The identification criteria of size, interconnectedness and complexity for TBTF financial institutions are proposed in the FSB, IMF and BIS *Guidance to assess the systemic importance of financial institutions, markets and instruments: initial considerations – Background Paper* (October 2009) available at

<https://www.imf.org/external/np/g20/pdf/100109a.pdf> (accessed 31 May 2016).

¹¹³ Cornell Law School Legal Information Institute available at

https://www.law.cornell.edu/wex/basis_point (accessed 31 July 2020) defines a basis point as a “unit of measure that denotes a change in the interest rate of a financial instrument and it expresses changes

approach is complemented by supervisory judgment to ensure that G-SIBs are appropriately identified and no SIFI escapes sufficient regulation.¹¹⁴ Banks that are identified as G-SIBs are consequently subjected to the HLA requirement in the form of a “global systemically important surcharge” (G-SIB surcharge)¹¹⁵ in accordance with a “bucketing” approach, discussed in more detail in Chapter Two, that assigns G-SIBs’ systemic scores in “buckets” that are commensurate with their systemic importance.

In its Report of April 2012 to the G20 Leaders, titled *Extending the G-SIFI framework to domestic systemically important banks*, the FSB reviewed the modalities to extend the *Basel G-SIB framework* to banks that are not globally systemic but are nevertheless considered systemically important to their domestic financial system and economy.¹¹⁶ In contrast to the G-SIBs that pose risk to the global financial system as explained above, the so-called domestic systemically important banks (D-SIBs) thus pose systemic risk specifically to their domestic financial systems.¹¹⁷ Subsequently, the BCBS published *A framework for dealing with domestic systemically important banks* (Basel D-SIB framework) in October 2012.¹¹⁸ As further indicated in Chapter Two,¹¹⁹ the *Basel D-SIB framework* adopts a principles-based methodology for the identification of D-SIBs in order to primarily facilitate the application of the HLA requirement, referred to as “the domestic systemically important banks buffer” (D-SIB buffer).¹²⁰ The *Basel D-SIB framework* thus complements the *Basel G-SIB framework* by focusing on the impact that the distress or failure of domestic systemically important banks will have on the domestic financial system and economy.¹²¹

in percentage point and 1 (one) basis point equals 1/100 (one hundredth) of 1 per cent or 0.01 per cent. This means that 130 basis points is equivalent to 1.3 (one point three) per cent. See paragraph 2.2, subparagraph 2.2.1, of Chapter Two for a detailed discussion of the systemic score calculation for G-SIBs.

¹¹⁴ See paragraph 2.2, subparagraph 2.2.3, of Chapter Two.

¹¹⁵ See paragraph 2.2, subparagraph 2.2.4, of Chapter Two.

¹¹⁶ FSB *Extending the G-SIFI framework to domestic systemically important banks: Progress Report to G-20 Ministers and Governors* (April 2012) available at https://www.fsb.org/wp-content/uploads/r_120420b.pdf (accessed 28 October 2016).

¹¹⁷ See paragraph 2.2 of Chapter Two.

¹¹⁸ BCBS *A framework for dealing with domestic systemically important banks* (October 2012) available at <https://www.bis.org/publ/bcbs233.pdf> (accessed 10 November 2016).

¹¹⁹ See paragraph 2.3 of Chapter Two.

¹²⁰ See paragraph 2.4, subparagraph 2.4.3, of Chapter Two.

¹²¹ See paragraph 2.3 of Chapter Two.

In the context of the prudential regulation and supervision of banks, the BCBS as the global regulator, is responsible for setting required prudential standards. In response to the GFC, the BCBS issued *Basel III: A global framework for more resilient banks and banking systems* (Basel III capital framework) in December 2010 to spearhead the international regulatory reforms for banking regulation.¹²² The *Basel III capital framework* seeks to strengthen the quality and quantity of capital for banks and to harmonise its definition across jurisdictions to ensure the resilience of banking sector.¹²³ This capital framework is designed to respond to the regulatory flaws of the Basel framework for *International Convergence of Capital Measurement and Capital Standards* (Basel II framework) which was issued in June 2004.¹²⁴ Jones and Zeitz note in particular, that the GFC demonstrated that the risk-sensitivity of the *Basel II framework* was inadequate to cover risks associated with securitisation, OTC derivatives and counter-party credit exposure and further accounted for the procyclicality of the financial markets.¹²⁵

The *Basel III capital framework* adopts a suite of micro-prudential and macro-prudential tools underpinning the prudential regulation of the banking industry.¹²⁶ In particular, it incorporates the *capital buffer regime*, as indicated below, that is instrumental to a macro-prudential regulatory approach, ensuring the health of the entire financial and banking system in general, as well as micro-prudential standards

¹²² BCBS *Basel III: A global regulatory framework for more resilient banks and banking systems* (December 2010) available at <https://www.bis.org/publ/bcbs189.pdf> (accessed 8 June 2016).

¹²³ *Ibid*

¹²⁴ BCBS *International Convergence of Capital Measurement and Capital Standards* (June 2004) available at <https://www.bis.org/publ/bcbs107.pdf> (accessed 8 June 2016). The *Basel II framework* revised the *Basel Accord*, fully known as the BCBS *International Convergence of Capital Measurement and Capital Standards* (July 1988), being a framework that set the capital standard for banks, available at

<https://www.bis.org/publ/bcbs04a.pdf> (accessed 8 June 2016). The *Basel II framework* was thus aimed at strengthening the soundness and stability of the international banking system by promoting consistent capital adequacy for competitive equality among internationally active banks and improving risk-sensitive capital requirements and risk-management standards.

¹²⁵ Jones E *et al* (2017) "The limits of globalising Basel banking standards" 3 *Journal of Financial Regulation* 89 at 96-124.

¹²⁶ BCBS *Basel III: A global regulatory framework for more resilient banks and banking systems* (December 2010) available at <https://www.bis.org/publ/bcbs189.pdf> (accessed 8 June 2016); See further, FSB, IMF and BIS *Macroprudential policy tools and frameworks – update to G20 Finance Ministers and Central Bank Governors* (February 2011) available at <https://www.imf.org/external/np/g20/pdf/021411.pdf> (accessed 6 July 2016); Liang N (2013) "Systemic risk monitoring and financial stability" 45 *Journal of Money, Credit and Banking* 130 at 133.

focusing on the safety and soundness of individual banks.¹²⁷ In addition, this regime recommends capital buffers that specifically target the systemic risk emanating from systemically important banks (SIBs) to address their heightened systemic risk in an endeavour to resolve the TBTF conundrum posed by these institutions.¹²⁸

The *Basel III capital buffer regime* encompasses the *capital conservation buffer* (CCvB) which ranges above the minimum regulatory capital¹²⁹ to act as a cushion that absorbs losses during financial stress.¹³⁰ The other macro-prudential instrument of the Basel III capital buffer regime, namely, the *countercyclical capital buffer* (CCyB) essentially counters the procyclical effects in the financial system.¹³¹ Most pertinently for the purposes of this study, the *Basel III capital framework* recommends the HLA requirement for systemically important banks (SIBs), being the primary prudential tool that raises the loss absorbing capacity of these SIBs during financial market distress to take account of their higher systemic risk profile relative to non-systemic banks.¹³² As discussed above, the G-SIB surcharge is the HLA requirement for G-SIBs and the D-SIB buffer is the HLA requirement for D-SIBs. To supplement risk-based capital, the *Basel III capital framework* further introduced the *supplementary leverage ratio*, which

¹²⁷ BCBS *Basel III: A global regulatory framework for more resilient banks and banking systems* (December 2010) available at <https://www.bis.org/publ/bcbs189.pdf> (accessed 8 June 2016); See further, FSB-IMF-BIS *Macro-prudential policy tools and frameworks – Progress Report to G20* (October 2011) available at <https://www.imf.org/external/np/g20/pdf/102711.pdf> (accessed 22 January 2019); IMF-FSB-BIS *Elements of effective macroprudential policies – lessons from international experience* (August 2016) available at <https://www.imf.org/external/np/g20/pdf/2016/083116.pdf> (accessed 22 January 2019); IMF *Key aspects of macro-prudential policy* (June 2013) available at <https://www.imf.org/external/np/pp/eng/2013/061013b.pdf> (accessed 22 January 2019); Wall LD (2015) “Stricter microprudential supervision versus macroprudential supervision” 23 *Journal of Financial Regulation and Compliance* 354; Tomuleasa II (2013) “Macro-prudential policy and systemic risk: an overview” 20 *Procedia Economics and Finance* 645.

¹²⁸ *Ibid*; See further, Arnold B *et al* (2012) “Systemic risk, macroprudential policy frameworks, monitoring financial systems and the evolution of capital adequacy” 36 *Journal of Banking and Financial* 3125-3132; Gadanez B *et al* “Macro-prudential policy frameworks, instruments and indicators: a review” at IFC workshop on *Combining micro and macro statistical data for financial stability analysis. Experiences, opportunities and challenges* December 14-15, 2015 Warsaw, Poland, available at https://www.bis.org/ifc/publ/ifcb41c_rh.pdf (accessed 8 June 2016).

¹²⁹ Paragraphs 49 and 50 of the *Basel III capital framework* set forth the following minimum regulatory capital for banks: CET1 capital of at least 4.5 per cent of RWAs, Tier 1 capital of minimum of 6 per cent of RWAs and total capital of minimum of 8 per cent of RWAs.

¹³⁰ The CCvB is discussed in paragraph 2.4, subparagraph 2.4.1, of Chapter Two.

¹³¹ The CCyB is elaborated in paragraph 2.4, subparagraph 2.4.2, of Chapter Two.

¹³² The HLA requirement is discussed in paragraph 2.2; paragraph 2.3, subparagraph 2.3.2; and paragraph 2.4, subparagraph 2.4.3, of Chapter Two.

is defined as non-risk-based capital consisting of CET1 capital in relation to a bank's total exposure, to curb unwarranted leverage in the financial sector.¹³³

In addition to the *Basel III capital framework*, the BCBS released two regulatory frameworks on liquidity standards in January 2013 and October 2014 to respectively address short-term and long-term liquidity risk, namely, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (Basel III LCR framework) and *Basel III: the net stable funding ratio* (Basel III NSFR framework).¹³⁴ The BCBS also issued the *Supervisory framework for measuring and controlling large exposures* (Basel large exposure framework) in April 2014 to regulate concentration risk among single counterparties.¹³⁵ A set of the abovementioned prudential standards of the BCBS are consolidated in *The Basel Framework*, issued in December 2019.¹³⁶ One of the prudential regulatory tools to be applied to failing SIBs, namely, resolution planning,¹³⁷ is covered under the recovery and resolution regimes as set out in the *FSB Key Attributes*, issued in October 2011 and updated in October 2014.¹³⁸

Regarding the enhanced supervisory framework, the BCBS noted that the *FSB SIE Report* is applicable because its recommendations substantially draw from the BCBS *Core Principles for Effective Banking Supervision* (BCPs), issued in September 2012,¹³⁹ which apply as best practice standards to the banking sector across the board. However, the *FSB SIE Report* tailors the *BCPs* to provide for the enhanced

¹³³ The supplementary leverage ratio is examined in paragraph 2.4, subparagraph 2.4.4, of Chapter Two.

¹³⁴ BCBS *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (January 2013) available at <https://www.bis.org/publ/bcbs238.pdf> (accessed 23 July 2016); BCBS *Basel III: the net stable funding ratio* (October 2014) available at <https://www.bis.org/bcbs/publ/d295.pdf> (accessed 23 July 2016). The Basel III LCR and the Basel III NSFR are discussed in paragraph 2.4, subparagraph 2.4.5, of Chapter Two.

¹³⁵ BCBS *Supervisory framework for measuring and controlling large exposures* (April 2014) available at <https://www.bis.org/publ/bcbs283.pdf> (accessed 27 January 2017). This framework is analysed in paragraph 2.4, subparagraph 2.4.6, of Chapter Two.

¹³⁶ BCBS *The Basel Framework* available at https://www.bis.org/basel_framework/ (accessed 20 February 2020).

¹³⁷ Resolution planning is discussed in paragraph 2.4, subparagraph 2.4.7, of Chapter Two.

¹³⁸ The *FSB Key Attributes for Effective Resolution Regimes for Financial Institutions* (October 2011) available at https://www.fsb.org/wp-content/uploads/r_111104cc.pdf (accessed 14 November 2016); See also an updated of the *FSB Key Attributes for Effective Resolution Regimes for Financial Institutions* (October 2014) available at https://www.fsb.org/wp-content/uploads/r_141015.pdf (accessed 14 November 2016).

¹³⁹ BCBS *Core Principles for Effective Banking Supervision* (September 2012) available at <https://www.bis.org/publ/bcbs230.pdf> (accessed 8 June 2016).

oversight of SIBs. As elaborated in Chapter Two,¹⁴⁰ some of the main elements of intensive (enhanced) supervision include enhanced risk-management assessments, and “stress-testing”, being a forward-looking macro-prudential tool that strengthens the loss absorbing capacity of banks under adverse economic conditions for purposes of risk-management.¹⁴¹

G20-jurisdictions like South Africa,¹⁴² are thus required to develop policy frameworks for the identification of D-SIBs and application of the resultant stringent prudential regulation and enhanced supervision of these domestic SIFI-banks (a phrase used for purposes of this thesis) in order to give effect to the *Basel D-SIB framework* as well as the abovementioned *Basel regulatory frameworks*. Specifically, the relevant national authorities are required to establish methodologies for the identification of D-SIBs for the primary purpose of facilitating the application of the D-SIB buffer in accordance with the *Basel D-SIB framework*, and to apply other stringent prudential requirements to these D-SIBs, in pursuit of the financial stability objective in line with the *FSB SIFI framework*.

As indicated in the preceding discussions, the concept of “SIFIs” is a collective term for systemically important financial institutions. It should, however, be noted that the focus of this thesis is on systemically important banks in particular. It should further be noted that the terms “D-SIBs” and “SIFI-banks” will be used interchangeably throughout this thesis. The term “SIBs” will be used as a general term for US G-SIBs and US domestic SIFI-banks.

1.8 Selection of comparative jurisdictions

Given that the GFC had its epicentre in the US, the US took the lead in the implementation of the G-20 financial stability reforms after the GFC, which also incorporate reforms for the identification and regulation of SIBs, through the enactment

¹⁴⁰ See paragraph 2.5 of Chapter Two.

¹⁴¹ Bolonga P *et al* (2017) “Integrating stress tests within the Basel III capital framework: a macro-prudentially coherent approach” 3 *Journal of Financial Regulation* 159; Simone V (2012) “Stress testing credit risk: The Great Depression scenario” 36 *Journal of Banking and Finance* 3133.

¹⁴² South Africa was part of the G-20 Leaders at the 2010 G-20 Seoul Summit and thus undertook to align with the new international financial regulatory reforms post the GFC. For this, see The G-20 Seoul Summit Leaders’ Declaration, Seoul, 12 November, 2010 <http://www.g20.utoronto.ca/2010/g20seoul.pdf> (accessed 27 January 2016).

of the *Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010* (hereinafter *Dodd-Frank Act*).¹⁴³ The *Economic Growth, Regulatory Relief, and Consumer Protection Act of 2018* (hereinafter *EGRRCPA*)¹⁴⁴ subsequently amended the *Dodd-Frank Act*. The *Dodd-Frank Act*, as amended by the *EGRRCPA*, incorporates an extensive and robust framework for the identification and stringent prudential regulation of US G-SIBs and BHCs that are subject to the application of section 165 of the *Dodd-Frank Act*, as amended by section 401 of the *EGRRCPA*, broadly implementing the prudential standards of the BCBS.¹⁴⁵ It is important to note that, the US regulatory reforms focus on the *Basel G-SIB framework*. This is because the US only introduced a G-SIB framework and not a framework for D-SIBs in alignment with the *Basel D-SIB framework*. The US approach to regulation of SIBs thus takes into consideration the fact that the *Basel G-SIB framework* formed the basis for the subsequent formulation of the *Basel D-SIB framework*. Therefore, the prudential standards that apply to US G-SIBs will also apply, with necessary changes, to US D-SIBs (although the US does not have a D-SIB framework) with the exception of the G-SIB surcharge and a few of the other stringent prudential standards tailored for the risk profile of US G-SIBs, as pointed out in Chapter Three. Given the fact that the *Basel G-SIB framework* served as the basis for the subsequent formulation of the *Basel D-SIB framework* and also given that the US has been at the forefront of implementing the *Basel G-SIB framework* and stringent prudential requirements to be applied to G-SIBs, guidance may, *mutatis mutandis*, be taken from the US G-SIB regulatory approach, to also inform how D-SIBs in South Africa should be identified and stringently regulated. Considering that many TBTF US banks were among the key drivers of the GFC which originated in the US and had devastating repercussions on global financial stability, and the reforms adopted by the US to address the TBTF problem post-GFC, the US is a critically important country for purposes of the comparative study that will be undertaken in this thesis.

The EU became the second jurisdiction to implement the G-20 reforms in the *Capital Requirements Regulation* (CRR) and the *Capital Requirements Directive* (CRD IV)

¹⁴³ The Dodd Frank Wall Street Reform and Consumer Protection Act – Pub. L. 111-203. The Dodd-Frank Act is codified in Title 12 of Chapter 53 of the Code of Laws of the United States – 12 USC 5301.

¹⁴⁴ The Economic Growth, Regulatory Relief and Consumer Protection Act of 2018 – Pub. L. 115-174.

¹⁴⁵ See Chapter Three.

(collectively termed CRD IV package).¹⁴⁶ The CRR was amended by *the Capital Requirements Regulation II* (CCR II), which largely applied from June 2021.¹⁴⁷ Further, the CRD IV was revised by *the Capital Requirements Directive V* (CRD V), and had to be transposed to EU Member States and applied from December 2020.¹⁴⁸ The CRD IV package incorporates a framework for the identification and regulation of “other systemically important institutions” (O-SIIs), as well as that of “global systemically important institutions” (G-SIIs), as EU banking institutions were similarly greatly distressed during the GFC.¹⁴⁹ Those EU banks that are referred to as O-SIIs are the counterparts of the Basel D-SIBs while the EU G-SIIs are the equivalent of the Basel G-SIBs.¹⁵⁰ In addition, *the Single Supervisory Mechanism Regulation* (SSM Regulation) has been implemented in the Eurozone countries as explained in more detail in Chapter Four.¹⁵¹

As also discussed in more detail in Chapter Four, the Netherlands, as both an EU Member State and a Eurozone country, implemented the CRD IV package, and the SSM Regulation, by means of amendments to *the Wet op het financieel toezicht* (*the*

¹⁴⁶ Regulation (EU) No 575/2013 of the European Union and of the Council of 26 of June 2013 on prudential requirements for credit institutions and investment firms available at <http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32013R0575&from=EN> (accessed 1 February 2018); Directive 2013/13/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and prudential supervision of credit institutions and investments available at <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0338:0436:En:PDF> (accessed 1 February 2018).

¹⁴⁷ Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0876> (assessed 5 June 2020).

¹⁴⁸ Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0878> (accessed 5 June 2020).

¹⁴⁹ See Chapter Four; See further, IMF European Union: Financial System Stability Assessment IMF (March) 2013 available at <https://www.imf.org/external/pubs/ft/scr/2013/cr1375.pdf> (accessed 31 May 2016).

¹⁵⁰ See Chapter Four.

¹⁵¹ Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1024&from=EN> (accessed 23 February 2018).

Financial Supervision Act),¹⁵² which introduced the Dutch Twin Peaks model in 2002 and which legislative framework was operationalized by 2007. The Dutch framework for identification of O-SIIs is thus incorporated in *the Financial Supervision Act*.

Like other G20 jurisdictions, South Africa aligns itself with the financial regulatory reforms initiated by the BCBS and has recently transitioned to a Twin Peaks model introduced by *the Financial Sector Regulation Act 9 of 2017* (FSR Act).¹⁵³ South Africa implemented the Twin Peaks model through two policy documents in 2011 and 2013 respectively, entitled, *A safer financial sector to serve South Africa better*, (Red book) and “*Implementing a Twin Peaks Model of financial regulation in South Africa* (the roadmap), as recommended by the South African National Treasury.¹⁵⁴ The South African Twin Peaks model is currently being phased-in, and in the interim, *the Banks Act 94 of 1990*¹⁵⁵ (the Banks Act), as amended by *the Regulations relating to banks of 2012*,¹⁵⁶ remains in force as the main regulatory framework for banks in the South African banking sector.¹⁵⁷

Notably, the FSR Act contains a framework for the designation of financial institutions as SIFIs, and stipulates stringent prudential measures that will be applied to SIFIs subsequent to their designation, pursuant to sections 29 and 30 thereof, respectively.¹⁵⁸ Given that both South Africa and the Netherlands adopted Twin Peaks

¹⁵² Law of September 2006 containing rules with regard to the financial markets and the supervision thereof (the Financial Supervision Act) available at <http://wetten.overheid.nl/BWBR0020368/2018-02-09#Titeldeel1>; The Financial Supervision Act is also available at <http://wetten.overheid.nl/BWBR0020368/2018-02-09> (accessed 7 April 2018).

¹⁵³ The Financial Sector Regulation Act No.9 of 2017 available at <http://www.treasury.gov.za/legislation/acts/2017/Act%209%20of%202017%20FinanSectorRegulation.pdf> (accessed 5 June 2018).

¹⁵⁴ Department of National Treasury of South Africa *A safer financial sector to serve South Africa better* (February 2011) available at <http://www.treasury.gov.za/documents/national%20budget/2011/A%20safer%20financial%20sector%20to%20serve%20South%20Africa%20better.pdf> (accessed 2 June 2016); Department of National Treasury of South Africa *Implementing a twin peaks model of financial regulation in South Africa* (February 2013) available at

at <http://www.treasury.gov.za/twinpeaks/20131211%20-%20Item%203%20Roadmap.pdf> (accessed 2 June 2016). See paragraph 5.1 of Chapter Five.

¹⁵⁵ The Banks Act No.94 of 1990 available at https://www.gov.za/sites/default/files/gcis_document/201503/act-94-1990s.pdf (accessed 2 June 2016).

¹⁵⁶ The Banks Act No.94 of 1990: Regulations Relating to Banks of December 2012 available at http://www.treasury.gov.za/legislation/35950_12-12_ReserveBankCV01.pdf (accessed 2 June 2016).

¹⁵⁷ See paragraph 5.2 of Chapter Five.

¹⁵⁸ See paragraph 5.6 of Chapter Five.

model,¹⁵⁹ the regulation of the Dutch and the South African financial systems are comparable. This degree of comparability makes the Netherlands a suitable jurisdiction from which South Africa can draw insights regarding the implementation of the BCBS reforms within a Twin Peaks model.

1.9 Research statement

The South African framework for assessing the systemic importance of banks has been implemented in 2019 in accordance with the FSR Act. This current framework modified the original framework that was published in 2013 in terms of *the Regulations relating to banks*. Currently, South Africa has no G-SIBs but only D-SIBs. Accordingly, the contribution in this research focuses on the extent to which South Africa has consistently and effectively implemented the *Basel D-SIB framework* in respect of the assessment methodology for identification of banks as D-SIBs and the implementation of the resultant HLA requirement to ensure more stringent prudential regulation of these systemically important banks with the aim of promoting financial stability. The research also interrogates other additional stringent prudential standards that may be imposed on D-SIBs (SIFI-banks).

1.10 Research objectives

The research objectives are to:

- (a) review the principles of the *Basel D-SIB framework* regarding the assessment methodology for the identification of D-SIBs; review the principles that relate to the application of the D-SIB buffer to banks that are identified as D-SIBs; as well as to review other additional stringent prudential requirements that may be imposed on D-SIBs by the relevant national authorities.
- (b) examine the US framework for the identification of G-SIBs as well as BHCs that are subject to the application of section 165 of the Dodd-Frank Act, as amended by section 401 of the EGRRCPA; and analyse how they are subjected to the stringent prudential standards and enhanced supervisory frameworks in accordance with the Dodd-Frank Act, as amended by the EGRRCPA.
- (c) analyse the implementation of the EU O-SII framework in the Netherlands as it pertains to the identification framework for O-SIIs and the heightened regulatory

¹⁵⁹ Schmulow A (2017: 393 at 401).

and supervisory regime in accordance with *the Financial Supervision Act*, as amended, to give effect to the CRD IV package, as amended, and *the SSM Regulation*.

- (d) analyse the provisions of section 29 of the FSR Act in terms of which financial institutions may be designated as SIFIs; review the implementation of the *Basel D-SIB framework* in South Africa regarding identification of South African banks as D-SIBs; and investigate the stringent prudential requirements and intensive supervisory regime for these D-SIBs (SIFI-banks) pursuant to section 30 of the FSR Act and *the Regulations Relating to Banks*.
- (e) Briefly investigate the available legal remedies for banks to challenge their identification as D-SIBs and the imposition of the stringent prudential regime in the US, the Netherlands and South Africa.

1.11 Research methodology

This research is based on a desktop research methodology. To that end, it substantially draws on legislation, as well as case law. Further, it explores secondary sources of law, including journal articles and books. In addition, web resources constitute part of sources of this study. The study further makes reference to publications of international standard-setting bodies (principally the BCBS and FSB) as well as those of international institutions (such as the IMF and the World Bank), which relate to the identification and regulation of SIFI-banks/D-SIBs. Given that the approach that informs this research methodology is that of comparative analysis, the relevant publications of the US, the Netherlands and South African jurisdictions regarding the identification of D-SIBs and the regulatory and supervisory frameworks will inform this study. The study also draws from conference papers, workshops, speeches and statements.

1.12 Delineation

This study focuses on the identification and prudential regulation of D-SIBs in South Africa, being SIFI-banks that are systemically important on the domestic economy. The focus is specifically on the identification of D-SIBs and the stringent prudential regulation of systemic risk posed by D-SIBs with the objective of strengthening their resilience in times of financial distress to minimise their probability of default and thereby safeguarding the stability of a financial system and domestic economy.

Consequently, as South Africa currently has no G-SIBs, the prudential regulation of G-SIBs which targets the regulation of systemic risk at a global level falls outside the scope of this research and reference thereto will only be made where it is necessary to contextualise the discussion that is relevant to this thesis. Notably, as pointed out, the discussion of the G-SIB framework in the US, where no D-SIB framework exists, is regarded necessary as the reforms made in this context are relevant to D-SIBs as well, given that the Basel D-SIB framework has been derived from the G-SIB framework. Further, the resolution regimes aimed at orderly resolutions of these SIFI-banks also fall outside the scope of this study and will be referred to only where it is relevant to contextualise the discussion in this study.

Finally, the calculation of systemic scores measuring the extent of the systemic importance of D-SIBs is beyond the scope of this research. This means that the research conducts a high-level overview of the assessment methodology for the identification of D-SIBs without conducting any deep mathematical or economic analysis of the calculations of the scoring methodology for banks that are identified as D-SIBs.

1.13 Chapter structure

Chapter One discussed the emergence, the rise and the demise of TBTF financial institutions. This Chapter specifically highlighted that the TBTF conundrum emerged from the global deregulation of financial services featuring the consolidation of banking institutions, securities firms and insurance companies through mergers and acquisitions that resulted in universal banking business. Further, this Chapter demonstrated that the TBTF-problem entailed the bail-out of financial institutions that could not exit the financial system without significant disruption due to their size, interconnectedness and complexity, thereby posing heightened systemic risk to a financial system relative to non-systemic financial institutions.

Chapter One also discussed the effect of deregulation and consolidation of the financial markets in the US and the Netherlands and the role that such deregulation and consolidation played in the consequent TBTF-issues that characterised the 2008 GFC as well as the impact of the Crisis on South Africa. The Chapter further alluded to the *FSB SIFI framework* reforms in respect of SIFIs in pursuit of the post-GFC G20

financial stability objective. In particular, the Chapter briefly alluded to the BCBS reforms pertaining to the identification of banks as D-SIBs and the D-SIB buffer regime that is applied to D-SIBs subsequent to their identification in accordance with the *Basel D-SIB framework*, as well as the imposition of other stringent prudential regulatory and supervisory frameworks.

Chapter Two firstly conducts an overview of the *Basel G-SIB framework* to inform the discussion on the analysis of the *Basel D-SIB framework*, given that the BCBS, in consultation with the FSB, modelled the *D-SIB framework* on the *G-SIB framework* as requested by the G20 Leaders and the aforesaid overview is thus necessary for contextualization. The Chapter analyses the *Basel G-SIB framework* methodology for identification of G-SIBs (defined as banks that are systemically important on a global financial system) with the indicator-based measurement approach, as supplemented by supervisory judgment. Further, the Chapter defines the categories (as well as the indicators assigned to these categories) of the indicator-based measurement approach consisting of: size, interconnectedness, substitutability, complexity and cross-jurisdictional activity, which are each risk weighted at 20 per cent to establish the level of a bank's global systemic footprint. Banks that obtain a systemic score of 130 basis points under the indicator-based measurement approach are identified as G-SIBs. G-SIBs are subject to a G-SIB surcharge that is assigned to each G-SIB in terms of the bucketing system corresponding to the systemic profile of a given G-SIB.

Supervisory judgment evaluates the systemic importance of banks that fall below this systemic score threshold having regard to indicators that are relevant to their individual jurisdictions' financial systems, which are not sufficiently captured under the indicator-based measurement approach or that cannot be easily quantified in the form of an indicator.

Chapter Two then evaluates the principles of the *Basel D-SIB framework* regarding the identification of banks as D-SIBs as well as the principles relating to the HLA requirement for D-SIBs, (the D-SIB buffer). The *Basel G-SIB framework* is thus rules-based whereas the *Basel D-SIB framework* is principles-based. Thereafter, the Chapter analyses the modalities for extending the *Basel G-SIB framework* to a domestic economy through the *Basel D-SIB framework* employing the categories of:

size, interconnectedness, substitutability and complexity. The relevant national authorities are permitted to incorporate the cross-jurisdictional category in the *Basel D-SIB framework* if their respective jurisdictions have internationally active banks posing cross-border systemic risk. The Chapter subsequently analyses the D-SIB buffer regime applicable to D-SIBs and further discusses other prudential standards that the relevant national authorities may generally apply to banks inclusive of D-SIBs. This prudential toolkit incorporates: the CCvB; the CCyB; the supplementary leverage ratio; the LCR; the NSFR; the large exposure limits framework; and resolution planning as per the *FSB Key Attributes*. The Chapter concludes with an analysis of the intensive supervisory framework for D-SIBs, as incorporated in the *FSB SIE Report* that incorporates prudential requirements such as risk governance and management frameworks and stress-testing regime.

Chapter Three provides an overview of the identification and regulation of D-SIBs (SIFI-banks) in the US pursuant to section 165 of the Dodd-Frank Act, as amended by section 401 of the EGRRCPA. To contextualise the discussion in Chapter Three, the regulation and supervision of the US financial system under different financial regulatory agencies is summarised, with particular focus on the regulation of the US dual banking system. The Chapter then provides a detailed discussion of the macro-prudential supervisory approach to the US financial system. Thereafter, the Chapter reviews the identification and regulatory framework for the US SIFI-banks that was originally incorporated under section 165 of the Dodd-Frank Act, and the subsequent amendments of this framework by section 401 of the EGRRCPA. The Chapter analyses the EGRRCPA's revised criteria for applicability of stringent prudential standards for US G-SIBs (as US G-SIBs would also by necessary implication constitute as US D-SIBs) and BHCs that are subject to the stringent prudential regime under section 165 of the Dodd-Frank Act, as amended. The Chapter further details the stringent prudential requirements imposed on US G-SIBs and BHCs pursuant to section 165 of the Dodd-Frank Act, as amended by the EGRRCPA. Finally, this Chapter investigates the available legal recourse for US SIFI-banks that seek to challenge their identification as SIBs and the resultant stringent prudential regime.

Chapter Four discusses the regulation and supervision of the EU financial system at Union level by the ESFS under the CRD IV package, as amended, together with the

supervision of significant credit institutions in the euro countries under the SSM Regulation. Thereafter, the Chapter overviews the supervision of the financial system in the Netherlands, and further analyses the implementation of the EU framework for identification and regulation of O-SIIs within the Dutch Twin Peaks model in accordance with the Financial Supervision Act, as amended, consistent with the CRD IV package and the SSM Regulation. Lastly, Chapter Four interrogates the legal remedies that are available in the Netherlands for aggrieved banks that have been identified as O-SIIs.

Chapter Five analyses the South African Twin Peaks model pursuant to the FSR Act. The Chapter then generally examines the procedure for the designation of financial institutions as SIFIs under section 29 of the FSR Act, as well as the implementation of the *Basel D-SIB framework* in South Africa pursuant to section 29 of the Act (as originally implemented in 2013 under *the Regulations relating to banks*). Further, the Chapter interrogates the legal consequences of SIFI-banks/D-SIB designation/identification being the resultant stringent prudential regulation and enhanced supervision incorporated under section 30 of the FSR Act. The Chapter concludes by interrogating the legal remedies for challenging SIFI-bank designation in South Africa.

Chapter Six sets out the conclusions on the comparative analysis of the implementation of the *Basel D-SIB framework* on the identification of D-SIBs and the stringent prudential regulatory and enhanced supervisory frameworks in the US and the Netherlands. It further recommends certain reforms in view of guidance for South Africa taken regarding best international practices to be observed in relation to the identification and prudential regulation of D-SIBs (SIFI-banks). Finally, Chapter Six concludes with brief observations on the prospects of challenging SIFI-bank designation in South Africa.

CHAPTER TWO

THE BASEL FRAMEWORK FOR IDENTIFICATION AND REGULATION OF DOMESTIC SYSTEMICALLY IMPORTANT BANKS (D-SIBs)

2.1 Introduction

As alluded to in Chapter One, the focus of this thesis will be the framework for identification and regulation of systemically important banks in South Africa - a developing country that does not currently have any banks that are globally systemically important.¹⁶⁰ Thus, South African banks can only be assessed in terms of whether they are systemic or not in relation to the domestic South African economy. The *Basel D-SIB framework*, analogous to the *Basel G-SIB framework* for global systemically important banks, sets out a framework to be applied for the identification and regulation of banks that are domestically systemically important in a specific country.

Notably, the *Basel G-SIB framework* was used as basis to formulate the *Basel D-SIB framework*. The connection between the *Basel G-SIB framework* and the *Basel D-SIB framework* is further that G-SIBs are by necessary implication, also D-SIBs.¹⁶¹ This means that in certain countries, such as for example the US, some of the banks that are domestic systemically important banks will also be players in the global arena and may thus be systemically important also on a much larger, global scale whereas certain other countries may have banks that are systemic to the domestic financial system but not to the global financial system.¹⁶² Given this complementary perspective and the fact that the *Basel D-SIB framework* draws heavily on the *G-SIB framework*, a high-level overview of the *Basel G-SIB framework* is relevant for purposes of contextualising the discussion hereinafter of the *Basel D-SIB framework* as

¹⁶⁰ Paragraph 1.6 of Chapter One reviewed the impact of the GFC on the South African financial system, as documented in *the IMF Financial System Stability Assessment* that was undertaken in South Africa in 2008, which revealed the existence of banks perceived to be TBTF within the South African financial system and domestic economy. The South African identification and regulatory framework for banks that are regarded as systemically important in the domestic South African economy is detailed in Chapter Five.

¹⁶¹ Refer to paragraph 27 of the *Basel D-SIB framework* (July 2018) available at <https://www.bis.org/bcbs/publ/d445.pdf> (accessed 10 November 2018).

¹⁶² Paragraph 3.7, subparagraph 3.7.1, of Chapter Three notes that some US banks that have been identified as G-SIBs may further be identified as D-SIBs.

international best practice standard for the identification and regulation of banks that are systemically important in a domestic economy.

Against this backdrop, this Chapter first investigates the assessment methodology for the identification of G-SIBs to facilitate the application of the G-SIB surcharge to G-SIBs in accordance with the *Basel G-SIB framework*. Thereafter, the modalities are investigated for extending the *Basel G-SIB framework* to a domestic economy by means of the *Basel D-SIB framework*. This will entail an investigation of the criteria for identifying banks as D-SIBs together with the principles underpinning the application of the D-SIB buffer to D-SIBs. The legal implications of the identification of banks as D-SIBs entailing stringent prudential regulation and an enhanced supervisory regime, respectively, is then considered.

2.2 An overview of the Basel G-SIB framework

Considering the havoc wreaked on the financial system during the 2008 GFC, when central banks, in an attempt to preserve financial stability, extended large bail-outs to globally systemic financial institutions in unprecedented fashion, the BCBS (or Basel Committee) adopted a series of reforms to improve the resilience of banks and banking systems.¹⁶³ These reforms included: increasing the quality and quantity of capital that banks are required to hold; improving the risk coverage of banks; introducing a leverage ratio as a risk-management measure which requires banks to maintain non-risk based capital relative to their total exposure; introducing capital conservation and countercyclical buffers; and a global standard for liquidity risk.¹⁶⁴

¹⁶³ The *Basel G-SIB framework* (July 2018) at 1. BCBS *The G-SIB framework – Executive Summary* (October 2018) available at https://www.bis.org/fsi/fsisummaries/g-sib_framework.htm (accessed 10 November 2018).

¹⁶⁴ The *Basel G-SIB framework* (July 2018) at 2; See further, BCBS *Basel III: Finalising the post-global crisis reform* (December 2017) available at <https://www.bis.org/bcbs/publ/d424.pdf> (accessed 24 January 2019); BCBS *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (January 2013) available at <https://www.bis.org/publ/bcbs238.pdf> (accessed 8 June 2016); BCBS *Basel III: International Framework for liquidity risk measurement, standards and monitoring* (December 2010) available at <https://www.bis.org/publ/bcbs188.pdf> (accessed 8 June 2016); BCBS *Enhancements to the Basel II framework* (July 2009) available at <https://www.bis.org/publ/bcbs157.pdf> (accessed 8 June 2016); and BCBS *Revisions to the Basel II market risk framework* updated as of 31 December 2010 (February 2011) (bis.org) (accessed 8 June 2016).

Post GFC it was regarded necessary to impose more stringent prudential measures specifically on supersized TBTFs, or G-SIBs, to address the negative externalities they generate and to protect the financial system from the wider spill-over risks they pose.¹⁶⁵ These issues required to be addressed by putting regulatory and resolution measures in place for G-SIBs. The *Basel G-SIB framework* incorporates regulatory measures designed to reduce the probability of failure of G-SIBs in times of financial distress by requiring them to hold additional “going-concern” loss absorbency¹⁶⁶ to regulate the elevated systemic risk they pose in the global financial system.¹⁶⁷

The “going concern loss-absorbency capacity” of a bank refers to the viability of a bank’s business, which enables the bank to absorb systemic shocks so that it becomes resilient in the face of material financial distress while at the same time meeting due obligations.¹⁶⁸ As opposed to a bank’s “going concern” loss-absorbency capacity which is focused on the viability of the bank’s business, its “gone concern” loss-absorbency capacity is targeted at the point of non-viability of the bank’s operations.¹⁶⁹ The loss-absorbing capacity is enhanced by requiring banks to hold Common Equity Tier 1 (CET1) capital which comprises of common shares and retained earnings, amongst others.¹⁷⁰ The BCBS regards such CET1 capital as the most effective loss-absorbing and higher form of regulatory capital for purposes of ensuring that a bank can continue operating as a going concern¹⁷¹ and having adequate CET1 capital is thus vital for a bank’s continued operation.¹⁷² The best

¹⁶⁵ The *Basel G-SIB framework* (July 2018) at 2.

¹⁶⁶ *Ibid.*

¹⁶⁷ Refer to paragraph 1.7 of Chapter One for the definition of systemic risk.

¹⁶⁸ Paragraph 49 of the *Basel III capital framework*.

¹⁶⁹ BCBS *TLAC holdings – amendment to the Basel III standard definition of capital* (October 2016) available at <https://www.bis.org/bcbs/publ/d387.pdf> (accessed 17 July 2017).

¹⁷⁰ Paragraph 52 of the *Basel III capital framework*.

¹⁷¹ As discussed in paragraph 1.7 of Chapter one, in the wake of the GFC, the BCBS redefined a bank’s capital to make it more consistent across the member jurisdictions as well as to improve its quality and quantity. As further stated in paragraph 1.7 of Chapter One, the definition of minimum regulatory capital is set out in paragraph 49 of the *Basel III capital framework* which stipulates that total regulatory capital consists of the sum of the following: Tier 1 capital (consisting of CET1 capital and Additional Tier 1 (AT1) capital) and Tier 2 capital. Further, paragraph 49 thereof notes that Tier1 capital constitutes part of regulatory capital covering the going concern of a bank while the objective of Tier 2 capital is to raise a bank’s loss-absorbing capacity on a gone concern basis.

¹⁷² See paragraph 49 of the *Basel III capital framework*; See further, Hanson SG *et al* (2011) “A macroprudential approach to financial regulation” 25 *Journal of Economic Perspectives* 3 at 9 noting that since a bank’s total Tier 1 capital includes CET1 capital and preferred shares, among other items, in a scenario where a bank is troubled, CET1 capital enables recapitalisation as it ranks more junior than preferred shares.

practice features of a bank resolution regime (a full discussion of which is outside the scope of this study) is addressed by the *FSB Key Attributes for Effective Resolution Regimes for Financial Institutions*.¹⁷³ These regimes are aimed at reducing the impact of a bank's failure by creating comprehensive recovery and resolution frameworks that enable the orderly resolution of global banks to resolve the bail-out conundrum.¹⁷⁴

In November 2015, the Financial Stability Board (FSB), in consultation with the BCBS, introduced principles regarding the Total Loss-Absorbing Capacity (TLAC) for G-SIBs titled *Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution – Total Loss-absorbing Capacity (TLAC)*.¹⁷⁵ This was done as a measure designed to prevent the disorderly resolution of G-SIBs in the event of their failure.¹⁷⁶ To eliminate or significantly mitigate the necessity of a bail-out, the TLAC-Principles require G-SIBs to have sufficient loss-absorbing and re-capitalisation capacity that simultaneously enhance their “going concern” as well as their “gone concern” capacity if they do fail and are put in resolution.¹⁷⁷

At the stage that a bank that is failing enters into resolution, the bank's loss-absorbency capacity strengthens both its going concern and gone concern, and thus enhances the resolvability of the failing bank.¹⁷⁸ Such enhanced loss-absorbing capacity in the context of resolution ensures the re-capitalisation of the bank on a standalone basis and also that of its subsidiaries, the continued provision of critical functions and performance of financial obligations without the disorderly systemic collapse of such bank.¹⁷⁹

¹⁷³ The *FSB Key Attributes* were highlighted in paragraph 1.7 of Chapter One and are also overviewed under subparagraph 2.4.7 below.

¹⁷⁴ *Ibid.*

¹⁷⁵ FSB *Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution – Total Loss-absorbing Capacity (TLAC) term sheet* (November 2015) available at <https://www.fsb.org/wp-content/uploads/TLAC-Principles-and-Term-Sheet-for-publication-final.pdf> (accessed 29 July 2017).

¹⁷⁶ *Ibid.*

¹⁷⁷ *Ibid.*; See further, Onagoruwa GA (2014) “Basel III and the case for contingent convertible capital” 29 *Journal of International Banking Law Regulation* 142 at 342. Onagoruwa states that capital is converted into equity when a bank fails to enhance its loss absorbing capacity during a resolution.

¹⁷⁸ BCBS *TLAC holdings – amendment to the Basel III standard definition of capital* (October 2016) available at <https://www.bis.org/bcbs/publ/d387.pdf> (accessed 17 July 2017).

¹⁷⁹ FSB *Adequacy of loss-absorbing capacity of global systemically important banks in resolution - consultative document* (November 2014) available at <https://www.fsb.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf> (accessed 2 November 2019).

The BCBS originally published the *Basel G-SIB framework* in November 2011¹⁸⁰ as regulatory framework for the identification of global systemically important banks that could set a best practice standard for mitigating the TBTF-problem insofar as these giant banks were concerned.¹⁸¹ The *Basel G-SIB framework* was subsequently revised in July 2013, and also in July 2018, to incorporate evolving trends in the banking sector regarding the methodologies and approaches for assessing the systemic importance of banks.¹⁸² The discussion in this Chapter is based on the updated 2018 version of the *Basel G-SIB framework*.

The *Basel G-SIB framework* is used to facilitate the annual identification of G-SIBs by the FSB, in consultation with the BCBS.¹⁸³ The current FSB list of G-SIBs was issued in November 2022.¹⁸⁴ The list of G-SIBs is, however, not fixed because banks' systemic profile change over time due to changes in their business models and risk profiles that decrease their systemic footprint, or the potential increase in a number of G-SIBs in the emerging market economies that are integrated into the global financial system and economy.¹⁸⁵

¹⁸⁰ BCBS *Global systemically important banks: assessment methodology and the additional loss absorbency requirements* (November 2011) available at <https://www.bis.org/publ/bcbs207.pdf> (accessed 10 November 2016). Since its first publication of the list of G-SIBs, the FSB has been releasing the list of G-SIBs in November every year.

¹⁸¹ The *Basel G-SIB framework* (July 2018) at 1-2; See also Ioannou S *et al* (2019) "Too-Big-To-Fail: Why Megabanks have not become smaller since the Global Financial Crisis?" 31 *Review of Political Economy* 356 at 360.

¹⁸² BCBS *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement* (July 2013) available at

<https://www.bis.org/publ/bcbs255.pdf> (accessed 28 October 2016); BCBS *Global systemically important banks: revised assessment methodology and the higher loss absorbency requirement* (July 2018) available at

<https://www.bis.org/bcbs/publ/d445.pdf> (accessed 10 November 2018). The *Basel G-SIB framework* was originally issued in July 2013 and the *Basel G-SIB framework* that was released in July 2018 had to be implemented by member jurisdictions by 2021 and the resulting HLA absorbency by January 2023. However, the fundamental features of the *Basel G-SIB framework* remain largely unchanged in the subsequent revision. Refer to the *G-SIB framework – Executive summary* (October 2018) available at

https://www.bis.org/fsi/fsisummaries/g-sib_framework.htm (accessed 10 November 2018).

¹⁸³ See paragraphs 7 and 11 of the *Basel G-SIB framework* (November 2011); See further, Barth JR *et al* "Systemically important banks in the post-crisis era – the global response of and 135 countries' responses" Milken Institute September 2013 available at

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2294641 (accessed 26 July 2018) acknowledging the leading role of the FSB regarding the financial regulatory reforms for SIFIs, as assigned by the G20, and noting the cross-border implications of the regulation of G-SIBs.

¹⁸⁴ FSB 2022 *List of Global Systemically Important Banks (G-SIBs)* available at <https://www.fsb.org/wp-content/uploads/P211122.pdf> (accessed 30 November 2022).

¹⁸⁵ Paragraph 37 of the *Basel G-SIB framework* (July 2018).

The primary objective of the *Basel G-SIB framework* is to facilitate the application of the “G-SIB surcharge”¹⁸⁶ to banks that are identified as G-SIBs. The G-SIB surcharge is designed to raise the loss-absorbing capacity of G-SIBs¹⁸⁷ and to incentivise G-SIBs to refrain from assuming excessive systemic significance.¹⁸⁸ Thus, banks’ systemic importance is assessed annually based on the most recently collected data¹⁸⁹ and, to encourage banks to reduce their systemic importance, the indicators, the cut-off scores, and bucket thresholds of the indicator-based measurement approach and the considerations underlying the exercise of supervisory judgment,¹⁹⁰ as discussed below, are publicly disclosed.¹⁹¹

The further rationale for imposing the G-SIB surcharge is to promote the maintenance of financial stability by addressing cross-border spill-over effects that are created by G-SIBs.¹⁹² As indicated in Chapter One,¹⁹³ cross-border spill-over effects may arise in situations where jurisdictions with internationally active banks have significant exposure to regulatory policies of other foreign jurisdictions.¹⁹⁴ Thus, these exposures

¹⁸⁶ Discussed in detail in subparagraph 2.2.4 below.

¹⁸⁷ See paragraph 6 of the *Basel G-SIB framework* (July 2018); The BCBS implemented the G-SIB surcharge because large and globally active banks were at the epicentre of the GFC that posed systemic risk causing a ripple effect to the global financial system and economy. For this, see, Schoenmaker D (2017) “What happened to global banking after the crisis” 25 *Journal of Financial Regulation and Compliance* 241.

¹⁸⁸ See the *Basel G-SIB framework* (July 2011) and the preface of the *Basel G-SIB framework* (July 2018); Goel T *et al* “Playing it safe: global systemically important banks after the crisis” BIS Quarterly Review September 2019 available at https://www.bis.org/publ/qtrpdf/r_qt1909e.pdf (accessed 2 November 2019) observe that given the high-cost implications of capital, the extra capital surcharge is intended to incentivise banks to reduce their systemic importance. See further, Passmore W *et al* (2019) “Are Basel’s capital surcharges for global systemically important banks too small?” 15 *International Journal of Central Banking* 107-156. Passmore and von Hafften label this G-SIB surcharge “self-insurance” against all losses that seek to ensure that G-SIBs would not receive bail-out when encountering financial distress.

¹⁸⁹ Paragraph 38 of the *Basel G-SIB framework* (July 2018).

¹⁹⁰ The indicator-based measurement approach and its bucket thresholds together with supervisory judgment are elaborated below in subparagraphs 2.2.2, 2.2.3 and 2.2.4.

¹⁹¹ Paragraph 38 of the *Basel G-SIB framework* (July 2018). As earlier stated, the primary objective of the *Basel G-SIB framework* is to apply the G-SIB surcharge to banks that are identified as G-SIBs. The public disclosure requirement regarding the systemic scores and applicable G-SIB surcharges is in line with the secondary objective of the *Basel G-SIB framework*, which is to incentivise banks to decrease their systemic importance to safeguard the global financial stability.

¹⁹² Paragraph 2 of the *Basel G-SIB framework* (July 2018); See further, Buch CM *et al* (2017) “Cross-border prudential policy spillovers: How much? How important? Evidence from the International Banking Research Network” 13 *International Journal of Central Banking* 505 at 510.

¹⁹³ Paragraph 1.4 of Chapter One.

¹⁹⁴ Allen F *et al* “Cross-border banking in Europe: implications for financial stability and macroeconomic policies” Centre for Economic Policy Research 2011 available at <https://cadmus.eui.eu/handle/1814/20202> (accessed 16 October 2016).

may spill over to banks in home jurisdictions, thereby creating negative externalities.¹⁹⁵ These negative externalities may then impose external costs on taxpayers and be increased by moral hazard costs and may consequently intensify systemic instabilities.¹⁹⁶

Given the cross-border negative externalities that are posed by very large cross-border banks, the reference system for assessing the systemic impact of a G-SIB is the global economy, with the unit of analysis at its highest consolidated level.¹⁹⁷ Consistent with this approach, the G-SIB surcharge is therefore applied on the consolidated level of the G-SIB.¹⁹⁸ In particular, the *Basel G-SIB framework* measures the systemic importance of global banks in terms of the impact that their failure can have on the global financial system and wider economy (so-called “loss-given-default” (LGD)), as opposed to the risk that a bank failure will occur.¹⁹⁹ As explained in the *Basel G-SIB framework*, this means that the assessment methodology applied to determine whether a bank is a G-SIB, considers certain indicators that are used to evaluate the potential system-wide adverse effects arising from the failure of a global bank during material financial distress.²⁰⁰ The *Basel G-SIB framework* consists of the indicator-based measurement approach, which is complemented by the supervisory judgment methodology, as discussed below.

2.2.1 The indicator-based measurement approach

Table 2.2.1 below illustrates the Basel indicator-based measurement approach for G-SIBs and seeks to facilitate a better understanding of such approach, as discussed hereinafter.

¹⁹⁵ Paragraph 3 of the *Basel G-SIB framework* (July 2018); The losses can, for instance, spill over to other financial institutions via direct exposures. For this, see Goldsmith-Pinkham P *et al* (2010) “Liquidity, bank runs, and bailouts: spillover effects during the Northern Rock episode” 37 *Journal of Financial Services* 83 at 84; Allen F *et al* (2000) “Financial contagion” 108 *Journal of Political Economy* 1-33. See also paragraph 1.4 of Chapter One.

¹⁹⁶ Goodhart C *et al* (2015) “Critical reflections on bank bail-ins” available at <https://www.bis.org/bcbs/events/bartnf/avgouleasgoodhart.pdf> (accessed 9 November 2019).

¹⁹⁷ Paragraph 12 of the *Basel G-SIB framework* (July 2018); However, the BCBS notes that the consolidated application of the G-SIB surcharge on a parent G-SIB does not rule out the option for the host jurisdictions of subsidiaries of the group also to apply the requirement at the individual legal entity, or consolidated level, within their jurisdiction.

¹⁹⁸ Paragraph 89 of the *Basel G-SIB framework* (July 2018).

¹⁹⁹ Paragraph 14 of the *Basel G-SIB framework* (July 2018).

²⁰⁰ *Ibid.*

Category (and weighting)	Indicator	Indicator weighting
Size (20%)	<ul style="list-style-type: none"> • Total exposure 	20%
Interconnectedness (20%)	<ul style="list-style-type: none"> • Intra-financial system assets • Intra-financial system liabilities • Securities outstanding 	6.67% 6.67% 6.67%
Substitutability (20%)	<ul style="list-style-type: none"> • Assets under custody • Payment activity • Underwritten transactions in debt and equity markets • Trading volume 	6.67% 6.67% 3.33% 3.33%
Complexity (20%)	<ul style="list-style-type: none"> • Notional amount of OTC derivatives • Trading and available for 	6.67% 6.67%

	sale securities <ul style="list-style-type: none"> • Level 3 assets 	6.67%
Cross-jurisdictional indicator (20%)	<ul style="list-style-type: none"> • Cross-jurisdictional claims • Cross-jurisdictional liabilities 	10% 10%

The *Basel G-SIB framework* sets out an indicator-based quantitative measurement approach,²⁰¹ which is supplemented by qualitative supervisory judgment,²⁰² to identify G-SIBs and assess their systemic importance.²⁰³ The indicator-based measurement approach measures the systemic importance of banks across five categories, namely: size; interconnectedness; substitutability; complexity; and global cross-jurisdictional activity.²⁰⁴ These categories of systemic importance are equally weighted at 20 (twenty) per cent each.²⁰⁵

As explained in the *Basel G-SIB assessment methodology – score calculation*,²⁰⁶ the systemic score for each indicator equals an individual bank's reported value for that indicator divided by the corresponding sample total and the resulting value is expressed in basis points. The sample total is derived by adding together the total amount for the corresponding indicator held by all banks that are included in the identification process.²⁰⁷ The final systemic score for each category is calculated by averaging the systemic scores for the indicators that fall within that category. Thus,

²⁰¹ Discussed in subparagraph 2.2.1 below.

²⁰² Discussed in subparagraph 2.2.3 below.

²⁰³ Paragraphs 12 and 14 of the *Basel G-SIB framework* (July 2018).

²⁰⁴ Paragraph 11 of the *Basel G-SIB framework* (July 2018).

²⁰⁵ Paragraph 27 of the *Basel G-SIB framework* (July 2018); See paragraph 1.7 of Chapter One for the definition of a basis point.

²⁰⁶ BCBS The G-SIB assessment methodology – score calculation (November 2014) available at <https://www.bis.org/bcbs/publ/d296.pdf> (accessed 21 June 2021).

²⁰⁷ *Ibid.*

the systemic score for the category that has only one indicator (size-category) will be the total systemic score for that indicator. Under the Basel G-SIB indicator-based measurement approach, a bank's systemic score will then consist of the weighted average of thirteen indicators across the five categories of: size; interconnectedness; substitutability; complexity; and cross-jurisdictional activity (that are each risk-weighted at 20 per cent).²⁰⁸ The banks' overall systemic score is produced by averaging these systemic scores for all the five categories and rounding the resulting value to the nearest whole basis point.²⁰⁹ Banks that obtain a systemic score that equals to or exceeds 130 basis points are identified as G-SIBs.²¹⁰

Whereas the size-category has one indicator and the other categories have multiple indicators, these indicators are utilised to define the substantive components of the aforementioned categories, establishing systemic importance for each category.²¹¹ The BCBS is of the view that these indicators reflect different aspects generating negative externalities, thereby rendering a bank systemically important and critical for the smooth functioning of a financial system.²¹²

2.2.1.1 Size

The size-category is used as a key measure of a bank's systemic importance.²¹³ This is because the systemic impact of distress or failure of a bank that has a large market share of global activity would significantly endanger the global financial system as the financial services rendered by such a bank would not be quickly replaced – thus resulting in a loss of public confidence that could compromise financial stability.²¹⁴ Size is measured by the total exposure of the bank, as defined in the *Base III supplementary leverage ratio*.²¹⁵ According to the *Basel III supplementary leverage ratio framework*, a bank's total exposure incorporates the sum of its on-balance sheet exposure,

²⁰⁸ *Ibid.*

²⁰⁹ *Ibid.*

²¹⁰ *Ibid.*

²¹¹ Paragraph 27 of the *Basel G-SIB framework* (July 2018).

²¹² *Ibid.*

²¹³ Paragraph 22 of the *Basel G-SIB framework* (July 2018).

²¹⁴ *Ibid.*

²¹⁵ Refer to paragraph 2.4.4 below for a detailed discussion of the Basel III supplementary leverage ratio requirement.

derivatives exposures, securities financing transactions exposures, and off-balance sheet items.²¹⁶

On-balance sheet exposures encompass all assets that are on a bank's balance sheet, including on-balance sheet derivatives collateral and collateral for securities financing transactions.²¹⁷ Derivatives transactions include exposures arising from an underlying derivative contract and counterparty credit risk (CCR) exposure.²¹⁸ Securities financing transactions cover transactions such as repurchase agreements, reverse repurchase agreements, and security lending and borrowing.²¹⁹ Off-balance sheet items include acceptances, standby letters of credit and unsettled securities.²²⁰

2.2.1.2 Interconnectedness

The interconnectedness-category relates to the risk of contagion in terms of which financial distress in one financial institution propagates to other financial institutions with which a bank is networked through its contractual obligations, thus creating the potential for "domino effect" systemic collapse.²²¹ Financial institutions in this context refer to banks, bank holding companies (BHCs), securities firms, insurance companies, mutual funds, hedge funds, pension funds and central counterparties

²¹⁶ Paragraph 14 of the *Basel III supplementary leverage ratio framework*.

²¹⁷ Paragraph 15 of the *Basel III supplementary leverage ratio framework*.

²¹⁸ Paragraph 18 of the *Basel III supplementary leverage ratio framework*; Counterparty risk is defined as "the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows." For this, see BCBS *The Basel Framework* available at https://www.bis.org/basel_framework/ (accessed 20 February 2020).

²¹⁹ Paragraph 32 of the *Basel III supplementary leverage ratio framework*; A repurchase agreement is defined as a financing transaction in which a holder of securities sells them to an investor and agrees to buy them at a future specified date with interest and the buyer of the securities enters into a reverse repurchase agreement by agreeing to buy such securities with the intention of selling them to the initial holder. For this, see Schultz K *et al* "Repurchase agreements" – Chapter 9 – In Strumeyer G *et al* (2017) *The capital markets: evolution of the financial ecosystem* 184.

²²⁰ Paragraph 162 of the *Basel III capital framework*; In a standby letter of credit, a seller's bank guarantees the performance of the seller relating to a certain obligation to a buyer, such as the delivery of purchased goods. A bank's acceptances refer to an obligation undertaken by a bank to pay a draft drawn on it at the maturity date. For this, refer to Sandler M *et al* (1986) "Primer on trade finance: export drafts, letters of credit, and banker's acceptances" 11 *North Carolina Journal of International Law and Commercial Regulation* 613 at 630 and 635.

²²¹ Paragraph 23 of the *Basel G-SIB framework* (July 2018); See further, Schoenmaker D (1996) "Contagion risk in banking available at https://web.actuaries.ie/sites/default/files/erm-resources/345_contagion_risk_in_banking.pdf (accessed 9 November 2019). Schoenmaker is of the view that contagion risk is also referred to as systemic risk.

(CCPs).²²² Three indicators are used to measure interconnectedness, namely: intra-financial system assets; intra-financial system liabilities; and securities outstanding.²²³

Intra-financial system assets encompass all funds that are deposits or balances of a bank in other financial institutions.²²⁴ They include certificates of deposit;²²⁵ committed lines²²⁶ extended to other financial institutions; net positive current exposure of securities financing transactions; and OTC derivatives transactions that have a net positive fair value.²²⁷ Further, intra-financial system assets extend to holdings of securities issued by other financial institutions, such as secured debt securities; senior unsecured debt securities; subordinated debt securities; commercial paper; and equity securities.²²⁸ Secured debt securities such as covered bonds, are types of debts that are secured by collateral and entitle secured creditors to have a priority claim over the proceeds of sale of an asset in case a bank goes bankrupt.²²⁹ Senior unsecured debt securities are debts that are unsecured by a collateral ranking lower than secured debt securities in bankruptcy proceedings.²³⁰ Subordinated debt is subordinated to senior creditors of a bank during bankruptcy.²³¹ Companies issue commercial paper as a

²²² Paragraph 57 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) available at

https://www.bis.org/bcbs/gsib/instr_end18_gsib.pdf (accessed 20 February 2019). BCBS notes that central banks and other public sector bodies such as multinational development banks are not included in the definition of financial institutions.

²²³ Paragraph 23 of the *Basel G-SIB framework* (July 2018).

²²⁴ Paragraph 60 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²²⁵ Paragraph 60 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) defines certificates of deposit as time deposits that are issued by a bank with a specific maturity date.

²²⁶ Paragraph 60 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019); Banks create committed lines facility from which borrowers can draw credit at a specified fee. For this, see Huang R “How committed are bank lines of credit? Experiences in the subprime mortgage crisis” Federal Reserve Bank of Philadelphia Working Paper August 2010 available at <https://pdfs.semanticscholar.org/1a31/f1eefe59b0881b728c0ead0f23aa1af3a628.pdf> (accessed 6 November 2019).

²²⁷ *Ibid.*

²²⁸ *Ibid.*

²²⁹ Stulz R *et al* (1985) “An analysis of a secured debt” 14 *Journal of Financial Economics* 501; Schwartz A (1981) “Security interests and bankruptcy priorities: a review of current theories” 10 *The Journal of Legal Studies* 1.

²³⁰ Badoer DC *et al* (2017) “Priority spreading of corporate debt” available at http://www.fmaconferences.org/Boston/VolatilityPriority_2016/1223.pdf (accessed 6 November 2019).

²³¹ Lambert Jr. EW (1996) “Bank debt securities: the investor’s viewpoint” 22 *Financial Analysts Journal* 93 at 94; BCBS Markets for bank Subordinated Debt and Equity in Basel Committee member countries Working Paper August 2003 available at https://www.bis.org/publ/bcbs_wp12.pdf (accessed 6 November 2019).

short-term debt instrument to raise capital at short-term interests.²³² Equity securities include common stock and preferred shares.²³³

Intra-financial system liabilities cover the funds in a bank that constitute deposits or loans due to depository institutions and non-depository financial institutions.²³⁴ Such intra-financial system liabilities are the converse of intra-financial system liabilities, as they include: the unused portion of committed lines obtained from other financial institutions; net negative current exposure of securities financing transactions; and OTC derivatives transactions that have a net negative fair value.²³⁵

The third indicator of interconnectedness, namely securities outstanding, covers all securities that are stipulated under the intra-financial system assets that are issued by a bank, or on its behalf, irrespective of whether or not they are held by other financial institutions.²³⁶

2.2.1.3 Substitutability

Substitutability refers to the extent to which the financial services and products of a bank may be replaced by other financial market participants, especially financial institution infrastructures.²³⁷ As pointed out in the *Basel G-SIB framework*, the systemic impact of distress or failure of a bank with a large market share in certain essential financial services that are difficult to substitute, is expected to be relatively greater than that of a bank with a smaller market share in this context.²³⁸ The potential disruption that could be caused by such a bank relates to the increased cost of having to secure such critical financial services from other financial institutions.²³⁹ Notably,

²³² Kacperczyk M *et al* (2010) “When safe proved risky: commercial paper during the financial crisis of 2007-2009” 24 *Journal of Economic Perspectives* 50.

²³³ Paragraph 68 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019); Common stock offers equity ownership that entitles stockholders to voting rights regarding the matters of a company while preferred stockholders receive a regular dividend and have priority over common stockholders albeit they do not have voting rights. Refer to Simpson TD (2014) *Financial markets, banking, and monetary policy* 168.

²³⁴ Paragraph 78 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²³⁵ *Ibid.*

²³⁶ Paragraph 90 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²³⁷ Paragraph 24 of the *Basel G-SIB framework* (July 2018).

²³⁸ *Ibid.*

²³⁹ *Ibid.*

the BCBS capped the systemic score of the substitutability-category to reduce the great impact it produced for banks that are dominant when measured in each of its three indicators, namely: payment activity; assets under custody; underwritten transactions in debt and equity markets; and trading volume.²⁴⁰

The payment activity indicator calculates the gross value of all cash payments that a bank sent via a large-value payment system or through an agent or correspondent bank.²⁴¹ Payment is reported regardless of the location from, and purpose for, which it was made, together with the settlement method which was used.²⁴² Assets under custody are assets that “a custodian bank” manages for custody and safekeeping on behalf of institutional investors and private customers, including those that are held by third parties as sub-custodians.²⁴³ They include assets under management or assets under administration, provided that they fulfil the criteria of being kept for custody or safekeeping.²⁴⁴ Underwritten equity transactions encompass initial public offerings and additional offering of common stock.²⁴⁵ Underwritten debt transactions include debt instruments such as covered bonds and asset-backed securities (ABS) transactions.²⁴⁶ Notably, the trading volume is a new indicator that did not feature in the 2013 *Basel G-SIB framework*, and its weighting is equally divided with the indicator

²⁴⁰ *Ibid.*

²⁴¹ Paragraph 101 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²⁴² *Ibid.*

²⁴³ Paragraph 106 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²⁴⁴ Paragraph 106 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) states that cash is included in assets under custody, however, assets that are held as collateral are generally excluded.

²⁴⁵ Paragraph 109 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019); The initial public offering occurs when a privately-owned company offers stock for the first time and thus “goes public” and the additional equity that a company may issue subsequently is called additional offering of common stock, otherwise known as secondary offering. For this, see Weisberger D “Equities” – Chapter 25 – In Strumeyer G *et al* (2017) *The capital markets: evolution of the financial ecosystem* 435 at 439.

²⁴⁶ Paragraph 111 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) notes that loan underwriting does not constitute the underwritten debt transactions, but the sovereign debt is included under underwritten debt instruments. Asset-backed securities are defined as securities that are collateralised by assets while mortgage-backed securities are securities backed by residential assets. For this, see Castro, Jr. DI “Asset-backed securities” – Chapter 18 – In Strumeyer G *et al* (2017) *The capital markets: evolution of the financial ecosystem* 312; Byrne P “Mortgage-Backed Securities” – Chapter 3 – In Strumeyer G *et al* (2017) *The capital markets: evolution of the financial ecosystem* 239. Schwarcz SL (2011) “The conundrum of covered bonds” 66 *The Business Lawyer* 561 at 562 states that covered bonds are debt securities that are collateralised by the assets of the issuer of a bond.

of underwritten transactions in debt and equity markets.²⁴⁷ The BCBS notes that this split reflects the role of the trading volume-indicator, which is to capture potential disruptions in the provision of liquidity in the secondary market for some exposures, while the underwritten transaction in the debt and equity markets-indicator captures liquidity in the primary market.²⁴⁸

2.2.1.4 Complexity

As observed in the *Basel G-SIB framework*, the systemic impact of a bank's failure is positively related to its business model, structural and operational complexity and results in time-consuming, costly, as well as complex resolution, should the bank encounter failure.²⁴⁹ Pursuant to the *FSB Key Attributes*, the complexity-category establishes the systemic importance of a bank with respect to the bank's ability to be resolved in an orderly fashion should it fail.²⁵⁰ The complexity of a bank is measured with regard to the following indicators: the notional amount of OTC derivatives; Level 3 assets; and trading and available-for-sale (AFS) securities.²⁵¹

Under the indicator of OTC derivatives, the *Basel G-SIB framework* incorporates derivatives transactions that are cleared through a central counterparty and bilaterally.²⁵² Securities that are held for trading are actively and frequently purchased and sold for profit generating on short-term fluctuations of prices of securities and are not classified as available-for-sale securities.²⁵³ Notably trading securities and available-for-sale securities are prone to asset fire sale discounts during financial

²⁴⁷ Paragraph 16 of the *Basel G-SIB framework*.

²⁴⁸ *Ibid.*

²⁴⁹ Paragraph 25 of the *Basel G-SIB framework* (July 2018).

²⁵⁰ . See subparagraph 2.4.7 below.

²⁵¹ Paragraph 25 of the *Basel G-SIB framework* (July 2018).

²⁵² Paragraphs 113, 114, 115 and 116 of the of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²⁵³ Paragraphs 117, 118, 119, 120 of the of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019); Barth ME *et al* (2017) "Bank earnings and regulatory capital management using available for sale securities" 22 *Review of Accounting Studies* 1761 at 1764 outlines categories of securities. The first category is trading securities that a bank actively trades and intends to sell in the near term. The second category are held-to-maturity securities that a bank has the intention and ability to hold to maturity. The last category is available for sale securities other than securities that are classified as trading and held to maturity.

distress.²⁵⁴ Level 3 assets are defined as illiquid assets, and their fair value cannot be easily determined, hence they may not be easily valued during market distress.²⁵⁵

2.2.1.5 Cross-jurisdictional activity

The cross-jurisdictional activity-category is communicated in terms of the global cross-border negative externalities arising from globally active banks. As explained in the *Basel G-SIB framework*, cross-jurisdictional activity is indicative of the global impact of a bank's distress or failure, which will generally vary in line with its cross-jurisdictional claims and cross-jurisdictional liabilities.²⁵⁶ A bank with a huge global systemic footprint will cause extensive cross-border spill-over effects and complicate the resolution process should such bank encounter failure.²⁵⁷ Cross-jurisdictional claims cover deposits and balances of a parent bank together with its loans and advances to foreign banks and financial institutions, including its holdings of securities.²⁵⁸ Cross-jurisdictional liabilities include the liabilities of all the offices of a bank, that is, headquarters, branches and subsidiaries, to entities that are outside its home jurisdiction.²⁵⁹

2.2.2 The utility of the indicator-based approach in identifying G-SIBs

The BCBS is of the view that the multiple indicator-based measurement approach adequately captures a bank's systemic importance due to its comprehensiveness, simplicity, and robustness.²⁶⁰ Because it is a quantitative methodology, the BCBS points out that the indicator-based measurement approach fosters transparency regarding how the systemic importance of banks is evaluated and this, in turn, assists banks in taking steps to reduce their systemic footprint.²⁶¹ Chouinard remarks that the

²⁵⁴ See paragraph 1.5 of Chapter One for the definition of asset fire sale.

²⁵⁵ Paragraphs 48 and 49 of the *Basel G-SIB framework* (November 2011); Milbradt K (2012) "Level 3 assets: booking profits and concealing losses" 25 *The Review of Financial Studies* 55 specifies that level 3 assets are illiquid assets and they include collateralised debt obligations (CDOs), asset-backed securities and other structured credit products.

²⁵⁶ Paragraph 21 of the *Basel G-SIB framework* (July 2018).

²⁵⁷ *Ibid*; The complexity of the resolution process may be created by the involvement of host and home authorities that are governed under different legal frameworks and as such, this may create conflict of interest. For this, see Krimminger MH (2008) "The resolution of cross-border banks: issues for deposit insurers and proposals for cooperation" 4 *Journal of Financial Stability* 376 at 379.

²⁵⁸ *Ibid*.

²⁵⁹ Paragraph 129 of the *Basel G-SIB framework* (July 2018).

²⁶⁰ Paragraph 11 of the *Basel G-SIB framework* (July 2018).

²⁶¹ BCBS *The G-SIB framework – Executive Summary* (October 2018) available at https://www.bis.org/fsi/fsisummaries/g-sib_framework.pdf (accessed 10 November 2018) notes that the quantitative approach of the *Basel G-SIB framework* consists of risk indicators and equal risk weights

quantitative assessment of the systemic significance of a bank provides an objective view and a consistent approach for the measurement of such systemic importance.²⁶² According to Chouinard, the flipside of the quantitative methodology is, however, that its effectiveness may be undermined by data availability and a degree of subjectivity in determining the indicators of systemic importance as well as the risk weights attached to each of the five categories that are used in the indicator-based approach.²⁶³

2.2.3 Supervisory judgment

Table 2.2.3 below lists the indicators of supervisory overlay to facilitate a better understanding of the discussion that follows.

Supervisory judgment indicators
<ul style="list-style-type: none"> • Total liabilities of a bank; • retail funding; • total gross revenue; • total net revenue; • foreign net revenue; • cross value of cash provided and cross value of securities provided in securities financing transactions; • cross value of cash received and cross value of securities received in securities financing transactions; • cross positive fair value of OTC derivatives transactions; • cross negative fair value of OTC derivatives transactions; • number of jurisdictions; • held to maturity securities; • total cross value of payment sent by a bank for the reporting year.

that are utilised to measure the systemic scores for individual banks. Walliman N (2010) *Research methods: the basics* at 71-72 observes that quantitative data is usually expressed in numbers that can be measured using mathematical formulas such as percentages and statistics in contrast to qualitative data which substantially draws on judgment and hence cannot be accurately calculated.

²⁶² Chouinard E *et al* (2013) "Assessing systemic importance of financial institutions" 37 *Financial System Review* 1.

²⁶³ *Ibid.*

As pointed out by the BCBS, there is no “one-size-fits-all”-approach for assessing systemic importance across all banks because the nature and degree of risks they pose will depend, *inter alia*, on their structural differences and financial activities.²⁶⁴ It is thus possible that the scoring system of the indicator-based measurement approach may underestimate the systemic importance of banks whose systemic scores are below the prescribed cut-off level of 130 basis points²⁶⁵ but which banks may nevertheless, for other reasons, be systemically important. Consequently, it may mean that some banks that should indeed be regarded as G-SIBs are not identified as such solely by using the quantitative view taken in terms of the indicator-based measurement approach.²⁶⁶

Therefore, supervisory judgment may be used to identify banks that do not meet the identification criteria of the indicator-based measurement approach and add them to the list of G-SIBs.²⁶⁷ On a practical level this means that when a bank is assessed to determine whether it should be regarded as a G-SIB and it falls short of the basis points required by the indicator-based method, the next phase will be to apply the supervisory judgment approach to that bank to determine whether it is nevertheless globally systemic.²⁶⁸

To enable the proper exercise of supervisory judgment, the *Basel G-SIB framework* lays down principles that guide the exercise of supervisory discretion to support (or even contradict) the outcome of the indicator-based measurement approach.²⁶⁹ One of the guiding principles is that supervisory judgment should only be exercised under extremely exceptional circumstances to adjust the systemic scores obtained by applying the indicator-based measurement approach to a bank.²⁷⁰ However, supervisory judgment will override the indicator-based measurement approach in cases where the treatment of a specific bank may give rise to imposing a loss

²⁶⁴ Paragraph 14 of the *Basel G-SIB framework* (July 2018).

²⁶⁵ See paragraph 2.2, subparagraph 2.2.1 above for the discussion on systemic score calculation for G-SIBs.

²⁶⁶ *Ibid.*

²⁶⁷ *Ibid.*

²⁶⁸ Paragraph 27 of the *Basel G-SIB framework* (July 2018).

²⁶⁹ Paragraph 30 of the *Basel G-SIB framework* (July 2018).

²⁷⁰ *Ibid.*

absorbency requirement on such bank that does not correspond to the bank's systemic importance.²⁷¹

Supervisory judgment relies on both quantitative and qualitative information, and given its subjectivity in the evaluation of the systemic importance of a bank, it must be carried out transparently and effectively.²⁷² The quantitative component of the supervisory judgment-approach comprises ancillary indicators relating to specific aspects of the systemic importance of a bank that, as mentioned above, may not be captured adequately by the indicator-based measurement approach.²⁷³ Such ancillary indicators of supervisory judgment include:²⁷⁴

- (a) total liabilities of a bank;²⁷⁵
- (b) retail funding;²⁷⁶
- (c) total gross revenue;²⁷⁷
- (d) total net revenue;²⁷⁸
- (e) foreign net revenue;²⁷⁹
- (f) cross value of cash provided and cross value of securities provided in securities financing transactions;²⁸⁰

²⁷¹ Paragraph 35 of the *Basel G-SIB framework* (July 2018); The Basel Committee argues that if such a situation arises from a host jurisdiction, a host supervisor would be required to incorporate the views of a bank's supervisory college comprising the home and major host supervisors, before applying the HLA requirement. If a home supervisor makes a recommendation for the application of a lower loss absorbency requirement, it will be subject to higher scrutiny, and the same rule will apply to a host supervisor's suggestion of a higher loss absorbency requirement.

²⁷² Paragraphs 30 and 35 of the *Basel G-SIB framework* (July 2018).

²⁷³ Paragraph 31 of the *Basel G-SIB framework* (July 2018).

²⁷⁴ Paragraph 31 of the *Basel G-SIB framework* (July 2018); These ancillary indicators are contained in the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) available https://www.bis.org/bcbs/gsib/instr_end18_gsib.pdf (accessed 20 February 2019).

²⁷⁵ Paragraph 134 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) specifies that own funds, capital and incurred costs such as income tax payable, wages payable are excluded from these liabilities.

²⁷⁶ As per Paragraph 135 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019), retail deposits are deposits minus deposits from depository institutions, central banks deposits and any other deposits that are not held by retail customers or small businesses.

²⁷⁷ Paragraph 136 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) defines gross revenue as interest income plus noninterest income.

²⁷⁸ Paragraph 137 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) defines total net revenue as interest income plus noninterest income minus interest expense.

²⁷⁹ Paragraph 138 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) defines foreign net revenue as revenue from the subsidiaries or branches of a bank located in other jurisdictions.

²⁸⁰ Paragraph 139 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) states that cross value of cash provided and cross value of securities provided in securities financing transactions encompass outgoing repurchase and reverse repurchase agreements, and securities lending and borrowing.

- (g) cross value of cash received and cross value of securities received in securities financing transactions;²⁸¹
- (h) cross positive fair value of OTC derivatives transactions;²⁸²
- (i) cross negative fair value of OTC derivatives transactions;²⁸³
- (j) number of jurisdictions;²⁸⁴
- (k) held to maturity securities;²⁸⁵
- (m) total cross value of payment sent by a bank for the reporting year.²⁸⁶

In addition to these quantitative indicators, the supervisory judgment may utilise qualitative information to assess the systemic importance of a bank in cases such as a major restructuring of the bank's operations.²⁸⁷

The BCBS further outlines sequential steps in the *Basel G-SIB framework* for incorporating supervisory judgment to the systemic scores that have been produced by the indicator-based measurement approach.²⁸⁸ These sequential steps are: the collection of data and supervisory commentary for all banks in the sample; the mechanical application of the indicator-based measurement approach and corresponding bucketing; the proposal of the relevant national authorities regarding the adjustment to the score of individual banks based on an agreed process; the recommendations of the BCBS to the FSB; and the final decision of the FSB as well as the relevant national authorities, in consultation with the BCBS.

²⁸¹ Paragraph 140 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) states that cross value of cash received and gross value of securities received in securities financing transactions cover incoming repurchase and reverse repurchase agreements, and securities lending and borrowing.

²⁸² Paragraph 141 of the of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²⁸³ Paragraph 142 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019).

²⁸⁴ Paragraph 143 of the of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019) states that this indicator includes the number of countries where a bank has branches or subsidiaries or the entity that is consolidated under the accounting standards.

²⁸⁵ Paragraph 154 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* January 2019.

²⁸⁶ In terms of paragraph 146 of the *BCBS Instructions for the end-2018 G-SIB assessment exercise* (January 2019), these are payments that are sent by a bank via large value payment systems or agent bank over the reporting year in each indicated currency.

²⁸⁷ Paragraph 33 of the *Basel G-SIB framework* (July 2018).

²⁸⁸ Paragraph 34 of the *Basel G-SIB framework* (July 2018).

The justification for the supervisory judgment methodology is that it takes into consideration country-specific information, and hence, allows national discretion in evaluating the risks posed by banks that may not be obviously systemically important.²⁸⁹ However, Chouinard observes that the accuracy of the supervisory judgment approach is limited by the subjective approach taken in the evaluation of the systemic importance of banks, which also means that it raises transparency issues.²⁹⁰

2.2.4 The G-SIB surcharge regime

Table 2.2.4 below illustrates the bucketing system approach to facilitate a better understanding of the discussion hereinafter.

Bucket	Score range	G-SIB surcharge
• 5	530-629	3.5%
• 4	430-529	2.5%
• 3	330-429	2.0%
• 2	230-329	1.5%
• 1	130-229	1.0%

In line with the goal of the Basel G-SIB surcharge, the legal consequences of being identified as a G-SIB is the imposition of a G-SIB surcharge, as alluded to above,²⁹¹ on the bank concerned.²⁹² As also pointed out,²⁹³ the G-SIB surcharge raises the loss-absorbing capacity of G-SIBs with the aim to minimise their probability of default. This is done with the overall objective of increasing the resilience of the global banking

²⁸⁹ Chouinard E *et al* (2013: 1).

²⁹⁰ *Ibid.*

²⁹¹ See paragraph 2.2 above.

²⁹² See the preface of the *Basel G-SIB framework* (July 2018).

²⁹³ See paragraph 2.2 above.

sector and financial system.²⁹⁴ To attain this goal, CET1 capital is deployed to meet the G-SIB surcharge requirement.²⁹⁵ As stated above,²⁹⁶ CET1 capital constitutes a higher quality capital that is composed of instruments that have the ability to absorb losses more effectively for purposes of enhancing a bank's resilience as a going concern.²⁹⁷

Notably the *Basel G-SIB framework* stipulates that a bank that is identified as a G-SIB is prohibited from using capital that is supposed to meet the G-SIB surcharge to simultaneously meet Pillar 2 requirements under the *Basel II framework*²⁹⁸ that capture risks that are unrelated to systemic risk posed by G-SIBs, for instance, concentration risk.²⁹⁹ In other jurisdictions, Pillar 2 requirements may also address risks that are related to systemic risk emanating from G-SIBs.³⁰⁰ In such jurisdictions, the *Basel G-SIB framework* indicates that the application of Pillar 2 capital should be tailored to take into account the application of the G-SIB surcharge so as to avoid the double counting of capital requirements for G-SIBs.³⁰¹

The general rule is that the G-SIB surcharge should be applied on a consolidated basis, as this approach is consistent with the identification process of G-SIBs that is carried out at the consolidated level of the G-SIB concerned.³⁰² Nonetheless, in terms of the *Basel G-SIB framework* the consolidated application of the G-SIB surcharge to a parent G-SIB should, in principle, not rule out the individual or sub-consolidated application of the G-SIB surcharge to its subsidiaries.³⁰³

²⁹⁴ Paragraph 6 of the *Basel G-SIB framework* (July 2018).

²⁹⁵ Paragraphs 46 and 53 of the *Basel G-SIB framework*; Refer to paragraph 2.2 above for the definition of the CET1 capital.

²⁹⁶ See paragraph 2.2 above.

²⁹⁷ Paragraph 49 of the BCBS *Basel III capital framework*; Paragraph 53 of the *Basel G-SIB framework* (July 2018).

²⁹⁸ BCBS *International convergence of capital measurements and capital standards* (June 2006) available at <https://www.bis.org/publ/bcbs128.pdf> (accessed 28 October 2016); Pillar 2 requirements are incorporated in the *Basel II framework* and are deliberated below in paragraph 2.5.

²⁹⁹ Paragraph 59 of the *Basel G-SIB framework* (July 2018); Paragraph 770 of the *Basel II framework* stipulates that concentration risk refers to any single exposure or group exposure with the potential to produce significant losses.

³⁰⁰ Paragraph 59 of the *Basel G-SIB framework* (July 2018).

³⁰¹ *Ibid.*

³⁰² Paragraph 55 of the *Basel G-SIB framework* (July 2018).

³⁰³ *Ibid.*

On a practical level, the *Basel G-SIB framework* applies the G-SIB surcharge in accordance with a “bucketing approach”, which creates four equally sized buckets and an unpopulated fifth bucket to which G-SIBs are ranked in terms of their systemic scores, with the ultimate goal of imposing a corresponding G-SIB surcharge.³⁰⁴ Thus, the rate at which the G-SIB surcharge applies depends on the degree of the systemic profile of a given G-SIB, as reflected in the systemic score. This means that the higher the ranking of a G-SIB in terms of the bucketing approach, the more elevated the G-SIB surcharge imposed on it will be.

The level of the G-SIB surcharge for G-SIBs that obtain 130 to 229 basis points and thus occupy the lowest bucket, is 1 (one) per cent of risk-weighted assets (RWAs). Bucket two is assigned to G-SIBs that have a systemic score that is between 230 to 329 basis points and attracts a G-SIB surcharge of 1.5 (one and a half) per cent of the RWAs. Bucket three is allocated to G-SIBs that have a systemic score of 330 to 429 basis points and are subject to a G-SIB surcharge of 2 (two) per cent of RWAs. Bucket four is populated by G-SIBs that have a systemic score of 430 to 529 basis points and are subject to a G-SIB surcharge of 2.5 (two and a half) per cent of RWAs.³⁰⁵ The HLA requirement is expressed as a percentage to RWAs expressing the BCBS’s view articulated in the *Basel II framework* on the amount of equity that a bank is required to maintain relative to its assets weighted according to their riskiness.³⁰⁶ It should be noted that the applicable G-SIB surcharges yielded by the bucketing approach serve as a minimum requirement, and it is thus possible for countries to opt to apply more stringent HLA requirements to banks in their jurisdiction.³⁰⁷

As mentioned above, a fifth bucket is added to this bucketing approach. This fifth bucket is intended to be unpopulated as its aim is to encourage banks either to maintain or reduce their systemic importance so that they do not pose grave risks to the financial system.³⁰⁸ This is in line with the secondary objective of the *Basel G-SIB framework* which is to incentivise banks to decrease their systemic importance – an

³⁰⁴ Paragraph 28 of the *Basel G-SIB framework* (July 2018).

³⁰⁵ Paragraph 46 of the *Basel G-SIB framework* (July 2018).

³⁰⁶ BCBS *International convergence of capital measurements and capital standards* (June 2006) available at <https://www.bis.org/publ/bcbs128.pdf> (accessed 28 October 2016).

³⁰⁷ Paragraph 48 of the *Basel G-SIB framework* (July 2018).

³⁰⁸ Paragraph 29 of the *Basel G-SIB framework* (July 2018).

objective that is accomplished through the increasing stringency of the G-SIB surcharge.³⁰⁹ Importantly, G-SIBs that populate the fifth bucket would attract a much higher G-SIB surcharge equal to 3.5 (three and a half) per cent of RWAs.³¹⁰

In the event that the top threshold of the fifth bucket becomes occupied, the BCBS comments that new buckets would be created which are equal in sizes in terms of systemic importance of the initial buckets and have incremental G-SIB surcharges of 1 per cent of RWAs.³¹¹ This means that G-SIBs that occupy the sixth bucket, should it be created, would be subject to a G-SIB surcharge of 4.5 (four and a half) per cent of RWAs, which surcharge will increase with 1 per cent of RWAs for the subsequent buckets. Consequently, this would mean that in order to avoid such high surcharges, G-SIBs should try and limit their systemic importance because it will leave them with less capital to finance their business operations and investments.

If a G-SIB migrates to a higher bucket in terms of systemic importance, it will be required to meet the applicable G-SIB surcharge for that bucket within a time-frame of twelve months, failing which it will be subjected to restricted capital distributions.³¹² On the other hand, if a G-SIB reduces its systemic importance such that it migrates to a lower bucket, the previous elevated G-SIB surcharge will cease to apply with immediate effect and a new decreased G-SIB surcharge that corresponds with the lower systemic importance of the G-SIB concerned will apply.³¹³

The magnitude of the G-SIB surcharge is calibrated using several analytical frameworks, which are designed to inform policy judgments regarding the corresponding rate of the applicable surcharge.³¹⁴ For instance, the “expected impact” approach calibrates the additional capital surcharge that is needed to approximate the systemic impact of a failure of a G-SIB to that of a non-G-SIB.³¹⁵ Another approach that the BCBS terms “Too Big To Fail funding subsidies”, seeks to eliminate the TBTF-problem by offsetting the reduction in funding costs of G-SIBs with a G-SIB surcharge

³⁰⁹ *Ibid.*

³¹⁰ Paragraph 47 of the *Basel G-SIB framework* (July 2018).

³¹¹ *Ibid.*

³¹² Paragraph 57 of the *Basel G-SIB framework* (July 2018).

³¹³ *Ibid.*

³¹⁴ Annex 2 of the *Basel G-SIB framework* (July 2018).

³¹⁵ *Ibid.*

that equals the amount of funding they would have been allocated in the absence of a subsidy.³¹⁶ Alternatively, the “long-term economic impact assessment framework” considers the maximised benefits of the G-SIB surcharge in the prevention or mitigation of costly financial crises to outweigh the costs of banks having to build capital surcharges that may likely inhibit economic activity.³¹⁷

The G-SIB surcharge essentially augments the capital conservation buffer (CCvB) and the countercyclical capital buffer (CCyB), as discussed in more detail below.³¹⁸ The same rules that apply when the CCvB is infringed similarly apply when the G-SIB surcharge requirement is breached.³¹⁹ If the CCvB is breached, constraints are imposed on capital distributions until a capital remediation plan is submitted stating how compliance with the CCvB will be reached within a specified timeframe.³²⁰

The G-SIB surcharge regime was concurrently phased-in with the CCvB and the CCyB regime between January 2016 to December 2018 and became fully effective on January 2019.³²¹ This transitional period was intended to ensure the smooth implementation of the *Basel G-SIB framework* by permitting banks to raise enough earnings to meet the required capital requirements while at the same time continuing with economic activities such as lending.³²²

2.3 The Basel D-SIB framework: extending the Basel G-SIB framework to a domestic economy

The *Basel D-SIB framework* was issued in October 2012, following the request by the G-20 Leaders’ to the FSB to consult the BCBS for purposes of reviewing the modalities to extend the *Basel G-SIB framework* to D-SIBs.³²³ The *Basel D-SIB framework*

³¹⁶ *Ibid.*

³¹⁷ *Ibid.*

³¹⁸ The CCvB and the CCyB requirements are analysed below in subparagraphs 2.4.1 and 2.4.2, respectively.

³¹⁹ Refer to paragraph 2.4.1 below on the elaboration of the rules regarding the breach of the CCvB.

³²⁰ Paragraph 55 of the *Basel G-SIB framework* (July 2018).

³²¹ Paragraph 62 of the *Basel G-SIB framework* (July 2018).

³²² Paragraphs 61 and 62 of the *Basel G-SIB framework* (July 2018).

³²³ BCBS *A framework for dealing with domestic systemically important banks* (October 2012) available at <https://www.bis.org/publ/bcbs233.pdf> (accessed 10 November 2016); FSB *Extending the G-SIFI framework to domestic systemically important banks: Progress Report to G-20 Ministers and Governors* (April 2012) available at https://www.fsb.org/wp-content/uploads/r_120420b.pdf (accessed 28 October 2016). These reforms were highlighted in paragraph 1.3 of Chapter One.

complements the *Basel G-SIB framework* by focusing on the systemic impact that the distress or failure of domestic banks will have on a domestic financial system and economy, rather than the global economy.³²⁴ The evaluation of the systemic impact of the failure of domestic banks on their domestic financial system and economy falls within the purview of the relevant national competent authorities.³²⁵

Notably, the BCBS developed a principles-based approach for the *Basel D-SIB framework* vis-à-vis the rules-based methodology of the *Basel G-SIB framework*.³²⁶ As pointed out by the BCBS, the principles-based approach was adopted to accommodate an appropriate degree of national discretion in the assessment of the systemic importance of banks and to allow flexibility in the choice of applicable prudential tools, thereby recognising the national specificities characterising the country-specific structures of financial systems of individual jurisdictions.³²⁷ Given that it further takes into account the cross-border implications of internationally active banks within a domestic jurisdiction, the BCBS comments that a D-SIB framework that is effective and consistent across jurisdictions promotes a level playing field internationally.³²⁸ The BCBS phased-in the *Basel D-SIB framework* consistently with the *Basel G-SIB framework* from January 2016 to December 2018.³²⁹

2.3.1 The Basel D-SIB assessment methodology

In broad terms, the *Basel D-SIB framework* establishes a methodology for assessing the systemic importance of D-SIBs to which a D-SIB buffer is then applied.³³⁰ The framework consists of a set of twelve principles that are generally classified into two categories.³³¹ The first set of seven principles establishes the methodology for assessing the systemic importance of banks for purposes of identifying D-SIBs.³³² The

³²⁴ Paragraph 3 of the *Basel D-SIB framework*.

³²⁵ Paragraphs 5 and 6 of the *Basel D-SIB framework*.

³²⁶ Paragraphs 1 and 5 of the *Basel D-SIB framework*; Principles-based approach entails high-level rules or principles that are generally and flexibly applied to achieve targeted outcomes at the regulated firms whereas rules-based approach engages detailed and prescriptive rules for financial services regulation. For this, see Black J *et al* (2007) "Making a success of Principles-based regulation" 3 *Law and Financial Markets Review* 191.

³²⁷ Paragraphs 4, 5 and 6 of the *Basel D-SIB framework*.

³²⁸ Paragraph 5 of the *Basel D-SIB framework*.

³²⁹ Paragraph 10 of the *Basel D-SIB framework*; See also paragraph 2.2, subparagraph 2.2.3 above.

³³⁰ Paragraphs 6 and 7 of the *Basel D-SIB framework*.

³³¹ Paragraph 11 of the *Basel D-SIB framework*.

³³² *Ibid.*

second set of five principles provides guidance on the implementation of the D-SIB buffer in respect of identified D-SIBs.³³³

As regards the principles for establishing the assessment methodology for D-SIBs, Principle 1 requires relevant national authorities to develop an assessment methodology for identifying D-SIBs.³³⁴ This assessment methodology seeks to address the negative externalities that a bank creates within a domestic economy, rather than on the global financial system (as is the case with the *Basel G-SIB framework*).³³⁵ Principle 2 is consistent with the *Basel G-SIB framework* to the extent that it stipulates that the measurement of systemic risk of a bank under the *Basel D-SIB framework* should reflect the potential impact of such a bank's failure.³³⁶ In other words, a bank with a heightened systemic risk is expected to have a greater impact when it fails relative to one with a smaller systemic profile.³³⁷ According to Principle 3, the potential impact of a domestic systemically important bank's failure should be evaluated with reference to its domestic economy, whereas the reference system for G-SIBs is the global economy.³³⁸

Principle 4 sets out the unit of analysis for assessing the degree of systemic importance of parent banks and subsidiaries.³³⁹ Home national authorities are required to evaluate the systemic importance of parent banks on a consolidated basis, given that the distress or failure of subsidiaries of parent banks that are outside the home jurisdiction may have potential spill-over effects onto the domestic financial system of the home country.³⁴⁰ In contrast, host national authorities are required to measure the extent of systemic importance of subsidiaries at the local or sub-consolidated level because of their potential adverse impact on the local economy, especially if their parent banks are internationally active.³⁴¹

³³³ *Ibid.*

³³⁴ Paragraph 12 of the *Basel D-SIB framework*.

³³⁵ *Ibid.*

³³⁶ Paragraphs 13 and 14 of the *Basel D-SIB framework*.

³³⁷ *Ibid.*

³³⁸ Paragraphs 15, 16 and 17 of the *Basel D-SIB framework*.

³³⁹ Paragraph 18 of the *Basel D-SIB framework*.

³⁴⁰ *Ibid.*

³⁴¹ Paragraphs 19 and 20 of the *Basel D-SIB framework*; Notably, the sub-consolidated assessment of the systemic importance of subsidiaries includes the downstream of their own subsidiaries in other jurisdictions.

Principle 5 broadly outlines a high-level category of factors that establish the systemic importance of a bank and which inform the identification criteria for D-SIBs.³⁴² These categories of systemic importance include:

- (a) Size;
- (b) Interconnectedness;
- (c) Substitutability/financial institution infrastructure (including considerations related to the concentrated nature of the banking sector); and
- (d) Complexity (including the additional complexities from cross-border activity).

It needs to further be noted that all the above-stated categories of systemic importance mentioned in the *Basel D-SIB framework* are similar to those featured in the *Basel G-SIB framework*, except for the cross-jurisdictional activity-category. This is because the BCBS is of the view that the cross-jurisdictional activity-category is not directly relevant to the *Basel D-SIB framework* as it focuses on the systemic impact posed by cross-border negative externalities of a G-SIB.³⁴³ However, the BCBS acknowledged the relevance of this category for measuring systemic importance at a domestic level in jurisdictions that are home to domestic banks that are globally active (although not globally systemic) and therefore, pose cross-border systemic implications.³⁴⁴

Notably, in terms of the *Basel D-SIB framework* the relevant national authorities may include additional criteria for measuring the systemic importance of D-SIBs, for instance, the size of a bank relative to the Gross Domestic Product (GDP).³⁴⁵ Hence, the *Basel D-SIB framework* incorporates principles to accommodate some degree of flexibility, recognising the structural differences between financial systems in different jurisdictions, as opposed to the *Basel G-SIB framework* which is prescriptive.³⁴⁶

Principle 6 of the *Basel D-SIB framework* requires national authorities to assess the systemic importance of banks annually, or as frequently as market conditions may

³⁴² Paragraph 21 of the *Basel D-SIB framework*.

³⁴³ Paragraph 22 of the *Basel D-SIB framework*.

³⁴⁴ *Ibid.*

³⁴⁵ Paragraph 23 of the *Basel D-SIB framework* notes that a bank that is greater in size compared to the GDP may be considered as systemically important in one jurisdiction while a bank of the same size but which is smaller relative to the GDP may not be eligible for identification as a D-SIB in another jurisdiction.

³⁴⁶ Paragraph 21 of the *Basel D-SIB framework*.

warrant, to take into account current developments in the financial system or the structural changes that a banking system may undergo, such as mergers of major banks.³⁴⁷ The recommendation regarding the annual assessment of the systemic importance of banks further strives for consistency between the *Basel D-SIB framework* and the *Basel G-SIB framework*, considering that a D-SIB may, in certain instances, be identified also as a G-SIB or that it may drop from that list.³⁴⁸ To foster the transparency of the assessment methodology, and to incentivise banks to reduce the degree of their systemic footprint and to meet the resulting HLA requirement, the *Basel D-SIB framework* requires public disclosure on the analytical frameworks underlying the assessment methodology, pursuant to Principle 7.³⁴⁹

2.3.2 The Higher Loss Absorbency requirement for D-SIBs: the D-SIB buffer regime

Principle 8 requires relevant national authorities to develop analytical frameworks for the calibration of the D-SIB buffer, which is a prudential instrument that implements the HLA requirement for D-SIBs.³⁵⁰ The primary objective of the D-SIB buffer is to enhance the loss absorbing capacity of D-SIBs in order to reduce their probability of default.³⁵¹ As such, the D-SIB buffer seeks to address the increased systemic risk of D-SIBs relative to banks that are not systemically important in their domestic jurisdictions.³⁵²

The analytical frameworks that have to be developed by national authorities are intended to inform policy judgments in calibrating the appropriate level of the D-SIB buffer and provide the underlying reasons for such a calibration.³⁵³ As indicated by the BCBS, country-specific factors, such as the concentration of a banking system or the size of a bank compared to the GDP of its country, should be used to guide policy judgments in calibrating the appropriate levels of the D-SIB buffer.³⁵⁴ This means that the failure of a bank with a bigger size relative to its country's GDP will likely inflict

³⁴⁷ Paragraphs 25 and 26 of the *Basel D-SIB framework*.

³⁴⁸ Paragraph 27 of the *Basel D-SIB framework*.

³⁴⁹ Paragraph 28 of the *Basel D-SIB framework*.

³⁵⁰ Paragraph 29 of the *Basel D-SIB framework*.

³⁵¹ *Ibid.*

³⁵² *Ibid.*

³⁵³ Paragraph 31 of the *Basel D-SIB framework*.

³⁵⁴ Paragraph 32 of the *Basel D-SIB framework*.

greater economic losses than a bank of a comparable size that is not huge compared to the GDP in another jurisdiction, whereas a concentrated banking system may potentially have a greater impact than a dispersed banking sector, and therefore, justifying an increased HLA requirement.³⁵⁵

Principle 8 further requires consistency across jurisdictions in respect of the calibration of the D-SIB buffer for D-SIBs with comparable systemic importance.³⁵⁶ Overall, the BCBS requires the relevant national authorities to conduct an effective and transparent assessment process supported by sufficient documentation for the consolidated and sub-consolidated application of the D-SIB buffer.³⁵⁷ The abovementioned considerations regarding the calibration of the D-SIB buffer would provide justification for different intensities of policy responses across countries for banks that have similar systemic footprints under the various categories of systemic importance.³⁵⁸

Principle 9, as another guiding principle of the *Basel D-SIB framework*, stipulates that the D-SIB buffer should be commensurate with the degree of the systemic profile of a D-SIB – the rationale being to encourage banks to decrease their systemic relevance.³⁵⁹ The BCBS states that this aim may be achieved using a similar indicator-based measurement approach with a bucketing system corresponding to the level of systemic importance of the bank concerned, although it should not entail a mandatory scoring and weighting system like that which is set by the *Basel G-SIB framework*.³⁶⁰ Principle 10 of the *Basel D-SIB framework* acknowledges the authority of home and host authorities to impose the D-SIB buffer on parent banks and subsidiaries respectively.³⁶¹ It recommends the consolidated application of the D-SIB buffer on parent banks and individual or sub-consolidated application thereof on subsidiaries of parent banks.³⁶² In principle, national authorities are required to subject D-SIBs with

³⁵⁵ *Ibid.*

³⁵⁶ Paragraph 30 of the *Basel D-SIB framework*.

³⁵⁷ Paragraphs 30 and 33 of the *Basel D-SIB framework*.

³⁵⁸ Paragraph 33 of the *Basel D-SIB framework*.

³⁵⁹ Paragraph 35 of the *Basel D-SIB framework*.

³⁶⁰ *Ibid.*; Paragraph 2.2 subparagraphs 2.2.1 and 2.2.4 above respectively dealt with the indicator-based measurement approach and the bucketing system set out under the *Basel G-SIB framework*.

³⁶¹ Paragraph 36 of the *Basel D-SIB framework*.

³⁶² The BCBS notes that national relevant authorities including host authorities are authorised to impose capital requirements that they consider appropriate on banks within their jurisdictions. Therefore, host authorities may apply the D-SIB buffer to subsidiaries at the individual or consolidated level consistent

identical systemic importance to the same D-SIB buffer, regardless of whether they are domestic banks, subsidiaries of foreign banking groups or subsidiaries of G-SIBs, *ceteris paribus*.³⁶³

As indicated by the *Basel D-SIB framework*, a parent bank is expected to be sufficiently capitalised on a standalone basis, irrespective of whether it is a D-SIB or not, and even in instances where its subsidiary has been identified as a D-SIB.³⁶⁴ In cases where a bank has been simultaneously identified as a D-SIB and a G-SIB because it poses systemic risk to both the domestic and global economy, the BCBS recommends that the relevant national authorities should apply the higher of the D-SIB buffer or the G-SIB buffer relevant to such bank.³⁶⁵ It explains that this is because the BCBS prudential standards are minima and not maxima, and this approach is also consistent with the *Basel G-SIB framework's* recommendation permitting national authorities to impose a more stringent HLA requirement than prescribed in the framework.³⁶⁶

The *Basel D-SIB framework's* Principle 11 regards supervisory cooperation and coordination as best international practices in the imposition of the D-SIB buffer to subsidiaries of foreign banks, within the constraints that are imposed by relevant laws in their host jurisdiction.³⁶⁷ According to the BCBS this encourages a spirit of collegiality and information sharing so that supervisors are kept apprised of the

with paragraph 89 of the *Basel G-SIB framework*, which stipulates that G-SIB subsidiaries may be subject to individual or consolidation application of the G-SIB surcharge.

³⁶³ Paragraph 37 of the *Basel D-SIB framework*; *Ceteris paribus* is a Latin concept that is literally translated “all other things being equal”. For this, see Reutlinger A (2019) “*Ceteris paribus* laws” Stanford Encyclopaedia of Philosophy available at <https://plato.stanford.edu/entries/ceteris-paribus/> (accessed 10 March 2020). Therefore, in this context, it is used to imply that the same D-SIB buffer must be applicable to all D-SIBs with comparable systemic profile unless the relevant national authorities provide a justification for the varying buffer rate. Specifically, the sub-consolidated application of the D-SIB buffer to subsidiaries seeks to mitigate their systemic significance on their host countries, even though the particular bank may not be systemically important at the parent level.

³⁶⁴ Paragraph 38 of the *Basel D-SIB framework*; Paragraph 23 of the *Basel II framework* reads: “further, as one of the principal objectives of supervision is the protection of depositors, it is essential to ensure that capital recognised in capital adequacy measures is readily available for those depositors. Accordingly, supervisors should test that individual banks are adequately capitalised on a stand-alone basis.”

³⁶⁵ Paragraph 39 of the *Basel D-SIB framework*.

³⁶⁶ Paragraphs 39 and 40 of the *Basel D-SIB framework*; Under paragraph 41 of the *Basel D-SIB framework*, the BCBS pronounces the view that the D-SIB buffer and the G-SIB buffer should not be additive to avoid double counting in order to ensure consistency between the *Basel D-SIB framework* and the *Basel G-SIB framework* and to recognise the complementary perspective of the *Basel D-SIB framework* to the *Basel G-SIB framework*.

³⁶⁷ Paragraphs 42 and 43 of the *Basel D-SIB framework*.

developments affecting their banking institutions.³⁶⁸ It is explained that this cooperation is desirable because it would also allow the home authority to test the capital position of a parent bank on a standalone basis.³⁶⁹ As further stated, host supervisors have to provide the basis for the rate of the D-SIB buffer that applies to subsidiaries of banking groups for reasons of transparency and to enable banks to minimise their systemic importance.³⁷⁰

Part of the reason for requiring cooperation and coordination of the supervisory colleges in respect of the D-SIB buffer applicable to subsidiaries of foreign banks, is that the application of the buffer has implications for the recovery and resolution regimes of D-SIBs.³⁷¹ Specifically, the BCBS remarked³⁷² that the application of the buffer will have an effect on the available resolution strategies of different jurisdictions, discussed below,³⁷² and how these strategies would affect the HLA requirement.

Principle 12 reiterates the sentiment expressed in the *Basel G-SIB framework* that the HLA requirement should be met fully by CET1 capital.³⁷³ As earlier stated, the *Basel III capital framework* recommends CET1 capital because it is simple, and the most effective loss-absorbing capital that increases the “going concern” capacity of a bank.³⁷⁴ The requirement regarding CET1 capital that must be used to meet the HLA requirement is aimed at ensuring maximum harmonisation and comparability in terms of loss absorbing capacity for D-SIBs across jurisdictions, especially to promote fair competition as most banks have cross-border operations in other jurisdictions.³⁷⁵

³⁶⁸ *Ibid.*

³⁶⁹ *Ibid.*

³⁷⁰ *Ibid.*

³⁷¹ *Ibid.*

³⁷² See subparagraph 2.4.7 below on the discussion pertaining to the resolution strategies under recovery and resolution regimes.

³⁷³ Paragraph 44 of the *Basel D-SIB framework*.

³⁷⁴ See paragraph 2.2 above regarding the discussion of the CET1 capital; See also, Paragraph 44 of the *Basel D-SIB framework*.

³⁷⁵ Paragraph 44 of the *Basel D-SIB framework*.

2.4 The stringent prudential standards to be imposed on D-SIBs

To facilitate a better understanding of the discussions that follow, Table 2.4 below lists the Basel and FSB prudential regulatory and supervisory regimes discussed hereinafter.³⁷⁶

The Basel prudential regulatory framework	
Types of prudential standards	Applicable prudential standards
CCvB	<ul style="list-style-type: none"> • 2.5% of a bank's RWAs
CCyB	<ul style="list-style-type: none"> • Ranges between 0-2.5% of a bank's RWAs
Supplementary leverage ratio	<ul style="list-style-type: none"> • 3% of a bank's total exposure
LCR	<ul style="list-style-type: none"> • 100% of a bank's HQLA to off-set cash outflows over a thirty-calendar day of stressed liquidity scenario
NSFR	<ul style="list-style-type: none"> • 100% of available stable funding to cover required stable funding for a one-year horizon
The large exposure framework	<ul style="list-style-type: none"> • 25% of a bank's eligible capital excluding credit risk mitigation techniques • 15% of a G-SIB's eligible capital excluding credit risk mitigation techniques
Recovery and resolution plans	<ul style="list-style-type: none"> • MPoE • SPoE
The Basel supervisory framework include:	
<ul style="list-style-type: none"> • Enhanced risk-management requirements 	
<ul style="list-style-type: none"> • Business model and horizontal reviews supervisory approaches 	
<ul style="list-style-type: none"> • Risk data aggregation and risk reporting 	
<ul style="list-style-type: none"> • Stress-testing regime 	
<ul style="list-style-type: none"> • Supervisory cooperation and coordination 	

³⁷⁶ See the discussions under this paragraph (paragraph 2.4), and paragraph 2.5 below.

As observed above, the legal consequences that result from banks being identified as D-SIBs entail the application of the D-SIB buffer in order for D-SIBs to have higher loss absorbency. In other words, the D-SIB buffer specifically targets the heightened systemic risk emanating from D-SIBs in an endeavour to resolve the TBTF conundrum posed by these institutions.

Further, the *Basel D-SIB framework* stipulates that national authorities may implement any other measures that are appropriate for addressing the systemic risk emanating from D-SIBs *in addition* to the D-SIB buffer.³⁷⁷ Consequently, the D-SIB buffer is deployed concurrently with a suite of prudential tools applied to banks in general (and not only to D-SIBs) that is generally incorporated in the BCBS standards. Some of these measures encompass the capital buffer regime that is applied both from a micro- and macro-prudential perspective to regulate and mitigate the systemic risk posed by D-SIBs for purposes of safeguarding financial stability.³⁷⁸ Most of these reforms were

³⁷⁷ Paragraph 44 of the *Basel D-SIB framework*; Recommendation 8 of the *FSB SIFI framework* available at

https://www.fsb.org/wp-content/uploads/r_101111a.pdf (accessed 19 June 2016) states that other strict measures for addressing systemic risk may include liquidity surcharges, large exposure limits and structural measures, as discussed below together with other prudential requirements under subparagraph 2.4.

³⁷⁸ Claessens S *et al* (2013) “Macro-prudential policies to mitigate financial system vulnerabilities” 39 *Journal of International Money and Finance* 153 at 155; Columba CLF *et al* “Macroprudential policy: what instruments and how to use them? Lessons from country experiences” IMF Working Paper (October 2011) available at <https://www.imf.org/external/pubs/ft/wp/2011/wp11238.pdf> (accessed 22 January 2019); FSF *Report of the Financial Stability Forum on addressing procyclicality in the financial system* (April 2009) available at

http://www.fsb.org/wp-content/uploads/r_0904a.pdf (accessed 22 January 2019); IMF *Staff Guidance on macroprudential policy – detailed guidance on instruments* (December 2014) available at

<https://www.imf.org/external/np/pp/eng/2014/110614a.pdf> (accessed 22 January 2019); Aikman D *et al* “Operationalising a macroprudential regime: goals, tools and open issues” Banco de España *Financial Stability Review* (2013) available at <https://bfi.uchicago.edu/wp-content/uploads/ref2013241.pdf> (accessed 22 January 2019). See also, Arnold B *et al* (2012) “Systemic risk, macroprudential policy frameworks, monitoring financial systems and the evolution of capital adequacy” 36 *Journal of Banking and Financial* 3125-3132; Gadanez B *et al* “Macro-prudential policy frameworks, instruments and indicators: a review” at IFC workshop on *Combining micro and macro statistical data for financial stability analysis. Experiences, opportunities and challenges* December 14-15, 2015 Warsaw, Poland, available at https://www.bis.org/ifc/publ/ifcb41c_rh.pdf (accessed 8 June 2016); Crockett A, General Manager of the Bank for International Settlements and Chairman of the Financial Stability Forum, remarks on “Marrying the micro-and macro-prudential dimensions of financial stability”, a statement before the Eleventh International Conference of Banking Supervisors, held in Basel, September 20-21, 2000 available at

<https://www.bis.org/speeches/sp000921.htm> (accessed 24 January 2019); Galati G and Moessner R “Macroprudential policy - a literature review” (bis.org) BIS Working Papers February 2011 (accessed 1 May 2018)

implemented in the aftermath of the GFC and are consolidated in the *Basel Framework* that, as pointed out in Chapter One,³⁷⁹ was issued in December 2019.³⁸⁰

Beyond the stringent prudential standards issued by the BCBS, the recovery and resolution planning frameworks of the FSB, as captured in the *FSB Key Attributes*,³⁸¹ are also applicable to systemically important banks and are designed to eliminate the TBTF conundrum. The stringent prudential regulation for D-SIBs is reinforced by the enhanced supervisory framework, which as also indicated in Chapter One,³⁸² is incorporated in the *FSB SIE Report*.³⁸³

The heightened prudential regulatory and supervisory framework for D-SIBs, as discussed in more detail below, thus typically comprises the following:³⁸⁴

- (a) the capital conservation buffer (CCvB);³⁸⁵
- (b) the countercyclical capital buffer (CCyB);³⁸⁶
- (c) the D-SIB buffer;³⁸⁷
- (d) the supplementary leverage ratio;³⁸⁸
- (e) the Liquidity Coverage Ratio (LCR);³⁸⁹

³⁷⁹ See paragraph 1.7 of Chapter One.

³⁸⁰ BCBS *The Basel Framework* (December 2019) available at https://www.bis.org/basel_framework/ (accessed 20 February 2020).

³⁸¹ The *FSB Key Attributes* are discussed in subparagraph 2.4.7 below.

³⁸² See paragraph 1.7 of Chapter One.

³⁸³ Part IV of the *FSB SIFI framework available at https://www.fsb.org/wp-content/uploads/r_101111a.pdf* (accessed 19 June 2016); *FSB Intensity and Effectiveness of SIFI Supervision – Recommendations for enhanced supervision* (November 2010) available at https://www.fsb.org/wp-content/uploads/r_101101.pdf?page_moved=1 (accessed 10 November 2016); *FSB Intensity and Effectiveness of SIFI Supervision – Progress report on implementing the recommendations on enhanced supervision* (November 2011) available at https://www.fsb.org/wp-content/uploads/r_111104ee.pdf (10 November 2016); *BCBS Core Principles for Effective Banking Supervision* (September 2012) available at <https://www.bis.org/publ/bcbs230.pdf> (accessed 11 July 2016). Paragraph 1.7 of Chapter One alluded to the *FSB SIE Report* and subparagraph 2.5 below highlights the stringent supervisory regime entailed under the *FSB SIE Report*.

³⁸⁴ This stringent prudential regulatory and supervisory framework is largely incorporated in the standards of the BCBS and the FSB frameworks. See further, Gadanecz B and Jayaram K “Macro-prudential policy frameworks, instruments and indicators: a review” at IFC workshop on *Combining micro and macro statistical data for financial stability analysis. Experiences, opportunities and challenges* December 14-15 2015, Warsaw, Poland, available at https://www.bis.org/ifc/publ/ifcb41c_rh.pdf (accessed 8 June 2016).

³⁸⁵ Subparagraph 2.4.1.

³⁸⁶ Subparagraph 2.4.2.

³⁸⁷ Subparagraph 2.4.3.

³⁸⁸ Subparagraph 2.4.4.

³⁸⁹ Paragraph 2.4.5, subparagraph 2.4.5.1.

- (f) the Net Stable Funding Ratio (NSFR);³⁹⁰
- (g) large exposure limits;³⁹¹
- (h) resolution plans;³⁹² and
- (i) an enhanced supervisory regime.³⁹³

2.4.1 The capital conservation buffer (CCvB)

Table 2.4.1 below illustrates the rules applicable to breach of the CCvB regime to facilitate a better understanding of the discussion that follows.

A bank's CET1 capital	Capital distribution restrictions
<ul style="list-style-type: none"> • 100% of a bank's CET1 to RWAs 	No capital distribution limit
<ul style="list-style-type: none"> • 80% of a bank's CET1 to RWAs 	20% of capital distribution restrictions
<ul style="list-style-type: none"> • 60% of a bank's CET1 to RWAs 	40% of capital distribution restrictions
<ul style="list-style-type: none"> • 40% of a bank's CET1 to RWAs 	60% of capital distribution restrictions
<ul style="list-style-type: none"> • 20% of a bank's CET1 to RWAs 	80% of capital distribution restrictions

The CCvB is a prudential tool that requires banks to have a buffer made up of a certain amount of capital above the minimum regulatory capital.³⁹⁴ Banks must build up such CCvB in good times and can then draw upon it to act as a cushion in times of stress.³⁹⁵ Banks that are systemically important as well as banks that are not systemically important are required to maintain a CCvB of 2.5 per cent to RWAs comprising of CET1 capital.³⁹⁶

³⁹⁰ Paragraph 2.4.5, subparagraph 2.4.5.2.

³⁹¹ Subparagraph 2.4.6.

³⁹² Subparagraph 2.4.7.

³⁹³ Subparagraph 2.5.

³⁹⁴ The minimum regulatory capital, as discussed in paragraph 1.7 of Chapter One, is extended by the CCvB.

³⁹⁵ Paragraph 26 of the *Basel III capital framework* states that the CCvB is intended to promote capital conservation and the build-up of adequate buffers above the minimum regulatory capital. In paragraphs 27 and 28 of the *Basel III capital framework*, the BCBS notes that at the onset of the GFC, banks continued making large capital distributions in the form of dividends, share buy backs and general compensation despite their deteriorating financial condition and thus rendering a financial system less resilient. As such, the BCBS introduced the CCvB regime requiring banks to conserve capital to build up buffers that increase their resilience during the economic downturn and provide the mechanism for rebuilding capital during the economic recovery. See further, Ramirez J (2017) *Handbook of Basel III capital: enhancing bank capital in practice* at 13 notes that the CCvB regime is designed to absorb losses during the periods of stress.

³⁹⁶ Paragraphs 129 and 130 of the *Basel III capital framework*.

As indicated in the *Basel capital III framework*, a bank that contravenes the CCvB requirement becomes subject to constraints on capital distributions, increasing in stringency in terms of quartiles that allocate the pay-out ratio of a bank relative to the levels of minimum CET1 capital that it holds.³⁹⁷ A bank that meets the CCvB with 100 (hundred) per cent of CET1 capital will however, not be subject to restrictions in capital distributions. Consequently, a bank that holds 80 per cent of CET1 to its RWAs will be subject to 20 per cent of capital distributions restrictions.³⁹⁸ A bank that maintains 60 per cent of CET1 to its RWAs will be subject to 40 per cent of capital distributions restrictions.³⁹⁹ If a bank maintains 40 per cent of CET1 to its RWAs it be subject to 60 per cent of capital distributions restrictions.⁴⁰⁰ Lastly, a bank that holds 20 per cent of CET1 to RWAs will be subject to 80 per cent of capital distributions restrictions.⁴⁰¹

2.4.2 The countercyclical capital buffer (CCyB)

The CCyB is a macro-prudential instrument that augments the CCvB, focusing on the cyclical systemic risks posed by banks, including D-SIBs.⁴⁰² As indicated in the *Basel III capital framework*, the objective of the CCyB is to dampen the procyclical effects of the banking sector and the financial markets for purposes of eliminating the build-up of risk over a certain time-dimension.⁴⁰³

The CCyB is set at zero per cent of a bank's RWAs under benign market conditions.⁴⁰⁴ When credit provision unabatedly escalates to such extent that it is associated with a build-up of systemic risk, a CCyB of up to 2.5 per cent of RWAs composed of CET1 capital, is activated.⁴⁰⁵ When it is activated, the CCyB constitutes an extension of the

³⁹⁷ Paragraph 131 of the *Basel III capital framework*.

³⁹⁸ *Ibid.*

³⁹⁹ *Ibid.*

⁴⁰⁰ *Ibid.*

⁴⁰¹ *Ibid.*

⁴⁰² BCBS *Guidance for national authorities operating the countercyclical capital buffer* (December 2010) available at <https://www.bis.org/publ/bcbs187.pdf> (accessed 24 January 2019). Paragraph 29 of the *Basel III capital framework* states that a banking system experienced substantial losses preceded by periods of excessive credit during the GFC, and thus, the CCyB regime seeks to build up buffers during these periods as well as to additionally regulate credit expansion.

⁴⁰³ Paragraph 31 of the *Basel III capital framework*; See further, Repullo R et al "The countercyclical capital buffer of Basel III: a critical assessment" CEMFI Working Paper (June 2011) available at <https://www.gtac.gov.za/wp-content/uploads/2021/11/The-Countercyclical-Capital-Buffer-of-Basel-III-A-Critical-Assessment.pdf> (accessed 7 November 2019).

⁴⁰⁴ Paragraph 31 of the *Basel III capital framework*.

⁴⁰⁵ *Ibid.*

CCvB.⁴⁰⁶ Breach of the CCyB also subjects a bank to constraints on capital distribution.⁴⁰⁷ When credit supply is judged not to be raising cyclical systemic risk concerns, the CCyB is released to enable the flow of credit and allow economic activity to be carried out in a financial system, and the surplus capital may be used to absorb any other losses.⁴⁰⁸ The capital that is used to comply with the CCyB requirement cannot however, be simultaneously used to fulfil other minimum capital requirements, such as the Pillar 2 requirements of the *Basel II framework*.⁴⁰⁹

As observed in the *Basel III capital framework*, the height of the 2008 GFC revealed the procyclical character of the financial markets in terms of which banks became highly leveraged during market upswings causing credit expansion, and hugely deleveraged during market downturns.⁴¹⁰ These procyclical effects led to unwarranted credit growth associated with the build-up of systemic risk, which saw the global financial system experiencing a severe credit crunch and significant losses being experienced in the wake of the GFC.⁴¹¹ Notably, the *Basel III capital framework* indicates that a pronounced benefit of the CCyB is that it regulates excessive credit expansion through restrictive minimum regulatory capital rules.⁴¹² As a side benefit, the increased cost of lending discourages credit demand and hence, prevents the escalation of credit in the financial system.⁴¹³

If a decision regarding the activation of the CCyB is reached, the *Basel III capital framework* requires a notification to be issued twelve months in advance of its

⁴⁰⁶ Paragraph 30 of the *Basel III capital framework*.

⁴⁰⁷ Paragraphs 137 and 142 of the *Basel III capital framework*.

⁴⁰⁸ Paragraph 30 of the *Basel capital framework*.

⁴⁰⁹ The Basel Committee states that the exception to this general rule is made when the CCyB is adapted to capture some of the Pillar 2 capital requirements when it is set above zero per cent to avoid the duplication of capital requirements. Pillar 2 requirements of the *Basel II framework* are fully detailed in paragraph 2.5 below.

⁴¹⁰ Paragraph 29 of the *Basel III capital framework*; See further, Arricia G *et al* "Policies for macroprudential stability: how to deal with credit booms" IMF Staff Discussion Note (June 2012) available at

<https://www.imf.org/external/pubs/ft/sdn/2012/sdn1206.pdf> (accessed 7 November 2019);

IMF *Macroprudential policy: an organising framework Background Paper* March 2011 available at <https://www.imf.org/external/np/pp/eng/2011/031411.pdf> (accessed 23 April 2018).

⁴¹¹ Paragraph 136 of the *Basel III capital framework*.

⁴¹² Paragraph 29 of the *Basel III capital framework*; See further, Drehmann M *et al* "Anchoring countercyclical capital buffers: the role of credit aggregates" BIS Working Paper (November 2011) available at

<https://www.bis.org/publ/work355.pdf> (accessed 24 January 2019).

⁴¹³ Paragraph 29 of the *Basel III capital framework*.

application to allow banks to adjust their capital planning.⁴¹⁴ The national designated authorities are required to set the CCyB based on the so-called “guided discretion”-principle, which itself, is underpinned by some further principles to back up supervisory decisions.⁴¹⁵ In particular, supervisors have to take into consideration the Credit-to-GDP gap and other variables in their country that indicate the existence of abundant credit supply, when exercising judgment on whether a particular instance of undue credit growth is associated with a build-up of systemic risk.⁴¹⁶ Regular supervisory updates regarding the anticipated imposition of the CCyB is recommended, and effective communication strategies are required to be put in place for such purpose.⁴¹⁷

In terms of the *Basel Committee Guidance for national authorities operating the countercyclical capital buffer*, a decision regarding an increase or decrease of the applicable rate of the CCyB must be supported by justifiable grounds.⁴¹⁸ The BCBS is of the view that the quarterly setting of the CCyB is preferable because it corresponds with the financial reporting time for banks and permits the setting of the buffer before the credit cycle turns.⁴¹⁹ Alternatively, it is indicated that the CCyB can be fixed as often as the particular financial system circumstances demand.⁴²⁰

Importantly, to recognise the credit exposure caused by internationally active banks, the principle of reciprocity applies to the CCyB regime.⁴²¹ In terms of the principle of reciprocity, jurisdictions that host internationally active banks are supposed to reciprocate the application of the CCyB to foreign institutions that are located in their jurisdictions with the exposure to the country setting the buffer.⁴²² The general rule is that the rate of the CCyB that applies to foreign banks cannot be lower than that which

⁴¹⁴ Paragraph 141 of the *Basel III capital framework*.

⁴¹⁵ BCBS *Guidance for national authorities operating the countercyclical capital buffer* (December 2010) available at <https://www.bis.org/publ/bcbs187.pdf> (accessed 24 January 2019).

⁴¹⁶ Committee on the Global Financial System *Operationalising the selection and application of macroprudential instruments CGFS Papers* (December 2012) available at <https://www.bis.org/publ/cgfs48.pdf> (accessed 7 November 2019) defines credit-to-GDP as “the deviation of the credit-to-GDP ratio from its long-term trend”. See further, Drehmann M *et al* (2012) “The effects of countercyclical capital buffers on bank lending” 19 *Applied Economics Letters* 603 at 604.

⁴¹⁷ BCBS *Guidance for national authorities operating the countercyclical capital buffer* (December 2010) available at <https://www.bis.org/publ/bcbs187.pdf> (accessed 24 January 2019).

⁴¹⁸ *Ibid.*

⁴¹⁹ *Ibid.*

⁴²⁰ *Ibid.*

⁴²¹ BCBS *Range of practices in implementing the countercyclical capital buffer policy* (June 2017) available at <https://www.bis.org/bcbs/publ/d407.pdf> (accessed 24 January 2019).

⁴²² *Ibid.*

applies to domestic banks. This serves to ensure that both domestic banks and subsidiaries of foreign banks are subject to the same rate of the CCyB in the host jurisdiction.⁴²³ This principle is intended to discourage the competitive disadvantage of foreign banks over domestic banks, and to realise the side benefit of the CCyB regarding increased cost of credit that is intended to dampen credit demand.⁴²⁴

2.4.3 The D-SIB Buffer

The *Basel D-SIB framework* recognises that D-SIBs have the propensity to assume increased systemic risk relative to non-systemic banks, which is reflected in their size, interconnectedness, substitutability, and complexity.⁴²⁵ As previously discussed,⁴²⁶ the D-SIB buffer is the primary stringent prudential instrument that implements the HLA requirement for D-SIBs, and thus, it is the basis for the formulation of the *Basel D-SIB framework*.⁴²⁷ The rationale for the introduction of the D-SIB buffer is to address the systemic risk that is directly posed by D-SIBs. This is done by raising the loss absorbency capacity of D-SIBs in times of financial distress for purposes of reducing their probability of default, and so to enhance the resilience of the banking sector and financial system.⁴²⁸

The BCBS recommends a D-SIB buffer that is composed of an additional minimum 1 per cent of RWAs constituted of CET1 capital.⁴²⁹ The D-SIB buffer augments the CCvB.⁴³⁰ The rules that apply to a D-SIB when it breaches the D-SIB buffer requirement are similar to those that apply to a bank when it violates the CCvB requirement, namely, the restriction of capital distributions.⁴³¹ As pointed out above,⁴³²

⁴²³ *Ibid.*

⁴²⁴ *Ibid.*

⁴²⁵ In terms of paragraph 32 of the *Basel III capital framework*, the interconnectedness among SIBs posed a risk of contagion during the GFC. Paragraph 20 of the *Basel D-SIB framework* lays down the selection criteria for D-SIBs such as size, interconnectedness, substitutability and complexity, as stated above in subparagraph 2.2.1.

⁴²⁶ In paragraph 2.3 above.

⁴²⁷ Paragraph 11 of the *Basel D-SIB framework*; See further, Claessens S “An overview of macroprudential policy tools” IMF Working Paper (December 2014) available at <https://www.imf.org/external/pubs/ft/wp/2014/wp14214.pdf> (accessed 23 January 2019).

⁴²⁸ Paragraph 29 of the *Basel D-SIB framework*. This objective is enunciated by Principle 8 of the *Basel D-SIB framework* discussed above in paragraph 2.3, subparagraph 2.3.2.

⁴²⁹ Paragraph 32 of the *Basel III capital framework*.

⁴³⁰ Paragraph 45 of the *Basel D-SIB framework*.

⁴³¹ Paragraphs 45 and 49 of the *Basel D-SIB framework*; Paragraph 19 of the *Basel G-SIB framework*; Paragraph 147 of the *Basel III capital framework*.

⁴³² See subparagraph 2.2.3 above.

this approach is also consistent with the *Basel G-SIB framework* on the rules that apply in case of impairment of the G-SIB surcharge.

Capital that is used to fulfil Pillar 2 requirements of the *Basel II framework* cannot be used to comply with the HLA requirement of the D-SIB buffer unless such Pillar 2 requirements are also designed to address risks related to D-SIBs (as other jurisdictions may use capital that is used to comply with Pillar 2 requirements to address risks associated with systemic risks posed by D-SIBs).⁴³³

2.4.4 The supplementary leverage ratio

The *Basel III supplementary leverage ratio framework* was implemented from January 2013 to December 2017, effective from January 2018.⁴³⁴ The Basel III supplementary leverage ratio refers to non-risk based capital consisting of CET1 capital relative to the total exposure of a bank, capturing on-balance and off-balance sheet items, and it is expressed as a percentage.⁴³⁵ This supplementary leverage ratio requirement comprises CET1 capital of a minimum of 3 (three) per cent to a bank's non-risk weighted exposure, which complements the risk-based capital requirements.⁴³⁶

The supplementary leverage ratio requirement constitutes one of the post-GFC reforms that seek to constrain a build-up of excessive leverage and reinforces the risk-

⁴³³ Paragraph 46 of the *Basel D-SIB framework*.

⁴³⁴ BCBS *High-level summary of Basel III reforms* (December 2017) available at https://www.bis.org/bcbs/publ/d424_hlsummary.pdf (accessed 24 January 2019).

⁴³⁵ BCBS *Basel III leverage ratio and disclosure requirements* (January 2014) available at <https://www.bis.org/publ/bcbs270.pdf> (accessed 26 May 2017); *Revisions to BCBS Basel III leverage ratio framework – Consultative Document* (April 2016) available at <https://www.bis.org/bcbs/publ/d365.pdf> (accessed 24 January 2019); *BCBS Revisions to leverage ratio disclosure requirements consultative document issued for comment by March 2019* (December 2018) available at

<https://www.bis.org/bcbs/publ/d456.pdf> (accessed 24 January 2019). See further, Gambacorta L *et al* (2018) "Leverage and risk weighted capital requirements" 14 *International Journal of Central Banking* 153; Blum JM (2008) "Why 'Base II' may need a leverage ratio restriction" 32 *Journal of Banking and Finance* 1699. Blum observes that the leverage framework was not part of the Basel II framework. However, the "US leverage ratio", as shown in Chapter Three, pre-existed the Basel III supplementary leverage ratio. Non-risk-based capital of the supplementary leverage ratio entails the amount of capital that a bank is required to maintain which is not weighted according to the riskiness of such a bank's activities. Unlike non-risk-based capital, risk-weighted capital ratio uses risk weights to measure the extent of risk of a bank's exposure. For this, see Allahrakha M *et al* (2018) "Do higher capital standards always reduce bank risk? The impact of the Basel leverage ratio on the U.S. triparty repo market" 34 *Journal of Financial Intermediation* 3.

⁴³⁶ The *Basel III supplementary leverage ratio framework*; Paragraphs 152 and 153 of the *Basel III capital framework*; BCBS *Finalising the post-global crisis reform* (December 2017) available at <https://www.bis.org/bcbs/publ/d424.pdf> (accessed 24 January 2019).

based capital with a non-risk based “backstop” capital measure.⁴³⁷ It was observed during the GFC that a forced deleverage that leads to asset fire sales⁴³⁸ significantly depleted banks’ equity capital to the detriment of the smooth functioning of the financial system, hence the need for implementing a supplementary leverage ratio requirement.⁴³⁹ Banks are subject to consolidated disclosure of the supplementary leverage ratio every quarter.⁴⁴⁰

2.4.5 The liquidity standards requirements

The BCBS issued *Principles for sound liquidity risk management and supervision* in September 2008, setting out guidelines for the development of robust liquidity risk-management and governance frameworks, and recommending the establishment of central banks’ liquidity facilities.⁴⁴¹ These principles define liquidity as the ability of a bank to fund its assets and at the same time meet obligations that are due without incurring losses.⁴⁴² According to the BCBS, sound liquidity management is crucial to the role of banks in the maturity transformation of short-term deposits into long-term loans because such maturity mismatch borders on liquidity risk.⁴⁴³ Simply put, liquidity risk refers to the risk of a bank being unable to meet its financial obligations as they fall due.⁴⁴⁴

⁴³⁷ Paragraphs 151 and 152 of the *Basel III capital framework*; IMF Staff Guidance note on macroprudential policy – detailed guidance on instruments (December) 2014 available at <https://www.imf.org/external/np/pp/eng/2014/110614a.pdf> (accessed 24 January 2019).

⁴³⁸ Asset fire sale is described under paragraph 1.5 of Chapter One.

⁴³⁹ Paragraph 16 of the *Basel III capital framework*.

⁴⁴⁰ Paragraph 40 of the *Basel III supplementary leverage ratio framework*.

⁴⁴¹ BCBS *Principles for Sound Liquidity Management and Supervision* (September 2008) available at <https://www.bis.org/publ/bcbs144.pdf> (accessed 22 January 2019); BCBS *Liquidity Risk: Management and Supervisory Challenges* (February 2008) available at <https://www.bis.org/publ/bcbs136.pdf> (accessed 22 January 2019).

⁴⁴² BCBS *Liquidity Risk: Management and Supervisory Challenges* (February 2008) available at <https://www.bis.org/publ/bcbs136.pdf> (accessed 22 January 2019).

⁴⁴³ *Ibid*; See further, Hartlage AW (2012) “The Basel III Liquidity Coverage Ratio and financial stability” 111 *Michigan Law Review* 454 at 457; Ingves S “Global liquidity regulation, supervision and risk management” keynote address to the DNB seminar “*Liquidity risk management – the LCR and beyond*” Amsterdam, the Netherlands, May 15, available at <https://www.bis.org/speeches/sp140515.pdf> (accessed 7 November 2019).

⁴⁴⁴ Bonner C *et al* (2015) “Banks’ liquidity buffers and the role of liquidity regulation” 48 *Journal of Financial Services Research* 215 at 218; Elliott DJ (2014) “Banks liquidity requirements: an introduction and overview” available at https://www.brookings.edu/wp-content/uploads/2016/06/23_bank_liquidity_requirements_intro_overview_elliott.pdf (accessed 7 November 2019).

Perotti and Suarez observe that the 2008 GFC demonstrated that a liquidity crisis can be systemic in that liquidity shortfalls at one financial institution can spread to other solvent and liquid financial institutions and speedily dry up the financial markets.⁴⁴⁵ As noted in Chapter One,⁴⁴⁶ a prime example of systemic liquidity risk occurred with the run on Northern Rock, a UK mortgage bank, in a contagion event that occurred in September 2007 leading to sudden withdrawals of large scale deposits.⁴⁴⁷

To augment the *Principles for sound liquidity risk management and supervision*, the BCBS released two liquidity regulatory frameworks highlighted in Chapter One,⁴⁴⁸ namely, the *Basel III Liquidity Coverage Ratio framework* and the *Basel III Net Stable Funding Ratio framework*.⁴⁴⁹

2.4.5.1 The Liquidity Coverage Ratio (LCR)

The *Basel III LCR framework* was phased-in from January 2015 and reached full implementation in January 2019. This framework requires a bank to hold a minimum of 100 per cent stock of unencumbered High Quality Liquid Assets (HQLA) to offset cash outflows over a period of thirty calendar days under different market stress scenarios.⁴⁵⁰ The purpose of the LCR is to enhance the short-term resilience of the liquidity profile of a bank against liquidity risk. It does so by requiring a bank to maintain a stock of HQLA that can be immediately and easily monetised with little or no cost in

⁴⁴⁵ Perotti EC *et al* (2011) "A pigovian approach to liquidity regulation" 7 *International Journal of Central Banking* 3 at 5.

⁴⁴⁶ See paragraph 1.5 thereof.

⁴⁴⁷ Goodhart CAE "The regulatory responses to the financial crisis" CESifo Working Paper March 2008 available at

<https://www.econstor.eu/bitstream/10419/26302/1/560533586.PDF> (accessed 23 July 2016); House of Commons – Treasury Committee: *The run on the Rock: Fifth Report of Session 2007-08* (January 2008) available at

<https://publications.parliament.uk/pa/cm200708/cmselect/cmtreasy/56/56i.pdf> (accessed 23 July 2016).

⁴⁴⁸ Refer to paragraph 1.7 thereof.

⁴⁴⁹ BCBS *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (January 2013) available at <https://www.bis.org/publ/bcbs238.pdf> (accessed 23 July 2016); BCBS *Basel III: the net stable funding ratio* (October 2014) available at <https://www.bis.org/bcbs/publ/d295.pdf> (accessed 23 July 2016); See further, Northcott A *et al* "Liquidity standards in a macroprudential context Bank of Canada" *Financial Stability Review* (December 2009) available at <https://www.bankofcanada.ca/wp-content/uploads/2012/01/fsr-1209-northcott.pdf> (accessed 7 November 2019)

⁴⁵⁰ Paragraph 16 of the *Basel III LCR framework*.

order to meet the bank's liquidity needs over thirty calendar days of liquidity stress conditions.⁴⁵¹

The *Basel III LCR framework* defines "total net cash outflows" as the total expected cash outflows minus the total expected cash inflows over different stress scenarios for a period of thirty calendar days.⁴⁵² As explained in the aforesaid framework, cash outflows typically consist of retail deposits, (which are divided into: stable⁴⁵³ and less stable deposits),⁴⁵⁴ unsecured wholesale funding,⁴⁵⁵ secured funding liabilities,⁴⁵⁶ and derivatives cash outflows.⁴⁵⁷

Cash inflows arise from exposure from which no default in performance is expected, and are capped at 75 (seventy-five) per cent of the relevant bank's total cash outflows to discourage the over-dependence of banks on inflows to meet their liquidity requirements.⁴⁵⁸ As observed in the *Basel III LCR framework*, the problem of excessive reliance on inflows is that they are unlikely to materialise during a liquidity crisis in the financial markets, implying that during such crisis banks may default on their liquidity obligations, which could then result in a "bank run".⁴⁵⁹

HQLA exhibit the following characteristics:⁴⁶⁰ they can immediately and speedily be converted into cash with no or insignificant losses; they are liquid during market distress;⁴⁶¹ they enable certainty and easy valuation by market participants: they have

⁴⁵¹ Paragraph 14 of the *Basel III LCR framework*.

⁴⁵² Paragraph 69 of the *Basel III LCR framework*.

⁴⁵³ Paragraph 76 of the *Basel III LCR framework* states that these are deposits that are fully insured by deposit guarantee scheme.

⁴⁵⁴ Paragraph 80 of the *Basel III LCR framework* states that these assets are not fully covered by deposit insurance scheme.

⁴⁵⁵ Paragraph 85 the *Basel III LCR framework* stipulates that unsecured wholesale funding is not sourced from the natural persons and it is without collateral in case of bankruptcy.

⁴⁵⁶ Paragraph 112 of the *Basel III LCR framework* states that secured funding liabilities are liabilities and obligations which are collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution.

⁴⁵⁷ Paragraph 116 of the *Basel III LCR framework*.

⁴⁵⁸ Paragraph 142 of the *Basel III LCR framework*.

⁴⁵⁹ Paragraph 144 of the *Basel III LCR framework*.

⁴⁶⁰ Paragraph 24 of the *Basel III LCR framework*.

⁴⁶¹ Gomes T *et al* "The Basel III liquidity standards: an update" Bank of Canada *Financial Stability Review* (June 2013) available at <https://www.bankofcanada.ca/wp-content/uploads/2013/06/fsr-0613-gomes.pdf> (accessed 7 November 2019).

low risk correlation with risky assets,⁴⁶² their outright sale is possible at all times;⁴⁶³ they provide high and large trading volumes; they attract large and diverse market participants; and they yield to so-called “flight to quality”.⁴⁶⁴ Further, HQLA are traded in large markets and are characterised by a low level of concentration; have a proven record as a reliable source of liquidity during a financial crisis; and are not issued by a financial institution or its affiliates.⁴⁶⁵ In addition to these prerequisites, HQLA are eligible by the central bank for intraday liquidity needs and overnight liquidity facilities.⁴⁶⁶

To be eligible as HQLA, assets must meet certain criteria. In particular, such assets should be unencumbered, meaning that they are supposed to be free from any legal, regulatory, contractual or any other form of restrictions impeding on their ability to be quickly liquidated.⁴⁶⁷ For instance, they should not be pledged as collateral, nor be subject to hypothecation.⁴⁶⁸ In order for assets that meet specified criteria of HQLA to be legally recognised, certain operational requirements that apply to the *Basel III LCR framework* must be fulfilled.⁴⁶⁹ One such requirement is that HQLA should also be subject to the bank’s designated control function⁴⁷⁰ possessing legal and operational

⁴⁶² The *Basel III capital framework* notes that a high correlation with risky assets may cause a wrong way risk, which is defined as a situation whereby the counterparty risk and default risk increase together. *The Basel Framework* (December 2019) states that general wrong-way risk “arises when the probability of default of counterparties is positively correlated with general market risk factors” while specific-wrong way risk arises when “future exposure to a specific counterparty is highly correlated with the counterparty’s probability of default.”

⁴⁶³ Committed market makers are readily available to buy and sell at all times. For this, refer to Committee on the Global Financial System *Market-making and proprietary trading: industry trends, drivers and policy implications CGFS Papers* (November 2014) available at <https://www.bis.org/publ/cgfs52.pdf> (accessed 8 November 2019).

⁴⁶⁴ The concept of “flight to quality” refers to a tendency of investors to buy less risky assets in times of financial market stress. For this, see Beber A *et al* (2008) “Flight-to-quality or flight-to-liquidity? Evidence from the Euro-Area bond market” 22 *The Review of Financial Studies* 925. *The Basel Framework* (December 2019) notes that investors increasingly resort to buy HQLA in the midst of the financial distress. In other words, HQLA yield to “flight to quality” as they are less risky and are highly liquid during financial stress.

⁴⁶⁵ Paragraph 26 of the *Basel III LCR framework* states that this eligibility criteria do not include Level 2B assets, which are discussed below.

⁴⁶⁶ Paragraph 23 of the *Basel III LCR framework*; BCBS *Monitoring tools for intraday liquidity management* (April 2013) available at <https://www.bis.org/publ/bcbs248.pdf> (accessed 8 November 2019) defines intraday liquidity needs as funds that can be accessed during the business day to enable banks to make payments in real time whereas overnight liquidity facility can be accessed after the end of business day.

⁴⁶⁷ Paragraph 31 of the *Basel III LCR framework*.

⁴⁶⁸ *Ibid.*

⁴⁶⁹ Paragraph 28 of the *Basel III LCR framework*.

⁴⁷⁰ The control function forms a separate and an independent structure within a bank that is intended to monitor the overall activities of the bank and directly reports to the management. For this, see Dietz T

capacity to monetise the assets in accordance with the systems and procedures that are put in place.⁴⁷¹

Depending on their degree of liquidity, HQLA assets are classified as Level 1 assets and Level 2 assets, which are further subdivided into Level 2A and Level 2B assets.⁴⁷² Level 1 assets are highly liquid assets that are not subject to “haircuts”.⁴⁷³ They include: cash and banknotes; central bank reserves; marketable securities of sovereigns, central banks, BIS, IMF and multilateral banks, that are assigned a zero per cent risk-weight.⁴⁷⁴ Level 2 assets are characterised by less liquidity than Level 1 assets and are subject to a haircut of 15 (fifteen) per cent.⁴⁷⁵ The *Basel III LCR framework* requires that Level 2 assets should cumulatively comprise 40 per cent of the total HQLA.⁴⁷⁶ In other words, Level 1 assets must always constitute a minimum of 60 per cent of the total HQLA.⁴⁷⁷

Level 2A assets include marketable securities just like Level 1 assets, however, they are assigned a 20 per cent risk-weight. In addition, Level 2A assets include corporate debt securities that are not issued by a financial institution, or on its behalf, and have a credit rating from a recognised external credit assessment institution of at least AA.⁴⁷⁸ Level 2B assets are categorised as HQLA based on supervisory discretion,

(2011) “The role of the risk control function under the Basel II framework” 1 *Risk Governance and Control: Financial Markets and Institutions* 40 at 46.

⁴⁷¹ Paragraph 33 of the *Basel III LCR framework*.

⁴⁷² Paragraphs 45, 46, 47 and 48 of the *Basel III LCR framework*.

⁴⁷³ Paragraph 30 of the *Basel III LCR framework* describes a haircut as a reduction in par value of collateralised assets and it is expressed as a percentage. The *Basel III framework* defines haircuts in the context of the liquidity framework to mean the reduction of the value of an asset based on its liquidity characteristics.

⁴⁷⁴ Paragraphs 49 and 50 of the *Basel III LCR framework*; See subparagraph 2.2.4 above for the definition of RWAs, being that assets are assigned weights according to the degree of their risk. In this context, risk-weights measure the level of risk that is associated with the liquidity characteristics of assets classes.

⁴⁷⁵ Paragraph 47 of the *Basel III LCR framework*.

⁴⁷⁶ Paragraph 51 of the *Basel III LCR framework*.

⁴⁷⁷ *Ibid.*

⁴⁷⁸ Paragraph 52 of the *Basel III LCR framework*; As pointed out in paragraph 1.1 of Chapter One, securitisation refers to a situation whereby assets are sliced into tranches that are sold to investors. The first tranche that is labelled the “super senior tranche” is rated as the safest tranche in terms of credit risk and it is the first to be paid out, however, it has a lower interest. The most junior tranche is the last to be paid. Mezzanine tranches are between the highest-ranking tranches and the lowest rated tranches. See Brunnermeier MK (2009) “Deciphering the liquidity and credit crunch 2007-2008” 23 *Journal of Economic Perspectives* 77 at 79; The US credit ratings agencies are Moody’s, available at <https://www.moody.com/> (accessed 9 January 2019) and Standard and Poor’s (S&P), available at https://www.standardandpoors.com/en_US/web/guest/home (accessed 9 January 2019). According to Moody’s, the best credit rating is Aaa and the next best is Aa and then follows A, Baa, Ba, B and Caa

subject to specified qualifying criteria.⁴⁷⁹ Some of the examples of Level 2B assets are: residential mortgage-backed securities (MBS) that are not issued by a bank, whose haircut is 25 per cent and may have a long-term credit rating of at least AA.⁴⁸⁰ Further, Level 2B assets include corporate debt securities that are not issued by a financial institution and may have a credit rating of between A+ and BBB-.⁴⁸¹ Level 2B assets also include common equity shares that are not issued by a financial institution or its affiliates and are exchange-traded and centrally cleared.⁴⁸²

The Basel III LCR is reported on a monthly basis, and if it falls below the minimum regulatory requirement as a result of idiosyncratic or market-wide shocks, the supervisor must be promptly informed.⁴⁸³ A supervisory response is required at an early stage, and depending on the cause of the liquidity shortfall, a bank may be ordered to take prompt corrective action or reduce liquidity exposure.⁴⁸⁴ Acharya points out that prompt corrective actions refer to early intervention measures that seek to restore the capital of banks to the required levels in order to restore such banks to financial health.⁴⁸⁵

Supervisors utilise a range of monitoring tools to evaluate the liquidity position of a bank, and these include: contractual maturity mismatch; concentration of funding by instrument type or counterparty type; quantity and key characteristics of assets; significant currency; and market-related information from the banking and financial sector.⁴⁸⁶

and these credit ratings correspond to S&P's credit ratings of: AAA, AA, A, BBB, BB, B and CCC, respectively. Moody's Aa credit rating category is divided into Aa1, Aa2 and Aa3 while an A credit rating category is broken down into A1, A2 and A3. Similarly, S&P's AA credit rating category is divided into AA+, AA and AA- while an A credit rating category is divided into A+, A and A-. For this, see Hull J *et al* (2004) "The relationship between credit default swap spreads, bond yields, and credit enhancements" 28 *Journal of Banking and Finance* 2789 at 2790.

⁴⁷⁹ Paragraph 53 of the *Basel III LCR framework*.

⁴⁸⁰ Paragraph 54(a) of the *Basel III LCR framework*.

⁴⁸¹ Paragraph 54(b) of the *Basel III LCR framework*.

⁴⁸² Paragraph 54(c) of the *Basel III LCR framework*.

⁴⁸³ Paragraphs 162 and 163 of the *Basel III LCR framework*.

⁴⁸⁴ Paragraph 176 of the *Basel III LCR framework*.

⁴⁸⁵ Acharya VV, Deputy Governor, Reserve Bank of India, "Prompt corrective action: an essential element of financial stability framework", remarks delivered at the Indian Institute of Technology Bombay October 12, 2018 available <https://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/PCAS255E21AB302F4D4DB307D29D6346F6ED.PDF> (accessed 8 November 2019).

⁴⁸⁶ Pohl M "Basel III liquidity monitoring tools" Financial Stability Institute Occasional Paper October 2017 available at <https://www.bis.org/fsi/ospapers14.pdf> (accessed 9 November 2019).

2.4.5.2 The Net Stable Funding Ratio (NSFR)

The *Basel III NSFR framework* was implemented by January 2018. In terms of the BCBS's definition, the NSFR is the amount of available stable funding relative to the amount of required stable funding.⁴⁸⁷ Available stable funding is defined as the capital and liabilities of a bank that are expected to be reliable and accessible over a one-year time horizon.⁴⁸⁸ The degree of stability of liabilities is reflected in terms of the funding tenor, the funding type and the counterparty type.⁴⁸⁹ In terms of the funding tenor, longer-term liabilities are defined as more stable than short-term liabilities.⁴⁹⁰ The BCBS considers the funding type that has short-term deposits of less than one year maturity provided by retail customers and small business customers, more stable than wholesale funding sources of the same maturity and counterparties that are retail customers and small business customers are regarded as more reliable than wholesale customers.⁴⁹¹

Required stable funding refers to the amount of liquidity that a bank will need to maintain to fund its assets and off-balance sheet exposures in order to continue its credit intermediation role.⁴⁹² Assets with a maturity date of less than one-year require a smaller proportion of stable funding.⁴⁹³

The objective of the NSFR is to increase the long-term liquidity resilience of a bank over one year and to discourage the over-reliance of internationally active banks on short-term wholesale funding.⁴⁹⁴ As indicated by the BCBS, during the GFC, banks created negative externalities from sources of short-term wholesale funding and illiquid assets that caused significant systemic losses from asset fire sales.⁴⁹⁵ The NSFR,

⁴⁸⁷ Paragraph 9 of the *Basel III NSFR framework*.

⁴⁸⁸ *Ibid.*

⁴⁸⁹ Paragraph 17 of the *Basel III NSFR framework*.

⁴⁹⁰ Paragraph 13 of the *Basel III NSFR framework*.

⁴⁹¹ *Ibid.*

⁴⁹² Paragraph 12(a) of the *Basel III NSFR framework*.

⁴⁹³ Paragraph 14 of the *Basel III NSFR framework*.

⁴⁹⁴ Paragraph 1 of the *Basel III NSFR framework*.

⁴⁹⁵ BCBS *Net Stable Funding ratio disclosure standards* (July 2015) available at <https://www.bis.org/bcbs/publ/d324.pdf> (accessed 8 July 2019); BCBS *Basel III: the net stable funding ratio* (October 2014) available at <https://www.bis.org/bcbs/publ/d295.pdf> (accessed 23 July 2016).

therefore, promotes a more stable funding source on a long-term in respect of a bank's composition of assets and off-balance sheet activities.⁴⁹⁶

2.4.6 The large exposure limits framework

The BCBS issued *the Supervisory framework for measuring and controlling large exposures* (Basel large exposure framework) in April 2014 to regulate the concentration risk arising from the credit exposure of a bank to a single counterparty or group of connected counterparties.⁴⁹⁷ The scope of application of the large exposure limits is applied on a consolidated basis to include on-and-off balance sheet exposures of parent banks and subsidiaries.⁴⁹⁸

The *Basel large exposure framework* was developed to address the concentration risk arising from among single counterparties against banks as it is not included in the calculation of the Pillar 1 requirements of the *Basel II framework*.⁴⁹⁹ The rationale behind the *Basel large exposure framework* is to mitigate the negative externalities that emanate from losses that banks could incur following the collapse of a single counterparty or a group of connected counterparties.⁵⁰⁰ These losses are occasioned by common or direct exposures that could raise solvency concerns.⁵⁰¹

Reported large exposures are described as exposures exceeding 10 (ten) per cent of a bank's eligible capital and exclude credit risk mitigation techniques such as collateral or guarantees.⁵⁰² These credit risk mitigation techniques reduce the value of the bank's credit exposure to the original counterparty and assigns the amount by which the credit exposure is reduced to the credit risk mitigation provider.⁵⁰³ The minimum

⁴⁹⁶ *Ibid.*

⁴⁹⁷ BCBS *Supervisory framework for measuring and controlling large exposures* (April 2014) available at <https://www.bis.org/publ/bcbs283.pdf> (accessed 27 January 2017); BIS and Financial Stability Institute *Treatment of large exposures in the Basel capital standards – executive summary* available at <https://www.bis.org/fsi/fsisummaries/largeexpos.pdf> (accessed 22 January 2019). Paragraph 770 of the *Basel II framework* defines concentration risk as any single exposure or group of exposures with the potential to produce losses large enough to endanger a financial system. See further, The Joint Forum, BCBS, IOSCO, IAIS, *Risk Concentrations Principles* (December 1999) available at <https://www.bis.org/publ/bcbs63.pdf> (accessed 22 January 2019).

⁴⁹⁸ Paragraph 11 of the *Basel large exposure framework*.

⁴⁹⁹ Paragraph 738(iii) of the *Basel II framework*.

⁵⁰⁰ Paragraph 1 of the *Basel large exposure framework*.

⁵⁰¹ *Ibid.*

⁵⁰² Paragraph 14 of the *Basel large exposure framework*.

⁵⁰³ Paragraph 42 of the *Basel large exposure framework*.

large exposure limit of eligible capital for all internationally active banks is 25 (twenty-five) per cent of eligible capital excluding credit risk mitigation techniques, and 15 (fifteen) per cent for all G-SIBs.⁵⁰⁴ Banks are required to look-through structures such as securitisation vehicles to identify the underlying exposures that should be assigned to counterparties with exposures to these underlying assets.⁵⁰⁵

The determination of a group of connected counterparties is based on the control relationship or economic independence tests.⁵⁰⁶ In terms of the economic independence test, there is a connection among counterparties if the financial difficulty of one will lead to the default of the other.⁵⁰⁷ The factors that are considered for the economic independence test are: when a counterparty derives 15 per cent or more income from transactions with another counterparty; provision of a full guarantee of significant exposures; and reliance on same funding sources.⁵⁰⁸ A bank is bound to show that it will manage to overcome its financial difficulties in the likely event that the connected counterparties collapse.⁵⁰⁹ On the other hand, some of the indicators of the control relationship test are: 15 per cent voting rights and influence on shareholders of a bank.⁵¹⁰ Similarly, a bank bears the onus of proving that the control relationship does not lead to the parties being connected.⁵¹¹

2.4.7 Recovery and resolution plans

Resolution planning forms part of the regulatory regime that is incorporated in the recovery and resolution regimes of the *FSB Key Attributes*.⁵¹² The resolution plan, a so-called “living will”, is an outline of a strategy that provides for the orderly and rapid resolution of the bank for which the plan is drafted, should it encounter failure and as

⁵⁰⁴ Paragraphs 16 and 90 of the *Basel large exposure framework*.

⁵⁰⁵ Paragraph 72 of the *Basel large exposure framework*.

⁵⁰⁶ Paragraph 20 of the *Basel large exposure framework*.

⁵⁰⁷ Paragraphs 22 and 23 of the *Basel large exposure framework*.

⁵⁰⁸ Paragraph 26 of the *Basel large exposure framework*.

⁵⁰⁹ *Ibid.*

⁵¹⁰ *Ibid.*

⁵¹¹ Paragraph 25 of the *Basel large exposure framework*.

⁵¹² The *FSB Key Attributes for Effective Resolution Regimes for Financial Institutions* (October 2011) available at https://www.fsb.org/wp-content/uploads/r_111104cc.pdf (accessed 14 November 2016); See also an updated of the *FSB Key Attributes for Effective Resolution Regimes for Financial Institutions* (October 2014) available at https://www.fsb.org/wp-content/uploads/r_141015.pdf (accessed 14 November 2016). Cecchetti SG (2015) “The road to financial stability: capital regulation, liquidity regulation, and resolution” 11 *International Journal of Central Banking* 127 at 130 observes that many jurisdictions are in the process of implementing resolution regimes in line with the *FSB Key Attributes*.

such the resolution plan seeks to prevent the disorderly systemic collapse of the bank concerned.⁵¹³ In terms of the *FSB Key Attributes*, resolution plans must be updated annually.⁵¹⁴

The objective of the resolution frameworks is to address the problems relating to “bail-out” and moral hazard⁵¹⁵ that are associated with the failure of a SIFI by attempting to ensure that the cost of failure of such an entity is not borne by taxpayers.⁵¹⁶ The *FSB Key Attributes* require: resolution plans to be credible and to detail strategies for continuing financial and economic functions; suitable resolution options for winding up; data on the business model and structure of a bank; how potential barriers to resolution may be mitigated; the steps that will be taken to protect depositors and resolution strategies.⁵¹⁷

The *FSB Key Attributes* specify two resolution strategies, namely, the single-point-of-entry (SPoE) and the multiple-point-of-entry (MPoE).⁵¹⁸ SPoE is a resolution strategy that plans for the home resolution authority to apply resolution powers to a single parent bank that issues the Total Loss Absorbency Capacity (TLAC)⁵¹⁹ to be allocated cross-jurisdictionally to its subsidiaries.⁵²⁰ MPoE resolution strategy involves the

⁵¹³ Paragraph 11.10 of the *FSB Key Attributes* (October 2011); Carmassi R *et al* (2013) “Living wills and cross-border resolution of systemically important banks” 5 *Journal of Financial Economic Policy* 316 at 369; Avgouleas E *et al* (2012) “Bank resolution plans as a catalyst for global financial reform” xxx *Journal of Financial Stability* 187 defines a living will as a resolution plan drawn up ex ante to resolve the financial difficulties of a failing bank.

⁵¹⁴ Paragraph 11.10 of the *FSB Key Attributes* (October 2011).

⁵¹⁵ See paragraph 1.4 of Chapter One for the definition of bail-out and moral hazard; See further, BCBS and International Association of Deposit Insurers Core Principles for Effective Deposit Insurance Systems (June 2009) available at <https://www.bis.org/publ/bcbs156.pdf> (accessed 23 February 2019).

⁵¹⁶ Paragraph 11.10 of the *FSB Key Attributes* (October 2011).

⁵¹⁷ Paragraph 11.6 of the *FSB Key Attributes* (October 2014); See further, Calvo D *et al* “Financial supervisory architecture: what has changed after the crisis?” Financial Stability Institute – BIS FIS *Insights on policy implementation* (April 2018) available at <https://www.bis.org/fsi/publ/insights8.pdf> (accessed 29 November 2018).

⁵¹⁸ *FSB Recovery and resolution planning for systemically important financial institutions – guidance on developing effective resolution strategies* (July 2013) available https://www.fsb.org/wp-content/uploads/r_130716b.pdf (accessed 14 November 2016).

⁵¹⁹ Refer to paragraph 2.2 above for the description of the TLAC requirement.

⁵²⁰ See the *FSB Key Attributes*; See further, Bolton P *et al* (2018) “Bank resolution and the structure of global banks” 32 *The Review of Financial Studies* 2384; Kupiec P *et al* (2015) “Can the “Single Point of Entry” strategy be used to recapitalize a systemically important failing bank?” 20 *Journal of Financial Stability* 184.

issuing of TLAC by subsidiaries in each jurisdiction, and it engages separate but coordinated resolution by the affected national resolution authorities.⁵²¹

On the other hand, a recovery plan is an early intervention measure that entails options for restoring the financial strength and viability of a bank that is distressed.⁵²² A recovery plan incorporates credible recovery plans under different stress scenarios, scenarios that will be used to address capital and liquidity shortfalls and processes that will ensure timely implementation.⁵²³

2.5 The Basel D-SIB enhanced supervisory regime

The *Basel II framework* incorporates the banking supervision aspect under Pillar 2 requirements.⁵²⁴ Pillar 2 requirements entail the *Supervisory Review and Evaluation Process* (SREP), which is intended to assess compliance by banks with minimum regulatory capital requirements⁵²⁵ under the Pillar 1 requirements of the *Basel II framework*.⁵²⁶ Under the SREP, banks are responsible for putting in place robust risk-management and governance frameworks to ensure prudent and effective risk assessments.⁵²⁷ The SREP essentially gauges a bank's capital and liquidity relative to its risk exposures such as credit risk, liquidity risk, and concentration risk.⁵²⁸ The use of on-site inspections or off-site examinations to monitor compliance with minimum prudential standards forms an integral part of the SREP.⁵²⁹ In cases of non-compliance with minimum capital and liquidity standards, supervisors are required to intervene early by requiring compliance or taking appropriate remedial action.⁵³⁰

⁵²¹ FSB *Recovery and resolution planning for systemically important financial institutions – guidance on developing effective resolution strategies* (July 2013) available at https://www.fsb.org/wp-content/uploads/r_130716b.pdf (accessed 14 November 2016).

⁵²² Paragraph 11.5 of the *FSB Key Attributes* (October 2014).

⁵²³ *Ibid.*

⁵²⁴ Paragraph 719 of the *Basel II framework*.

⁵²⁵ The concept of minimum regulatory capital is highlighted in paragraph 1.7 of Chapter One.

⁵²⁶ Paragraph 720 of the *Basel II framework*.

⁵²⁷ BCBS *Overview of Pillar 2 supervisory review and practices and approaches* (June 2019) available at <https://www.bis.org/bcbs/publ/d465.pdf> (accessed 16 July 2019); Committee on the Global Financial System *Structural changes in banking after the crisis CGFS Papers* (January 2018) available at <https://www.bis.org/publ/cgfs60.pdf> (accessed 12 February 2018).

⁵²⁸ The Basel Committee notes that a key feature of the supervisory review process under the *Basel II framework* is the internal capital adequacy assessment program (ICAAP).

⁵²⁹ Paragraphs 746 and 756 of the *Basel II framework*.

⁵³⁰ *Ibid.*

The *Basel Core Principles for Effective Banking Supervision* (BCPs)⁵³¹ sets forth a supervisory regime for the global banking sector.⁵³² The *FSB SIE Report* mirrors an enhanced version of the *BCPs*, and thus, accordingly establishes an enhanced supervisory framework for D-SIBs.⁵³³ This means that the *FSB SIE Report* tailors the supervisory regime established by the *BCPs* for banks to merit the heightened systemic risk of D-SIBs compared to non-systemic banks.⁵³⁴ The BCBS acknowledges that the scope of application of the *BCPs* extends to D-SIBs, as another spectrum of banks.⁵³⁵ Therefore, the *FSB SIE Report* should be read in conjunction with the *BCPs* for the implementation of the Basel D-SIB supervisory framework. Further, the FSB pointed out in its *Thematic review supervisory frameworks and approaches for SIBs* (May 2015) that the stringency and frequency of supervisory tools that are applicable to large banks are intensified for the supervisory regime of D-SIBs.⁵³⁶

In terms of the *FSB SIE Report*, intensive supervision translates into effective supervision when supervisors intrusively and proactively impact upon the key areas of supervision such as risk governance, risk-management and risk culture in pursuing an overall financial stability objective.⁵³⁷ Effective supervision further speaks to early supervisory intervention that meaningfully addresses deficiencies in risk-management frameworks of banks.⁵³⁸ The FSB further notes that the level of effectiveness of

⁵³¹ BCBS *Core Principles for Effective Banking Supervision* (September 2012) available at <https://www.bis.org/publ/bcbs230.pdf>; See paragraph 1.7 of Chapter One for an overview of the *BCPs*.

⁵³² BCBS *Core Principles for effective banking supervision* (September 2012) available at <https://www.bis.org/publ/bcbs230.pdf> (accessed 11 July 2016); See further, Kalas B *et al* (2016) "Characteristics of Basel principles and standards in banking" 18 *European Journal of Economic Studies* 486 at 487-488.

⁵³³ Part I of the *FSB SIFI framework* available at https://www.fsb.org/wp-content/uploads/r_101111a.pdf (accessed 19 June 2016).; Paragraph 30 of the *BCPs*.

⁵³⁴ *Ibid.*

⁵³⁵ Under paragraph 19 of the *BCPs*, the BCBS opines that it is unnecessary to formulate separate principles for D-SIBs given that they represent one end of the supervisory spectrum of banks. Recommendation 6 of the *FSB SIE Report* available at

http://www.fsb.org/wp-content/uploads/r_101101.pdf?page_moved=1 (accessed 31 May 2016)

requires the consolidated and group-wide supervision of D-SIBs. See further, Part I and Recommendation 6 of the *FSB SIFI framework* available at

https://www.fsb.org/wp-content/uploads/r_101111a.pdf (accessed 19 June 2016).

⁵³⁶ FSB *Thematic review on supervisory frameworks and approaches for SIBs – Peer Review Report* (May 2015) available at

<http://www.fsb.org/wp-content/uploads/Thematic-Review-on-Supervisory-Approaches-to-SIBs.pdf> (accessed 4 April 2019).

⁵³⁷ *Ibid.*; See further, Barfield R *et al* (2011) "Basel III- implications for risk management and supervision" 89 *Compliance Office Bulletin* 1 at 5.

⁵³⁸ FSB *Thematic review on supervisory frameworks and approaches for SIBs – Peer Review Report* (May 2015) available at

supervision of D-SIBs can be mainly tested against a bank's strategy that is targeted at set priorities and objectives.⁵³⁹

Principle 1 of the *BCPs* states that a clear mandate regarding supervisory authority is a core element of banking supervision.⁵⁴⁰ In terms of the *FSB SIE Report*, this mandate must enable supervisors to have “the will to act” to prioritise macro-prudential issues over other non-financial stability matters in order to safeguard financial stability.⁵⁴¹ To effectively enforce their mandates with the required level of accountability, supervisors must have operational independence, which is especially reinforced by budget autonomy.⁵⁴² The FSB also identified inadequate financial and human resources as key factors undermining supervisory operational independence in most jurisdictions.⁵⁴³

Recommendation 4 of the *FSB SIE Report* focuses on vesting supervisors with powers to discharge their mandate with improved supervisory tools, techniques and approaches that are geared towards outcome-focused supervision.⁵⁴⁴ Such outcome-focused supervision is more concerned with outcomes that are consistent with supervisory expectations, rather than the processes that are meant to bring about those outputs.⁵⁴⁵ In the *FSB SIE Report*, the FSB recommends that the *BCPs* should be expanded to cover the *Basel III framework* regulatory tools including capital buffers, enhanced liquidity standards, and large exposure limits.⁵⁴⁶

<http://www.fsb.org/wp-content/uploads/Thematic-Review-on-Supervisory-Approaches-to-SIBs.pdf>
(accessed 4 April 2019).

⁵³⁹ *Ibid.*

⁵⁴⁰ Paragraph 41 of the *BCPs*.

⁵⁴¹ Part II of the *FSB SIE Report*; Recommendation 1 of the *FSB SIE Report* proposes that Principle 1 of the *BCPs* should be clarified to expressly state that the financial stability matters must prevail over other policy objectives. Recommendation 9 of the *FSB SIE Report* states that the D-SIB supervisory approach should be forward-looking and macro-prudential in nature.

⁵⁴² Part II of the *FSB SIE Report*; Paragraph 41 of the *BCPs*; Part IV of the *FSB SIFI framework*; According to the FSB, lack of operational independence such as the approval of the minister concerning the supervisory decisions can act as a constraint to effective supervision.

⁵⁴³ Recommendation 3 of the *FSB SIE Report*; *FSB Thematic review on supervisory frameworks and approaches for SIBs – Peer Review Report* (May 2015) available at

<http://www.fsb.org/wp-content/uploads/Thematic-Review-on-Supervisory-Approaches-to-SIBs.pdf>
(accessed 22 January 2019). This Peer Review Report notes that supervisors should devise funding mechanisms that will not impede their independence and should have frequent capacity building to acquire the skills set required of the supervision of D-SIBs. Refer to Recommendation 2 and 3 of the *FSB SIFI framework*; Principle 2 of the *BCPs*.

⁵⁴⁴ Part II of the *FSB SIE Report*; Recommendation 2 of the *FSB SIFI framework*.

⁵⁴⁵ *Ibid.*

⁵⁴⁶ Recommendation 4 of the *FSB SIFI framework*.

The supervisory tools that are available for enhanced supervision of D-SIBs include:⁵⁴⁷ enhanced risk assessments;⁵⁴⁸ business model and product analysis and horizontal reviews;⁵⁴⁹ risk data aggregation and risk data reporting;⁵⁵⁰ a stress-testing regime;⁵⁵¹ and supervisory cooperation and coordination,⁵⁵² as discussed below.

2.5.1 The enhanced risk-management requirements

Risk-management and corporate governance requirements feature in Principles 14 and 15 of the *BCPs*.⁵⁵³ The key areas of risk-management standards are the board of directors' general oversight function; the bank's risk governance framework; the risk-management framework; risk appetite and risk culture.⁵⁵⁴ The *FSB SIE Report* recommends that the corporate governance principles relating to the selection criteria for the board and the senior management of a D-SIB be tightened to ensure that these persons are fit and proper to effectively run a complex bank with the required set of skills and expertise.⁵⁵⁵ For these purposes, regular interviews and training of the board and the senior management are required to be conducted.⁵⁵⁶

The board is charged with the overall oversight of a bank; the approval and oversight of the senior management's implementation of a bank's strategy, risk governance framework and corporate culture.⁵⁵⁷ In other words, the board is enjoined to ensure that senior management acts in accordance with set strategies and policies,⁵⁵⁸ ensure that the bank's risk appetite matches its risk profile, and that the bank's risk-taking activities and risk-management processes and risk communication awareness promote a sound risk culture.⁵⁵⁹

⁵⁴⁷ Recommendation 5 of the *FSB SIE Report*.

⁵⁴⁸ Subparagraph 2.5.1.

⁵⁴⁹ Subparagraph 2.5.2.

⁵⁵⁰ Subparagraph 2.5.3.

⁵⁵¹ Subparagraph 2.5.4.

⁵⁵² Subparagraph 2.5.5.

⁵⁵³ Paragraph 41 of the *BCPs*.

⁵⁵⁴ BCBS *Corporate governance principles for banks – Guidelines* (July 2015) available at <https://www.bis.org/bcbs/publ/d328.pdf> (accessed 22 January 2019); Paragraph 23 of the *2015 Corporate governance principles* (July 2015); See further, McConnell PJ (2012) "A risk culture framework for systemically important banks" 3 *Journal of Risk and Governance* 23.

⁵⁵⁵ Part II of the *FSB SIE Report*; See also, Principle 2 of the *BCBS Corporate governance principles for banks* (July 2015); Recommendation 5 of the *FSB SIFI framework*.

⁵⁵⁶ *Ibid.*

⁵⁵⁷ Paragraph 23 of the *BCBS Corporate governance principles for banks* (July 2015).

⁵⁵⁸ Paragraph 93 of the *BCBS Corporate governance principles for banks* (July 2015).

⁵⁵⁹ Paragraphs 29 and 34 of the *BCBS Corporate governance principles for banks* (July 2015); Risk appetite is defined as the aggregate level and type of risk that a bank is willing to assume relative to its

Senior management of a bank is responsible for establishing the bank's risk-management framework to ensure that the bank is operating within its risk appetite.⁵⁶⁰

Risk-management entails the identification, measurement, and monitoring of risks, including detection of emerging risks and deficiencies in the risk-management framework.⁵⁶¹

A bank's risk-management framework is further constituted of a risk committee with specialised expertise in risk-management. The risk committee must ensure that systems are established to review that the policies and strategies of the bank are consistent with its risk appetite.⁵⁶² The chief risk officer heads the risk-management function and is tasked with identifying enterprise-wide risk and assessing the compliance of the bank with set risk limits and directly reports to the board.⁵⁶³ Considering that one of the key drivers of the GFC was the perverse incentives awarded to bank senior management which lead to unsound risk practices, it is pertinently required that the compensation structure for banks should encourage prudent risk taking consistent with the risk profile of a bank.⁵⁶⁴

Further, a bank's risk governance framework should entail an internal audit control providing quality assurance of the bank's internal controls and risk-management, as per Principle 26 of the *BCPs*.⁵⁶⁵ The *FSB SIE Report* recommends that an audit committee should be established specifically for D-SIBs, and the financial reports they

risk capacity to achieve its strategies and business plan. Risk capacity itself is defined as the maximum level of risk that a financial institution can assume given its resources before infringing constraints determined by the regulatory capital and liquidity needs, as well its obligations. Risk profile is described as a financial institution's gross and net risk exposures aggregated across each risk category after taking into consideration risk mitigants. For these definitions, see *FSB Principles for an effective risk appetite framework* (November 2013) available at https://www.fsb.org/wp-content/uploads/r_131118.pdf (accessed 22 January 2019).

⁵⁶⁰ Paragraph 112 of the *BCBS Corporate governance principles for banks* (July 2015).

⁵⁶¹ *Ibid.*

⁵⁶² Paragraph 71 of the *BCBS Corporate governance principles for banks* (July 2015).

⁵⁶³ Paragraphs 105 and 109 of the *BCBS Corporate governance principles for banks* (July 2015).

⁵⁶⁴ Principle 11 of the *BCBS Corporate governance principles for banks* (July 2015); Paragraph 146 thereof requires the board to approve the remuneration policies of a bank. See further, *FSF Principles for Sound Compensation Practices* (April 2009) available at http://www.fsb.org/wp-content/uploads/r_0904b.pdf (accessed 29 January 2019).

⁵⁶⁵ Paragraph 138 of the *BCBS Corporate governance principles for banks* (July 2015); Principle 26 of the *BCPs* requires internal and audit frameworks to be put in place to establish a smooth environment for the conduct of business of banks taking into account their risk profiles.

submit should be used to draw insights on their risk appetite.⁵⁶⁶ The oversight of the external audit may be utilised to ensure that the bank's records accord with widely accepted international accounting standards.⁵⁶⁷

The compliance function is a critical component of a bank's risk governance structure, evaluating such bank's compliance with applicable laws, regulations and internal policies.⁵⁶⁸ In April 2015, the BCBS issued a document titled *Compliance and the compliance function in banks*,⁵⁶⁹ stipulating high-level principles and guidelines on compliance functions, wherein compliance risk is defined as: "...the risk of legal or regulatory sanctions, material financial loss, or loss to reputation a bank may suffer as a result of its failure to comply with laws, regulations, rules, related self-regulatory organisation standards, and codes of conduct applicable to its banking activities."

2.5.2 Business model and horizontal reviews supervisory approaches

As indicated by the FSB, the business model of a bank relates to its income-generating methods and facilitates an understanding of the key risk drivers.⁵⁷⁰ Supervisors are supposed to scrutinise and challenge the business lines and complex products that introduce heightened risks to the financial condition of a bank.⁵⁷¹ One of the causes of the GFC was the introduction of complex financial innovation products at a time of a lack of technical supervisory capacity to understand the risks that were inherent in those products.⁵⁷² Therefore, the FSB points out that the GFC demonstrated a need for an in-depth analysis of business models as a precondition for understanding the material risks of a bank.⁵⁷³ Against this backdrop, supervisors are required to develop

⁵⁶⁶ Paragraph 68 of Principle 3 of the BCBS *Corporate governance principles* (July 2015); Recommendation 5 of the *FSB SIFI framework*.

⁵⁶⁷ Paragraph 41 of the *BCPs*. Recommendation 10 of the *FSB SIE Report*, nonetheless, cautions against the over-reliance on third parties' work following a lesson learnt from the GFC that external auditors' work proved inadequate to report matters of material significance to supervisors.

⁵⁶⁸ Paragraph 132 of the 2015 BCBS *Corporate governance principles for banks* (July 2015).

⁵⁶⁹ BCBS *Compliance and the compliance function in banks* (April 2005) available at <https://www.bis.org/publ/bcbs113.pdf> (accessed 22 January 2019); BCBS *Implementation of compliance principles – a survey* (April 2008) available at <https://www.bis.org/publ/bcbs142.pdf> (accessed 22 January 2019).

⁵⁷⁰ FSB *Thematic review on supervisory frameworks and approaches for SIBs – Peer Review Report* (May 2015) available at <http://www.fsb.org/wp-content/uploads/Thematic-Review-on-Supervisory-Approaches-to-SIBs.pdf> (accessed 22 January 2019).

⁵⁷¹ Part II of the *FSB SIE Report*.

⁵⁷² *Ibid.*

⁵⁷³ *Ibid.*

the technical capacity to review and understand complex business models and products of D-SIBs.⁵⁷⁴

The horizontal reviews-supervisory approach shares the best international practices across identical topics and identifies areas that need to be improved as well as industry-wide risks.⁵⁷⁵ Recommendation 7 of the *FSB SIE Report* states that proactive communication regimes should be established to ensure the smooth and continuous information flow between supervisory authorities and D-SIBs in order to avoid reactive event-driven discussions.

2.5.3 Risk data aggregation and risk data reporting

The BCBS *Principles for effective risk data aggregation and risk reporting* recommends that banks, including D-SIBs, implement data Information Technology architecture and management information systems to facilitate a robust framework for risk data collection and risk data reporting.⁵⁷⁶ Risk data aggregation is described as “defining, gathering and processing risk data according to the bank’s risk reporting requirements to enable the bank to measure its performance against risk tolerance or risk appetite”.⁵⁷⁷

These principles are relevant to the supervision of D-SIBs as it became evident during the GFC that the failure of risk-management governance systems and controls to capture material risks and exposures of TBTF banks had devastating repercussions.⁵⁷⁸ This requirement consequently seeks to bolster the risk data aggregation and risk reporting capabilities of banks, which will, in turn, improve recovery and resolvability processes.⁵⁷⁹ The essential criteria for meeting the risk data aggregation-principle is that risk data that is garnered must capture all material risks

⁵⁷⁴ *Ibid.*

⁵⁷⁵ Part II of the *FSB SIE Report*.

⁵⁷⁶ BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013) available at <https://www.bis.org/publ/bcbs239.pdf> (accessed 17 July 2017).

⁵⁷⁷ Paragraph 8 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013).

⁵⁷⁸ Paragraph 1 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013).

⁵⁷⁹ Paragraphs 2 and 3 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013); BCBS *Progress in adopting principles for effective risk data aggregation and risk reporting* (June 2018) available at <https://www.bis.org/bcbs/publ/d443.pdf> (accessed 17 July 2017).

and exposures, be accurate, reliable and comprehensively collect risk data promptly and frequently, in risk reporting and ad hoc reporting requests.⁵⁸⁰ Similarly, the risk data reporting principle is fulfilled based on the data's extensiveness, granularity, clarity, and precision, accompanied by frequent periodic reporting and reports distributions.⁵⁸¹

The FSB observed that D-SIBs are encountering challenges in the implementation of the Information Technology (IT) and management information systems principle due to the cost implications and complexities of the technique. Supervisors are enjoined to undertake periodic reviews to assess compliance with these principles,⁵⁸² and thus, supervisory college cooperation is essential.⁵⁸³ Supervisors are ordered to employ appropriate tools and resources to require effective and timely compliance with these principles to enable early remedial steps regarding any identified deficiencies.⁵⁸⁴ For the effective implementation of these principles, the parallel run phase-in periods for G-SIBs and D-SIBs were from January 2013 to 2018.⁵⁸⁵

2.5.4. Stress-testing regime

Stress-testing is a supervisory technique that measures the sufficiency of a bank's capital to absorb losses during a period of stress.⁵⁸⁶ In May 2009, the BCBS released *Principles for sound stress testing practices and supervision* (2009 Stress Testing Principles), providing guidelines on effective stress-testing frameworks.⁵⁸⁷ The 2009

⁵⁸⁰ Paragraph 36 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013).

⁵⁸¹ Paragraphs 52, 53, 54, 55 and 56 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013); Recommendation 5 of the FSB *SIE Report*; FSB, IMF *The financial crisis and information gaps – Report to the G-20 Finance Ministers and Central Bank Governors* (October 2009) available at

<https://www.imf.org/external/np/g20/pdf/102909.pdf> (accessed 22 January 2019).

⁵⁸² Paragraph 12 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013).

⁵⁸³ Paragraph 14 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013); Recommendation 8 of the FSB *SIE Report*.

⁵⁸⁴ Paragraph 78 of the BCBS *Principles for effective risk data aggregation and risk reporting* (January 2013).

⁵⁸⁵ Paragraph 3 of BCBS *Progress in adopting principles for effective risk data aggregation and risk reporting* (June 2018).

⁵⁸⁶ Paragraphs 728, 731, 732, 738(ii), 748, 744 of the *Basel II framework*; Arnold BR *et al* (2012) "systemic risk, Basel III, and global financial stability and regulation" 36 *Journal of Banking & Finance* 3123-3124 states that stress-testing regime seek to adequately replenish a bank's capital during the economic downturn.

⁵⁸⁷ BCBS *Principles for sound stress testing and supervision* (May 2009) available at <https://www.bis.org/publ/bcbs155.pdf> (accessed 22 January 2019).

Stress Testing Principles were published to facilitate an understanding of the implementation of the stress-testing framework for supervisors.⁵⁸⁸ The stress-testing regime was reviewed in the wake of the realisation of supervisors' inability to grasp the stress-testing use and the selection of appropriate stress scenarios.⁵⁸⁹

The BCBS thereafter published *Stress testing principles* (2018 Stress Testing Principles) in October 2018 to enhance the *2009 Stress Testing Principles*.⁵⁹⁰ The *2018 Stress Testing Principles* enumerate guidelines for stress-testing practices underpinning sound risk-management and banking supervision. Primarily, the principles recommend the construction of a stress-testing framework clearly articulating the objectives that will inform the use of the stress test findings.⁵⁹¹ The disclosure of stress test findings is aimed at reinforcing market discipline, assuring confidence in the resilience of the financial system and banking industry, and gaining international perspectives across different jurisdictions.⁵⁹²

In general, stress tests are forward-looking macro-prudential tools designed for early detection and analysis of risks and the assessment of the resilience of the financial system.⁵⁹³ In the supervisory approach for D-SIBs, stress-testing may be utilised to assess the adequacy of capital and the calibration of the additional capital buffers to raise the loss absorbing capacity of D-SIBs.⁵⁹⁴ There are two types of stress tests, namely, "Top-down" and "Bottom-up" stress tests. In the "Top-down" stress test, supervisors perform the stress test using their own models and the data they collected from banks, the so-called "supervisor-run" stress test.⁵⁹⁵ In the "Bottom-up" stress test, banks conduct stress-testing employing their own model with stress scenarios

⁵⁸⁸ *Ibid.*

⁵⁸⁹ *Ibid.*

⁵⁹⁰ BCBS *Stress testing principles* (October 2018) available at <https://www.bis.org/bcbs/publ/d450.pdf> (accessed 22 January 2019).

⁵⁹¹ Paragraph 1 of the BCBS *Stress testing principles* (October 2018).

⁵⁹² Paragraph 9 of the BCBS *Stress testing principles* (October 2018).

⁵⁹³ BCBS *Supervisory and bank stress testing: range of practices* (December 2017) available at <https://www.bis.org/bcbs/publ/d427.pdf> (accessed 22 January 2019); See further, Jerome H *et al* "A macro stress testing framework for assessing systemic risks in the banking sector" European Central Bank Occasional Paper series October 2013 available at <https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp152.pdf> (8 November 2019).

⁵⁹⁴ *Ibid.*

⁵⁹⁵ Paragraph 2.1 of the BCBS *Supervisory and bank stress testing: range of practices* (December 2017) available at <https://www.bis.org/bcbs/publ/d427.pdf> (accessed 22 January 2019).

and guidance that are issued by supervisors, also known as “company-run” stress-testing.⁵⁹⁶

The minimum stress scenarios include the “baseline”, “adverse scenario” and “severely adverse scenario”, and any other scenarios that a bank may select, and they are regularly reviewed to capture emerging financial risks.⁵⁹⁷ The “baseline” stress scenario refers to a set of economic conditions that is projected not to lead to future stressed events.⁵⁹⁸ The “adverse stress” scenario is designed to test banks’ performance with a set of economic conditions that is stronger than the “baseline” scenario while the “severely adverse stress” scenario is more severe than the “adverse” stress scenario.⁵⁹⁹ The description narrative of stress scenarios explains the main stress events to be captured, although the FSB reported that the choice of appropriate scenarios remains a challenge for supervisors.⁶⁰⁰

The stress-testing framework thus incorporates stress-testing methodologies and models that are designed by qualified model developers with the insights gained from risk managers, modelled after the specific objectives for risk capturing.⁶⁰¹ These models are updated regularly for purposes of reliability and consistency, as well as to keep pace with the trends in the financial system, and the stress test results are evaluated to identify areas that need improvements.⁶⁰²

Within the stress-testing framework, different roles are assigned to governance and institutional structures.⁶⁰³ Reportedly, some jurisdictions lack clear delineation of responsibilities relating to stress-testing frameworks while others rely on supervisory guidance.⁶⁰⁴ Part of the reason for the lack of clear institutional structure is linked to

⁵⁹⁶ *Ibid.*

⁵⁹⁷ Paragraph 4 of the BCBS *Stress testing principles* (October 2018).

⁵⁹⁸ Baudino P *et al* “Stress-testing banks – a comparative analysis” FSI Insights on policy implementation (November 2018) available at <https://www.bis.org/fsi/publ/insights12.pdf> (accessed 8 November 2019).

⁵⁹⁹ *Ibid.*

⁶⁰⁰ Subparagraph 2.4.1 of the BCBS *Supervisory and bank stress testing: range of practices* (December 2017).

⁶⁰¹ Paragraph 7 of the BCBS *Stress testing principles* (October 2018).

⁶⁰² Paragraphs 3 and 8 of the BCBS *Stress testing principles* (October 2018).

⁶⁰³ Paragraph 2 of the BCBS *Stress testing principles* (October 2018).

⁶⁰⁴ Subparagraph 2.2.2 of the BCBS *Supervisory and bank stress testing: range of practices* (December 2017).

the difficulty of the implementation process of the stress-testing framework, given its technical complexities.⁶⁰⁵

2.5.5 Supervisory cooperation and coordination

The supervisory college and cooperation-approach is paramount to the cross-border supervision of D-SIBs.⁶⁰⁶ As indicated by the FSB, the host and the home supervisory authorities may discuss the different supervisory approaches for enhanced risk assessments and forward-looking recovery and resolution planning and their impact on the D-SIB buffers and TLAC.⁶⁰⁷ Supervisory cooperation is intended to derive balanced outcomes accommodating these various jurisdictional supervisory approaches as well as to avoid overlap and duplication of supervisory activities.⁶⁰⁸

2.6 Conclusion

The *Basel G-SIB framework* is fundamental to the assessment of the systemic importance of banks on a global scale using the indicator-based measurement approach as complemented by supervisory judgment. The indicator-based measurement approach correlates the systemic importance of banks over the categories of size; interconnectedness; substitutability; complexity and cross-jurisdictional activity, which are assigned one or more indicators and 20 per cent equal risk weights. A bucketing approach ranking G-SIBs according to their systemic scores is used to allocate the applicable G-SIB surcharges to individual G-SIBs.

Overall, the indicator-based measurement approach presumes that size is not sufficient to adequately capture systemic importance for all banks. Accordingly, the indicator-based measurement approach incorporates the categories of interconnectedness; substitutability; and complexity to reflect other risk dimensions that elevate the systemic profile of a bank. Notably, the indicator-based measurement

⁶⁰⁵ Paragraph 5 of the BCBS *Stress testing principles*; Subparagraph 2.2.3 of the BCBS *Supervisory and bank stress testing: range of practices* (December 2017).

⁶⁰⁶ Recommendation 8 of the *FSB SIE Report*; BCBS *Progress report on the implementation of principles for effective supervisory colleges* (December 2017) available at <https://www.bis.org/bcbs/publ/d430.pdf> (accessed 22 January 2019).

⁶⁰⁷ FSB *Thematic review on supervisory frameworks and approaches for SIBs Peer Review Report* (May 2015) available at <http://www.fsb.org/wp-content/uploads/Thematic-Review-on-Supervisory-Approaches-to-SIBs.pdf> (accessed 22 January 2019).

⁶⁰⁸ *Ibid.*

approach is ideal for measuring systemic importance of sizeable and outsized banks that are eligible for identification due to exceeding a systemic score threshold of 130 basis points. Based on its quantitative indicators, it is preferable as a simple, transparent and comprehensive methodology. However, it is subjective to the extent that the indicators and risk weights that are used, are discretionary.

On the other hand, the BCBS notes that there is no single methodology that can perfectly capture systemic importance across all banks given that the nature of the risks they pose will vary in line with their structural differences and business models. Hence, supervisory judgment is used to identify banks that are deemed to be systemically important based on indicators that do not perfectly feature under the indicator-based measurement approach as well as other qualitative information that may not be capable of being quantified in the form of an indicator. Supervisory judgment is considered ideal because of its flexibility to accommodate national specificities. Nonetheless, as pointed out in this Chapter, concerns have been raised regarding the transparency of supervisory overlay in proving the systemic importance of a bank.

Given that the *Basel D-SIB framework* is modelled on the *Basel G-SIB framework* in order to apply to a domestic financial system, it employs similar categories as those employed by the *Basel G-SIB framework* to establish the systemic importance of a bank, excluding the category of cross-jurisdictional activity. However, a bank's cross-jurisdictional activity may be relevant to evaluate the systemic relevance of a bank on a domestic economy to capture the global systemic footprint of an internationally active bank. Further, in contrast to the rules-based approach of the *Basel G-SIB framework*, the *Basel D-SIB framework* adopts principles that are designed to permit criteria that accommodate specificities of different jurisdictions for the identification of banks as D-SIBs and does not necessarily employ the mandatory scoring system with fixed risk weights, as is done by the *Basel G-SIB framework*.

The legal consequence of the identification of D-SIBs is the application of stringent prudential standards and administering of an enhanced supervisory framework. The D-SIB buffer is the primary prudential tool that is designed to enhance the resilience of D-SIBs during financial market stress in order to reduce their probability of failure.

Further, the *Basel III framework* contains a wide range of other prudential tools that generally apply to banks, including D-SIBs to address soundness and safety concerns and financial stability risks. These include: the CCvB; the CCyB; the LCR; the NSFR; the supplementary leverage ratio; and the large exposure limit framework. In addition, the enhanced supervisory regime for D-SIBs, which is recommended in the *FSB SIE Report* and modelled after the *BCPs*, include: enhanced risk assessments; risk data aggregation and risk data reporting; and a stress-testing regime.

Besides the BCBS prudential standards, the FSB has also formulated recovery and resolution planning regimes (incorporated in the *FSB Key Attributes*) as stringent prudential requirements for D-SIBs designed to address the systemic impact of a failing bank.

In general, the regulatory and supervisory measures recommended by the *FSB SIFI framework* as implemented in the *Basel D-SIB framework* through the identification of D-SIBs and the imposition of the D-SIB buffer, as well as other stringent prudential requirements, are well recognised measures in pursuit of the financial stability objective that is a main priority for bank regulators. That notwithstanding, the effectiveness of the *Basel D-SIB framework* should be assessed in terms of its ability to combat systemic risk and address the moral hazard issue pertaining to D-SIBs for purposes of attaining financial stability. Owing to its recent implementation, coupled with the scarcity of data, the effectiveness of the *Basel D-SIB framework* is yet to be proven. Most fundamentally, the effectiveness of the *Basel D-SIB framework* can only be truly tested and proven in the existence of financial crises, and they have not yet occurred since its implementation following the GFC. However, in the midst of the Covid-19 global pandemic,⁶⁰⁹ albeit that it is not a financial crisis itself but definitely occasioned financial crisis-effects, regulators provided some relief regarding some of

⁶⁰⁹ The World Health Organisation first detected cases of Covid-19 in China and subsequently declared Covid-19 health crisis as a global pandemic. For this, see WHO Covid-19 – China available at <https://www.who.int/emergencies/disease-outbreak-news/item/2020-DON229> (accessed 30 November 2022). The Covid Health Crisis caused lockdowns in various countries that heavily compromised economic growth across the globe.

the prudential requirements to enable banks to continue credit intermediation and perform due obligations, as indicated in Chapters Three,⁶¹⁰ Four⁶¹¹ and Five.⁶¹²

⁶¹⁰ See paragraph 3.8, subparagraph 3.8.3, of Chapter Three.

⁶¹¹ See subparagraph 4.5.1.5 of Chapter Four.

⁶¹² See paragraph 5.6.1, subparagraphs 5.6.1.1, 5.6.1.2 and 5.6.1.4 of Chapter Five; See also paragraph 5.6.3 of Chapter Five.

CHAPTER THREE

THE LEGAL FRAMEWORK FOR IDENTIFICATION AND REGULATION OF SYSTEMICALLY IMPORTANT BANKS (SIBs) IN THE UNITED STATES

3.1 Introduction

This chapter provides an overview of the identification and regulation of SIFI-banks in the US. Notably, the US banking sector includes G-SIBs as well as D-SIBs. The core of this chapter analyses section 65 of *the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010* (hereinafter the Dodd-Frank Act), as subsequently amended by section 401 of *the Economic Growth, Regulatory Relief, and Consumer Protection Act of 2018* (hereinafter the EGRRCPA), that deals with the implementation of the stringent prudential regulatory and supervisory framework for US bank holding companies (US BHCs) and foreign banking organisations (FBOs) that operate in the US. These legislative measures aim to safeguard the US financial system in alignment with the G20's post-GFC reforms that pursue an overall financial stability objective.⁶¹³ It should be noted that the discussion in this chapter will focus on the stringent prudential regime for US BHCs.

In order to contextualise the discussion in this chapter, an overview is provided of the regulatory and supervisory architecture of the US financial system, focusing specifically on the regulation of the US dual banking system as background to the operational and institutional framework for US BHCs that are subject to the stringent prudential regulatory and supervisory regime that has been introduced post-GFC. Subsequently an outline is provided of the macro-prudential regulation of the US financial system aimed at prevention and mitigation of systemic risk as it impacts upon the stringent prudential regulation and enhanced supervision of US BHCs given their systemic importance.

⁶¹³ Section 65 of the Dodd-Frank Wall Street Reform and Consumer Protection Act – Pub. L. 111-203 (codified in Title 12 of Chapter 53 of the Code of Laws of the United States – 12 USC 5301), as amended by section 401 of the Economic Growth, Regulatory Relief, and Consumer Protection Act of 2018 – Pub. L. 115-174, incorporates the measures of the BCBS regarding the identification and regulation of systemically important banks, which give effect to the reforms of the FSB on tackling the systemic risk and the moral hazard problem of SIFIs as part of the post-GFC G20 financial stability reforms. See paragraph 1.3 of Chapter One.

This will be followed by an overview of the criteria for the application of stringent prudential standards to US BHCs that was originally established under section 165 of the Dodd-Frank Act. The proposals for amendment of the aforesaid criteria for the application of stringent prudential standards to US BHCs are then interrogated and it is examined how these criteria were subsequently modified under section 401 of the EGRRCPA.

Most pertinently, the revised criteria for determining the applicability of stringent prudential standards for US BHCs as laid down in section 401 of the EGRRCPA are analysed and the tailoring of the applicability criteria of stringent prudential standards for US BHCs in line with the EGRRCPA revised criteria is considered. An outline is provided of the additional stringent prudential standards that may be temporarily imposed on these US BHCs when it becomes necessary to protect financial stability in the US. The legal remedies available to US BHCs for challenging the application of these stringent prudential standards are briefly interrogated and the Chapter is concluded with a summary of salient aspects pertaining to prudential regulation and supervision of US SIFI-banks.

3.2 The legal framework for the regulation of the United States financial system

To many, the US was the poster child for the 2008 GFC and its severe effects on various financial systems across the globe. This jurisdiction, where the Crisis had its epicentre,⁶¹⁴ took on several deep regulatory reforms in response to the GFC and arguably also took the lead internationally in the context of addressing the TBTF-conundrum which, as pointed out in Chapter One, manifested spectacularly in the US during the GFC.⁶¹⁵ In particular, the Dodd-Frank Act, was enacted in 2010 to overhaul the regulation of the US financial system by implementing extensive G20 financial

⁶¹⁴ Paragraph 1.2 of Chapter One highlighted that the origins of the GFC were attributed to the demise of the US subprime mortgage industry following a failure and bankruptcy of Lehman Brothers in September 2008.

⁶¹⁵ TBTF financial institutions in the US were among the key drivers of the GFC owing to the substantial amount of toxic assets that they held in the face of deregulation and consolidation of financial markets. The US Congress subsequently enacted the Economic Stabilisation Act of 2008 in the wake of the GFC to purchase the troubled assets of US TBTF financial institutions in an endeavour to prevent or mitigate the systemic crisis that had the devastating economic repercussions on the US financial system. See paragraph 1.2 of Chapter One.

stability reforms post-GFC.⁶¹⁶ As discussed later, the Dodd-Frank Act was amended in 2018 by the EGRRCPA.⁶¹⁷

The preamble of the Dodd-Frank Act captures its primary objective as follows: “To promote the financial stability of the United States by improving accountability and transparency in the financial system, to end “too big to fail”, to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services, and for other purposes.” Of particular significance for this thesis is the emphasis on financial stability and ending the incidence of financial institutions that become so large, complex and powerful that they can hold governments, finance ministries and central banks at ransom to use taxpayers’ money for bail-outs to avoid the financial meltdown that the collapse of a TBTF-institution may occasion.

To discuss the various reforms undertaken in the context of SIFI-bank regulation in the US in response to, and after the GFC, an understanding of the regulatory framework of the US banking system is critical. The regulatory and supervisory model applied to the US financial system, featuring an extensive combination of functional and institutional approaches,⁶¹⁸ is notoriously complex.⁶¹⁹ The functional approach to financial regulation dedicates a specific regulator for a specific type of financial activity

⁶¹⁶ Hamilton J *et al* – CCH Attorney-Editor Staff (2010) *Dodd-Frank Wall Street Reform and Consumer Protection Act: Law, explanation and analysis* 1; Anand S (2011) *Essentials of Dodd-Frank Act* 7; Wolfson J *et al* (2010) “The Dodd-Frank Wall Street Reform and Consumer Protection Act: A regulatory overhaul for Wall Street and banks” 80 *CPA Journal* 56; Nolle DE (2012) “Global financial system reform: The Dodd-Frank Act and the G20 agenda” 4 *Journal of Financial Economic Policy* 160; Krainer RE (2012) “Regulating Wall Street: The Dodd-Frank Act and the new architecture of global finance, a review” 8 *Journal of Financial Stability* 121; Zhang X (2012) “Dodd-Frank Wall Street Reform and Consumer Protection Act: Law, explanation and analysis” 13 *European Business Organization Law Review* 298; Thompson DB “Beyond Dodd-Frank: Pinning down the octozilla of Too-Big-To-Fail with multiple market instruments” Ethics and Business Law Faculty Publications 2016 available at <https://ir.stthomas.edu/cgi/viewcontent.cgi?article=1061&context=ocbeblpub> (accessed 2 September 2017); Weaver PM (2016) 5th ed *Banking and lending practice* 2.

⁶¹⁷ See paragraph 4.6.

⁶¹⁸ Llewellyn DT “Institutional structure of financial regulation and supervision: The basic issues” presented at a World Bank Seminar Washington DC, June 6th and 7th, 2006 available at <http://web.worldbank.org/archive/website01049/WEB/IMAGES/F2FLEMMI.PDF> (accessed 3 September 2018). Llewellyn’s presentation discusses various approaches to financial regulation, amongst which are functional and institutional approaches.

⁶¹⁹ Group of Thirty The structure of financial supervision – approaches and challenges in a global marketplace 2008 available at <https://www.davispolk.com/files/files/Publication/5ee96bcc-efeb-48a2-959a-d43cd85a10be/Preview/PublicationAttachment/c5c96139-d4cf-4909-9557-dec76b20721f/nazareth.group.thirty.jul12.pdf> (accessed 2 September 2017).

undertaken by a financial institution irrespective of its legal status, whereas a firm's legal status determines its regulator under the institutional approach.⁶²⁰ The result is that the regulatory and supervisory architecture of the US financial system is constituted of a large network of diverse financial regulatory agencies.

The National Bank Act of 1864 (hereinafter the National Bank Act),⁶²¹ introduced the rather unique US dual banking system. It established Federally chartered banks, referred to as national banks,⁶²² which include Federal branches or agencies of foreign banks that are supervised by the Office of the Comptroller of the Currency (OCC) as discussed in more detail hereinafter. Further, as the US is a federal republic comprising of 50 states, the US dual banking system is also composed of State-chartered banks,⁶²³ known as state banks, whose supervision is jointly assigned to a "State bank supervisor"⁶²⁴ and the "relevant Federal banking agency", as defined hereinafter, depending on a bank's membership status.

The OCC, the Board of the Federal Reserve System (Federal Reserve), and the Federal Deposit Insurance Corporation (FDIC), are collectively referred to in section 3(q) of *the Federal Deposit Insurance Act of 1950* (hereinafter the Federal Deposit Insurance Act),⁶²⁵ as the "appropriate Federal banking agencies" in the US dual banking system.⁶²⁶ Notably, this provision was subsequently amended by section

⁶²⁰ Schmulow AD "Approaches to financial regulation: An international comparative survey" Centre for International Finance and Regulation (CIFR) Research Working Paper Series (January 2015) available at

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2556545 (accessed 3 September 2018). Schmulow notes that the functional approach pays no regard to the legal entity that is being regulated but focuses on the type of transactions under regulation. For a further discussion on the institutional approach, see Schmulow AD (2015) "The four methods of financial system regulation: An international comparative survey" 26 *Journal of Banking and Finance Law Practice* 151 at 152.

⁶²¹ The National Bank Act of 1864 – 12 USC 38.

⁶²² *Ibid.* See also, Pollard AM *et al* (1988) *Banking Law in the United States* 44-45.

⁶²³ 12 USC § 1813(a)(1)(2) defines a "State bank" as any bank engaged in the business of receiving deposits which is incorporated under the laws of any State.

⁶²⁴ Section 3(r) of the Federal Deposit Insurance Act defines a "State bank supervisor" as any officer, agency, or other entity of any State which has the primary regulatory authority over State banks or State savings associations in such a State.

⁶²⁵ The Federal Deposit Insurance Act of 1950 – Pub. L. 81-797.

⁶²⁶ Section 2(2) of the Dodd-Frank Act states that the definition of "Federal banking agencies" is consistent with that of section 3(q) of the Federal Deposit Insurance Act. Section 2(10) of the Dodd-Frank Act stipulates that the term "Federal banking agency" means, individually, the OCC, the Federal Reserve and the FDIC while "Federal banking agencies" is a collective term for the OCC, the Federal Reserve and the FDIC. Section 312(b) of the Dodd-Frank Act transferred the powers and duties of the Office of the Thrift Supervision (OTS) relating to the supervision of Federal and State savings

312(c) of the Dodd Frank Act which refers to the “appropriate Federal banking agencies” in Title III of the Dodd-Frank Act called *the Enhancing Financial Institution Safety and Soundness Act of 2010*.

Section 324 of the National Bank Act, as amended by section 314 of the Dodd-Frank Act, established the OCC within the US Department of the Treasury (US Treasury)⁶²⁷ and charged it with the supervision of national banks, Federal branches or agencies of foreign banks and Federal savings associations.⁶²⁸

The Federal Reserve was created by *the Federal Reserve Act of 1913* (hereinafter the Federal Reserve Act)⁶²⁹ and constitutes the Federal Reserve System of US Federal Reserve banks.⁶³⁰ The Federal Reserve is responsible for the supervision of State banks that joined the Federal Reserve System (State member banks),⁶³¹ branches or agencies of foreign banks, any foreign bank which does not operate an insured

associations and savings and loan holding companies (SLHCs) and their subsidiaries to the OCC, the Federal Reserve and the FDIC.

⁶²⁷ 12 USC § 1(a) states that the OCC is “charged with ensuring the safety and soundness of, and compliance with laws and regulations, fair access to financial institution, and fair treatment of customers, the institutions and other persons subject to its jurisdiction.”

⁶²⁸ Section 3(q) of the Federal Deposit Insurance Act, as amended by section 312(c)(1)(A), (B) and (C) of the Dodd-Frank Act. 12 USC § 1(b) establishes the Comptroller of the Currency as the chief officer of the OCC. 12 USC § 21 sets out the requirements pertaining to the formation of national banks. Section 312(b)(B) of the Dodd-Frank Act transferred the powers and duties of the OTS relating to the supervision of the savings associations to the OCC.

⁶²⁹ The Federal Reserve Act of 1913 – Pub. L. 63-43. 12 USC § 241 stipulates that the Federal Reserve shall be composed of seven members that are appointed by the President with the advice and consent of the Senate. It further provides that not more than one member of the Federal Reserve shall be selected from any one Federal Reserve district, as further explained below.

⁶³⁰ 12 USC § 222 states that the US shall be divided into not less than eight nor more than twelve Federal Reserve districts, which shall be re-adjusted and new districts may be created from time to time by the Federal Reserve and such districts shall not exceed twelve in all. The Federal Reserve banks are twelve in total, each located in each Federal Reserve district, and they constitute the US Federal Reserve System, which is the US central banking system. For the structure of the Federal Reserve System, refer to a publication called “Purpose: Overview of the Federal Reserve System” available at https://www.federalreserve.gov/aboutthefed/files/pf_1.pdf (accessed 6 September 2017). This publication specifies that the Federal Reserve System comprises three entities namely, the Board of Governors, the Federal Reserve Banks and the Federal Open Market Committee (FOMC). The Board of Governors is responsible for overseeing the Federal Reserve System. Within the monetary policy of the Federal Reserve System, the Board of Governors is responsible for the discount rate and reserve requirements. The FOMC oversees the open market operations. See also, Federal Open Market Committee available at

<https://www.federalreserve.gov/monetarypolicy/fomc.htm> (accessed 30 June 2020); See further, Board of Governors of the Federal Reserve System 103rd Annual Report 2016 available at <https://www.federalreserve.gov/publications/files/2016-annual-report.pdf> (accessed 6 September 2017).

⁶³¹ 12 USC § 1813(d) defines a “State member bank” as any State bank that is a member of the Federal Reserve System.

branch, BHCs and subsidiaries of BHCs (other than depository institutions) as well as savings and loan holding companies (SLHCs) and their subsidiaries (other than depository institutions).⁶³² FBOs are authorised to do business in the US by *the International Banking Act of 1978* (hereinafter International Banking Act), and they operate in the US through branches or agencies, as well as by the establishment of subsidiaries.⁶³³

In particular the Federal Reserve is tasked with the consolidated supervision⁶³⁴ of BHCs and SLHCs pursuant to *the Bank Holding Company Act of 1956* (hereinafter the Bank Holding Company Act).⁶³⁵ A “bank holding company” is defined as any company that has control over banks and non-bank subsidiaries.⁶³⁶ The Federal Reserve’s consolidated supervision covers “functionally regulated subsidiaries” within a bank holding company structure.⁶³⁷ “Functionally regulated subsidiaries” are entities that are involved in securities, investment, and derivatives activities, which entities form part of a BHC as supervised by the Federal Reserve and whose primary financial regulatory agencies are the Securities and Exchange Commission (SEC), and the Commodities Futures Trading Commission (CFTC) including insurance subsidiaries

⁶³² Section 312(A), (B), (C), (F) and (G) of the Dodd-Frank Act; 12 USC § 321 lays down the requirements that a State bank must fulfil in support of the application for the Federal Reserve System membership. See further, Function: Supervising and regulating financial institutions and activities available at

https://www.federalreserve.gov/aboutthefed/files/pf_5.pdf (accessed 6 September 2017); Wall LD (2017) “Recent changes in the US regulation of large foreign banking organizations” 25 *Journal of Financial Regulation and Compliance* 318 at 319.

⁶³³ The International Banking Act of 1978 – Pub. L. 95-36. The operations of branches or agencies of foreign banks are authorised by the Federal Reserve and the relevant State bank supervisor and are subject to the same regulation and supervision as State member banks. The subsidiaries of foreign banks are Federally chartered or State-chartered with the approval of the Federal Reserve and the relevant State bank supervisor, and they are incorporated under the US laws and are similarly subject to the same supervision as domestically owned banks.

⁶³⁴ According to Principle 12 of the *Basel Core Principles for Effective Banking Supervision*, consolidated supervision means the groupwide application of prudential standards to all the entities of the banking group. The Core Principles for Effective Banking Supervision are overviewed in paragraph 2.5 of Chapter Two.

⁶³⁵ The Bank Holding Company Act of 1956 – Pub. L. 84-511.

⁶³⁶ Section 2 of the Bank Holding Company of 1956; 12 USC § 1841 (a)(1); 12 USC § 1841 (a)(2) provides that “control” relates to direct or indirect ownership, the power to vote 25 per cent or more of the stock of a bank or company, the election of majority shareholders, or the exercise of influence over the policies of a BHC. 12 USC § 1841(d) defines a subsidiary of a BHC as any company whose voting shares that exceed 25 per cent is directly or indirectly controlled by that BHC, or the election of majority of a company’s directors is controlled by that BHC or a BHC has the power to exercise a controlling influence over the management of policies of such a company. See further, Taylor JL *et al* (2017) “Bank holding company regulation in Kenya, Nigeria, and South Africa: A comparative inventory and a call for Pan-African regulation” 19 *Journal of Banking Regulation* 175 at 197 and 199.

⁶³⁷ Section 5 of the Bank Holding Company Act, as amended by section 604(c) of the Dodd-Frank Act.

that are subject to the supervision of a State insurance regulator, as discussed below.⁶³⁸

In its consolidated supervision of BHCs, the Federal Reserve, to the extent possible, uses reports and other supervisory information that BHCs or subsidiaries of BHCs submit to primary Federal or State regulatory agencies; externally audited financial statements of BHCs or those of subsidiaries of BHCs; information that is available from Federal and State regulatory agencies and publicly reported information.⁶³⁹ The Federal Reserve also has an extensive supervisory and regulatory toolkit and may, *inter alia*, conduct examinations of BHCs and each of their subsidiaries regarding the nature of their operations, the financial, operational and other risks within a BHC that may pose a threat to their safety and soundness and ultimately, financial stability risks.⁶⁴⁰

The FDIC, being the other Federal banking agency that was established by the *Banking Act of 1933* (also known as the *Glass Steagall Act*)⁶⁴¹ is responsible for the supervision of State banks that are not members of the Federal Reserve System (State non-member insured banks), foreign banks owning insured branches that are covered by the US deposit insurance system, and State savings associations.⁶⁴²

⁶³⁸ 12 USC § 1844(c)(5). In terms of section 2(12) of the Dodd-Frank Act, a “primary financial regulatory agency” means the appropriate Federal banking agency, the SEC, the CFTC, the State insurance authority of the State in which an insurance company is domiciled, and the Federal Housing Finance Agency (FHFA), which is discussed later under this section.

⁶³⁹ Section 5 of the Bank Holding Company Act, as amended by section 604(a)(2)(B) of the Dodd-Frank Act.

⁶⁴⁰ Section 5(c)(2) of the Bank Holding Company, as amended by section 604(b)(A) of the Dodd-Frank Act. In terms of section 604(b)(B) thereof, the Federal Reserve may rely on the examination reports of other Federal or State regulatory agencies relating to BHCs or their subsidiaries to reduce examination burden. Section 604(b)(C) (i) of the Dodd-Frank Act requires the Federal Reserve to provide reasonable notice to, and consult with the OCC, the FDIC, the SEC, the CFTC, or the relevant State regulatory agency for a subsidiary that is a depository institution or a functionally regulated subsidiary of a BHC before commencing an examination of the affected subsidiary. Section 604(b)(C)(ii) thereof states that the Federal Reserve, shall to the fullest extent possible, avoid duplication of examination activities, reporting requirements, and requests for information.

⁶⁴¹ The Glass Steagall Act – Pub. L. 73-66.

⁶⁴² Section 312 (c) (2) (A), (B) and (C) of the Dodd-Frank Act. In terms of section 3(h) of the Federal Deposit Insurance Act, a foreign bank having an insured branch means a bank whose deposits are insured with the FDIC in terms of the Federal Deposit Insurance Act. Section 2(18) of the Dodd-Frank Act provides that the definition of an “insured branch” is consistent with the definition of an “insured bank” including a foreign bank having an insured branch as per section 3(h) of the Federal Deposit Insurance Act.

Important to note is that, the FDIC is the institution responsible for administering the US explicit deposit insurance framework on a Federal level.⁶⁴³ It is governed in terms of the Federal Deposit Insurance Act, (as subsequently amended by Title II of the Dodd-Frank Act, under the heading, *Orderly Liquidation Authority*). Notably, section 335 of the Dodd-Frank Act increased the “standard maximum deposit insurance amount” from 100 000 US dollar (USD)⁶⁴⁴ to 250 000 USD per depositor, per insured bank, for each account ownership category.⁶⁴⁵ The FDIC is also designated by the Orderly Liquidation Authority Title of the Dodd-Frank Act as the “receiver” of failing financial institutions that have been placed in resolution for purposes of facilitating their smooth and orderly resolution.⁶⁴⁶ In this regard, it has to mitigate systemic risk⁶⁴⁷ and moral hazard⁶⁴⁸ and impose the losses incurred by such financial institutions on their shareholders and creditors through resolution measures such as bail-in instruments.⁶⁴⁹ Notably, section 214 of the Dodd-Frank Act prohibits the bail-out of US financial companies that are put into receivership.⁶⁵⁰

Besides the Federal banking agencies, there are other Federal primary financial regulatory agencies. The SEC regulates the securities markets.⁶⁵¹ The CFTC

⁶⁴³ 12 USC § 1811(a).

⁶⁴⁴ Section 11(a)(1)(E) of the Federal Deposit Insurance Act states that the term “standard maximum deposit insurance amount” means 250 000 USD as stipulated in the Dodd-Frank Act.

⁶⁴⁵ The FDIC insures deposits of up to 250 000 USD, which is the standard maximum deposit insurance amount, that is allocated in the following account ownership categories; single accounts, joint accounts, certain retirement accounts, recoverable trust accounts, corporation, partnership, and unincorporated association accounts, irrevocable accounts, employee benefit plan accounts, and government accounts. Refer to FDIC Deposit insurance available at <https://www.fdic.gov/deposit/index.html> (accessed 6 March 2020).

⁶⁴⁶ Sections 201 and 204 of the Dodd-Frank Act. As a receiver of insolvent financial companies under this Title, the FDIC is enjoined to ensure that these financial companies are rapidly resolved in an orderly manner to prevent their bail-out with taxpayers’ money. As discussed in paragraph 1.7 of Chapter One, resolution regimes that comply with features as set out in the *FSB Key Attributes for Effective Resolution Regimes for Financial Institutions* as international benchmark, are designed to ensure that the failure of a financial institution does not adversely affect a financial system by averting the bail-out conundrum.

⁶⁴⁷ The concept of systemic risk is defined in paragraph 1.7 of Chapter One.

⁶⁴⁸ The definition of bail-out is set out in paragraph 1.4 of Chapter One.

⁶⁴⁹ Bail-in measures are outlined in paragraph 1.7 of Chapter One.

⁶⁵⁰ Section 214 of the Dodd-Frank Act stipulates that financial companies that are placed under receivership shall not be liquidated with public funds, rather, all funds expended during the liquidation process shall be recovered from the disposition of assets of a financial company concerned or such costs shall be imposed on the financial sector through assessments. This provision is consistent with the preamble of the Dodd-Frank Act, which seeks to end the TBTF conundrum in the US and it is consistent with the general objective of the *FSB SIFI framework*, as discussed in paragraph 1.3 of Chapter One.

⁶⁵¹ The Securities Exchange Act of 1934 – 15 USC § 78a. See further, Hazen TL (1985) *The law of securities regulation* 3-4.

oversees the derivatives sector.⁶⁵² The National Credit Union Administration (NCUA) is responsible for regulating credit unions.⁶⁵³ The Federal Housing Finance Agency (FHFA) supervises certain government-sponsored enterprises (GSEs).⁶⁵⁴ These GSEs are the Federal National Mortgage Corporation (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Banks, which are collectively termed “regulated entities”.⁶⁵⁵

Given the non-existence of a Federal supervisor for the insurance sector, the Dodd-Frank Act established the Federal Insurance Office within the US Treasury under Title V in subtitle A thereof (called *the Federal Insurance Office Act of 2010*) to oversee the US insurance industry at the Federal level.⁶⁵⁶ The Bureau of Consumer Financial Protection (CFPB) is another independent Federal financial regulatory agency that was newly created under the Dodd-Frank Act and is tasked with consumer protection and regulation of provision of financial products and services to financial customers by financial institutions.⁶⁵⁷

⁶⁵² The Commodities Exchange Act of 1936 – 7 USC 1.

⁶⁵³ The Federal Credit Union Act of 1934 – 12 USC § 1751.

⁶⁵⁴ The FHFA was established as an independent Federal agency by the Federal Housing Finance Regulatory Reform of 2008 – 12 CFR § 1200.1, which is Division A of the Housing and Economic Recovery Act of 2008 – Pub. L. 110-289.

⁶⁵⁵ 12 CFR § 1200.1.

⁶⁵⁶ Section 502 of the Dodd-Frank Act.

⁶⁵⁷ The CFPB is established in section 1011(a) of the Dodd-Frank Act under Title X, called the Consumer Financial Protection Act of 2010. Following the enactment of the Dodd-Frank Act, the Secretary of the US Treasury designated July 21, 2011 as the date in which seven authorities, namely, the OCC, the Federal Reserve, the FDIC, the NCUA, the OTS, the Federal Trade Commission and the Department of Housing and Urban Development were transferred to the CFPB. For this, see Bureau of Consumer Financial Protection Designated transfer date Federal Register 75 57,252, 57,252 September 20, 2010 (accessed 17 June 2017). See further, Mierzewski M *et al* (2010) “The Dodd-Frank Act establishes the Bureau of Consumer Financial Protection as the primary regulator of consumer financial products and services” 127 *Banking Law Journal* 722; Kirsch L *et al* (2017) *Meltdown: The financial crisis, consumer protection, and the road forward* 10. The rationale for the creation of the CFPB was to address the problems relating to abusive market conduct towards consumers, such as predatory and reckless lending, by financial institutions that experienced unprecedented subprime mortgages home losses amid the turmoil of the GFC. For this, see Kennedy LJ *et al* (2012) “The Consumer Financial Protection Bureau: Financial regulation of the twenty-first century” 97 *Cornell Law Review* 1141. For more information on the activities of the CFPB, see Consumer Financial Protection Bureau available at <https://www.consumerfinance.gov/> (accessed 14 January 2020). Congress has made several attempts to abolish the CFPB, most notably, it proposed to replace the CFPB with a “Consumer Law Enforcement Agency” under the Financial Choice Bill of 2017 available at <https://www.congress.gov/bill/115th-congress/house-bill/10> (accessed 14 January 2020). See further, Labonte M *et al* “The Financial CHOICE Act in the 115th Congress: Selected policy issues” Congressional Research Service (September 2017) available at <https://fas.org/sgp/crs/misc/R44839.pdf> (accessed 14 January 2020).

3.3 The Financial Stability Oversight Council's financial stability mandate

In the context of financial stability in the US post-GFC, the main actor is the Financial Stability Oversight Council (Council), which is established by section 111(a) of the Dodd-Frank Act. The voting members of the Council, collectively termed “member agencies,”⁶⁵⁸ are: the US Treasury Secretary, the Chairman of the Federal Reserve, the Comptroller of the Currency, the Chairperson of the FDIC, the Director of the CFPB, the Commissioner of the SEC, the Chairperson of the CFTC, the Director of the FHFA, the Chairman of the NCUA Board, and one independent Presidential appointee with insurance expertise.⁶⁵⁹ The five non-voting members of the Council that serve in an advisory capacity are: the Director of the Office of Financial Research (OFR), as discussed below, the Director of the Federal Insurance Office, a State Insurance Commissioner, a State Banking Supervisor, and a State Securities Commissioner.⁶⁶⁰

Given its composition comprising of the *ex officio* members of the Federal financial regulatory agencies, as chaired by the US Treasury Secretary and represented by an independent insurance expert, the Council is considered to offer a pragmatic approach as well as a holistic view of systemic risk regulation of the US financial system.⁶⁶¹ The OFR, whose organisational structure comprises the Data Center and the Research and Analysis Center,⁶⁶² operates within the US Treasury to support the Council in its financial stability oversight role.⁶⁶³

Title I of the Dodd-Frank Act (cited as *the Financial Stability Act of 2010*⁶⁶⁴ and hereinafter referred to as *the Financial Stability Title*) captures the financial stability mandate entrusted to the Council. This macro-prudential surveillance function⁶⁶⁵ is expressly and comprehensively set out in section 112 of the Dodd-Frank Act and gives

⁶⁵⁸ Section 102(3) of the Dodd Frank Act states that “member agency” means an agency that is represented by a voting member of the Council.

⁶⁵⁹ Section 111(b) of the Dodd-Frank Act.

⁶⁶⁰ Section 111(b)(2) of the Dodd-Frank Act.

⁶⁶¹ Section 111(b) of the Dodd-Frank Act; See further, Stupak JM “Financial Stability Council (FSOC): Structure and activities” Congressional Research Service Report (February 2018) available at <https://fas.org/sqp/crs/misc/R45052.pdf> (accessed 26 February 2018); Sarlin P (2016) “Macro-prudential oversight, risk communication and visualization” 27 *Journal of Financial Stability* 160.

⁶⁶² Section 154(a) of the Dodd-Frank Act.

⁶⁶³ Section 152(a) of the Dodd-Frank Act establishes the OFR.

⁶⁶⁴ Section 101 of the Dodd-Frank Act.

⁶⁶⁵ The macro-prudential approach to financial system is defined in paragraph 1.4 of Chapter One.

effect to the principal objective of the Act. Section 112 captures the macro-prudential supervisory authority of the Council with three principal purposes that pursue the Council's financial stability objective,⁶⁶⁶ namely:

- (a) to identify risks to financial stability in the US that could arise from material financial distress or failure, or ongoing activities, of large and interconnected bank holding companies or non-bank financial companies, that could arise from the financial services marketplace;
- (b) to promote market discipline, by eliminating expectations on the part of shareholders, creditors, and counterparties of such companies that the Government will shield them from losses in the event of failure;⁶⁶⁷ and
- (c) to respond to emerging threats to the stability of the US financial system.

To conduct the required macro-prudential analysis, the Council collects data from the financial regulatory agencies and financial entities through standardised reporting formats that are prepared by the OFR.⁶⁶⁸ The Council must avail the results of its

⁶⁶⁶ Section 112(a)(1) of the Dodd-Frank Act; See further, Murphy EV *et al* "Financial Stability Oversight Council: A framework to mitigate systemic risk" November 2011 Congressional Research Service Report (November 2011) available at <https://www.llsdc.org/assets/DoddFrankdocs/crs-r42083.pdf> (accessed 6 September 2017); Boston University School of Law (2012) "The Financial Stability Oversight Council" 31 *Review of Banking and Financial Law Journal* 521; Boston University School of Law (2010-2011) "Too-Big-To-Fail and the Financial Stability Oversight Council" 30 *Review of Banking and Financial Law* 73; Tarullo DK (2014) "Macroprudential regulation" 31 *Yale Journal on Regulation* 505; Yellen JL "Financial stability a decade after the onset of the crisis", remarks at "Fostering a dynamic global recovery" symposium Wyoming August 25, 2017 available at <https://www.federalreserve.gov/newsevents/speech/files/yellen20170825a.pdf> (accessed 6 September 2017); Yellen JL, Vice-Chair, Board of the Federal Reserve System, remarks on "Pursuing financial stability at the Federal Reserve" at the Fourteen Annual International Banking Conference, Federal Reserve of Chicago, Illinois, November 11, 2011 available at <https://www.federalreserve.gov/newsevents/speech/files/yellen20111111a.pdf> (accessed 19 August 2016); Fein ML (2010) "Dodd-Frank Consumer Protection and Wall Street Reform Act" available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1357452 (accessed 3 September 2017).

⁶⁶⁷ This duty specifically confirms the regulatory sentiment post-GFC against bail-outs.

⁶⁶⁸ Section 112(a)(2)(A), (B) and (C) of the Dodd-Frank Act; Section 112(2)(d) of the Dodd-Frank Act; FSOC Annual

Report 2017 available at https://home.treasury.gov/system/files/261/FSOC_2017_Annual_Report.pdf (accessed 20 February 2018). See further, Liang N, Director Office of Financial Stability Policy and Research, Board of Governors of the Federal Reserve, a statement "Regarding Financial Stability Oversight Council", before the Subcommittee on Oversight and Investigations of the Committee on Financial Services US House of Representatives Washington DC April 14, 2011 Washington DC available at

<https://www.federalreserve.gov/newsevents/testimony/files/liang20110414a.pdf> (accessed 6 September 2017). Section 116 of the Dodd-Frank Act provides that in the execution of macro-prudential function, the Council utilises the reports that are submitted by financial regulatory agencies and financial entities, publicly reported information or externally audited financial statements, to avoid duplication and reporting burden.

macro-prudential analysis to the financial regulatory agencies,⁶⁶⁹ and submit an annual report on emerging financial system developments to Congress.⁶⁷⁰

The OFR, headed by a Director, is critically instrumental to the macro-prudential surveillance function of the Council.⁶⁷¹ In terms of section 153 of the Dodd-Frank Act, the functions of the OFR include collecting data on behalf of the Council and submitting such data to the Council and member agencies, standardising the types and formats of data, developing tools for risk measurement and monitoring and making the results of its activities available to financial regulatory agencies. The OFR is entitled to request the court to subpoena a financial entity in order to enforce compliance of an order for the furnishing of the requested information to facilitate macro-prudential surveillance function.⁶⁷²

In particular, data collection, validation and maintenance constitute the primary task of the Data Center.⁶⁷³ On the other hand, the duties of the Research and Analysis Center include developing and maintaining metrics and reporting risks to the US financial system, monitoring and reporting on changes to system-wide risks levels and patterns to the Council and Congress, conducting research to support and improve regulation of financial entities and markets, investigating disruption in the US financial system

⁶⁶⁹ Section 153 of the Dodd-Frank Act stipulates that the activities of the Council are funded by the Financial Research Fund. Section 118 of the Dodd-Frank Act states that the Financial Research Fund provides funding for the OFR. Section 122 of the Dodd-Frank Act states that the Comptroller General functioning in the Government Accountability Office (GAO) is empowered to audit the activities of the Council.

⁶⁷⁰ In terms of section 112(a)(N) of the Dodd-Frank Act, the Council must annually report to, and testify before Congress on matters such as the activities of the Council, significant financial market and regulatory developments along with the assessment of those developments on the stability of the financial system and potential emerging financial stability threats. Section 112(c) provides that the Chairperson of the Council shall, after the report to Congress has been submitted, annually appear before the Committee on Financial Services of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate to discuss the activities and objectives of the Council and to address questions arising from the report that has been submitted to Congress.

⁶⁷¹ Section 112(d)(1) of the Dodd-Frank Act requires the Director of the OFR to annually report to, and testify before the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Financial Services of the House of Representatives on the activities of the OFR including the work of the Data Center and the Research and Analysis Center, and the assessment of the OFR, of significant financial market developments and potential emerging financial stability threats. Further, section 122 (e) states that the Director of the OFR may provide additional reports to Congress regarding the US financial stability and notify Congress of such additional reports. See also, OFR Annual Report to Congress 2016 available at <https://www.financialresearch.gov/annual-reports/files/office-of-financial-research-annual-report-2016.pdf> (accessed 6 September 2017).

⁶⁷² Section 153(f) of the Dodd-Frank Act.

⁶⁷³ Section 154(b) of the Dodd-Frank Act.

and making recommendations to the Council based on findings that are made, evaluating and reporting on stress tests of financial entities, conducting studies and providing advice on the impact of policies related to systemic risk and promoting best practices for financial risk-management.⁶⁷⁴

Other than the functions of data aggregation and system-wide risk assessment, the Council identifies gaps in systemic regulation,⁶⁷⁵ facilitates information sharing and coordination among the financial regulatory agencies concerning development of domestic financial sector policy,⁶⁷⁶ monitors domestic and international financial regulatory developments,⁶⁷⁷ and ensures that the supervisory practices of the member agencies reflect the outcomes of discussions of the Council.⁶⁷⁸ It is to be noted that the Council has the authority to designate non-bank financial companies as systemically important and to require supervision of such entities by the Federal Reserve.⁶⁷⁹ The Council is also authorised to identify systemically important financial market utilities and payment, clearing, and settlement activities.⁶⁸⁰

Note should further be taken of section 123 of the Dodd-Frank Act which provides that the Council is responsible for carrying out a study of the effects of size and complexity of financial institutions on capital market efficiency and economic growth that is intended to reduce systemic risk. The Council reports to Congress on the findings of this study every five years.⁶⁸¹

⁶⁷⁴ Section 154 of the Dodd-Frank Act.

⁶⁷⁵ Section 112(a)(2)(G) of the Dodd-Frank Act.

⁶⁷⁶ Section 112(a)(2)(E) of the Dodd-Frank Act.

⁶⁷⁷ Section 112(a)(2)(D) of the Dodd-Frank Act.

⁶⁷⁸ Section 112(a)(2)(F) of the Dodd-Frank Act.

⁶⁷⁹ Section 112(a)(2)(H) of the Dodd-Frank Act, read in conjunction with section 113 thereof. See also, the Department of Treasury Report to the President of the United States pursuant to the Presidential memorandum issued in April 21, 2017, Financial Stability Oversight Council Designations (November 2017) available at

<https://www.treasury.gov/press-center/press-releases/Documents/PM-FSOC-Designations-Memo-11-17.pdf> (accessed 9 December 2017).

⁶⁸⁰ Section 112(a)(2)J of the Dodd-Frank Act.

⁶⁸¹ Section 123(b) of the Dodd-Frank Act. Pursuant to section 123 of the Dodd-Frank Act, the Council conducted the required study and issued the inaugural Report in January 2011. For this, see, Study of the effects of size and complexity of financial institutions on capital market efficiency and economic growth pursuant to section 123 of the Dodd-Frank Act Wall Street Reform and Consumer Protection Act of 2010 – by the Chairperson of the Financial Stability Oversight Council (January 2011) available at

<https://home.treasury.gov/system/files/261/Study%20of%20the%20Effects%20of%20Size%20and%20Complexity%20of%20Financial%20Institutions%20on%20Capital%20Market%20Efficiency%20and%20Economic%20Growth%20-%20January%2C%202011.pdf> (accessed 3 March 2019). This Report

Given its lack of micro-prudential authority, the Council can only make recommendations to the financial regulatory agencies tasked with micro-prudential regulation of financial institutions regarding the application of the prudential toolkit. Section 115 of the Dodd-Frank Act authorises the Council to recommend to the Federal Reserve to apply stringent prudential regulation to BHCs that are subject to section 165 of the Dodd-Frank Act (as amended by section 401 of the EGRRCPA), as discussed in more detail below, as well as to enhance their supervision.⁶⁸²

The Council may also make recommendations to the financial regulatory agencies to apply new or heightened prudential standards and safeguards for financial activities or practices that could create or increase risks of significant liquidity, credit, or other risks spreading among financial institutions.⁶⁸³ These financial regulatory agencies may impose prudential standards recommended by the Council, alternatively they have to explain, in writing, not later than ninety days after the date on which the Council issues the recommendation, the reasons for not following the Council's recommendation.⁶⁸⁴ The Council may further recommend that a financial activity or practice no longer requires the application of heightened prudential standards or safeguards,⁶⁸⁵ in which case the relevant financial regulatory agency must determine whether such standards should remain in effect.⁶⁸⁶

was followed by another study in March 2016 titled Study of the effects of size and complexity of financial institutions on capital market efficiency and economic growth carried out at the direction of the Chairperson of the Financial Stability Oversight Council – issued pursuant to section 123 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (March 2016) available at <https://home.treasury.gov/system/files/261/Study%20of%20the%20Effects%20of%20Size%20and%20Complexity%20of%20Financial%20Institutions%20on%20Capital%20Market%20Efficiency%20and%20Economic%20Growth%20-%20March%202016.pdf> (accessed 3 March 2019). According to the Report of the Council released in March 2016, the ability of large financial institutions to increase in size and complexity has, over the past years, been limited by section 622 of the Dodd-Frank Act prohibiting mergers and acquisitions of large financial institutions, as well as the Dodd-Frank Act's establishment of enhanced capital framework and resolution regimes, as discussed under subparagraphs 3.8 below.

⁶⁸² Section 115 of the Dodd-Frank Act; Section 112(2)(I) of the Dodd-Frank Act lists stringent prudential standards that the Council may recommend the Federal Reserve to apply to these BHCs and these standards are discussed in paragraph 3.8 below.

⁶⁸³ Section 120(a) of the Dodd-Frank Act.

⁶⁸⁴ Section 112(K) of the Dodd-Frank Act, read in conjunction with section 120 thereof.

⁶⁸⁵ Section 120 (e) (1) of the Dodd-Frank Act.

⁶⁸⁶ Section 120(e) (2)(A) of the Dodd-Frank Act provides that if a financial regulatory agency determines that the standards should remain in effect, the financial institution concerned may appeal such a decision. Section 120(e)(2) of the Dodd-Frank Act states that in cases where there are no financial regulatory agencies for activities that are being regulated, Congress must enact legislation pursuant to the FSOC's recommendations for the elevated regulation of risky financial activities posing heightened risks to the US financial system. In terms of section 119 of the Dodd-Frank Act, the Council resolves jurisdictional disputes among the financial regulatory agencies.

Of particular importance for this thesis is further that the Council conducts a macro-prudential function in respect of BHCs that are subject to the Federal Reserve's stringent prudential standards in terms of section 165 of the Dodd-Frank Act (as amended by section 401 of the EGRRCPA) as discussed hereinafter. This duty entails that the Council must determine the financial condition of such BHCs for purposes of monitoring and controlling risks, evaluate potential disruptions to financial stability in the US that may be caused by the activities of such BHCs and monitor their activities with subsidiaries that are deposit-taking institutions.⁶⁸⁷ Accordingly, the Council may require BHCs to submit certified reports, or use existing regulatory reports and publicly available information, in order to determine whether a BHC poses a threat to the US financial system.⁶⁸⁸

In terms of section 121 of the Dodd-Frank Act, the Federal Reserve must assist the Council in the mitigation of risks to financial stability in the US. The Federal Reserve may consequently limit mergers and acquisitions of BHCs that are subject to stringent prudential standards or restrict their financial products or terminate their financial activities or put conditions on their business conduct to preserve the stability of the US financial system.⁶⁸⁹ In the event that such measures are inadequate to mitigate threats to financial stability, the Federal Reserve must require the BHC concerned to divest its assets to unaffiliated financial entities.⁶⁹⁰ Notably, these BHCs must also send written notice to the Federal Reserve of any intention to acquire a non-bank financial company with total consolidated assets of 10 billion USD (that is, major acquisitions) so that the Federal Reserve can determine whether such acquisition constitutes a large exposure that will pose financial stability threats.⁶⁹¹ The Federal Reserve

⁶⁸⁷ Section 116(a) and (b) of the Dodd-Frank Act, as amended by section 401(c)(1)(B) of the EGRRCPA, states that for purposes of the execution of this task, the Council may use certified reports of such BHCs, existing regulatory reports that BHCs or their functionally regulated subsidiaries furnish to other Federal or State financial regulatory agencies, publicly reported information or externally audited financial statements.

⁶⁸⁸ Section 116(a) of the Dodd-Frank Act, as amended by section 401(c)(1)(B) of the EGRRCPA.

⁶⁸⁹ In terms of section 121(a) (1), (2), (3) and (4) of the Dodd-Frank Act, as amended by section 401(c)(1)(C) of the EGRRCPA, the Federal Reserve must limit the ability of BHCs that are subject to stringent prudential standards to merge with, or acquire other companies, restrict such BHCs' ability to offer financial products, or require the BHCs to terminate one or more activities or to impose conditions on the manner in which they conduct their activities.

⁶⁹⁰ Section 121(a)(5) of the Dodd-Frank Act.

⁶⁹¹ Section 163(b) of the Dodd-Frank Act, as amended by section 401(c) (1)(e) of the EGRRCPA; Shahmoon CS (1991) "Federal Reserve authority over bank subsidiaries under the Bank Holding Company Act of 1956" 91 *Columbia Law Review* 965 states that BHCs must have the approval of the Federal Reserve for the acquisition of new banks or bank holding companies.

publishes a Financial Stability Report to complement the Financial Stability Oversight Council's annual Report to Congress regarding the assessment of macro-prudential trends.⁶⁹²

3.4 Section 165 of the Dodd-Frank Act

The primary objective of section 165 of the Dodd-Frank Act is to safeguard financial stability in the US by preventing or mitigating risks to the US financial system arising from material financial distress or failure, or ongoing activities, of large and interconnected financial institutions (SIFIs).⁶⁹³ This provision originally mandated the Federal Reserve to automatically apply “stringent prudential standards” to US BHCs and foreign-based BHCs that maintained minimum total consolidated assets of 50 (fifty) billion USD. The prudential standards that were to be applied to qualifying entities were more stringent than those that are imposed on BHCs and FBOs with a total consolidated asset threshold of less than 50 billion USD which were deemed not to present similar risks to US financial stability as their bigger counterparts.⁶⁹⁴ Notably, the stringent prudential standards envisaged by section 165 apply to BHCs only, hence, banks that do not have a bank holding company are not subject to stringent

⁶⁹² The Federal Reserve's Financial Stability Report was first published in November 2018. For this, See Federal Reserve Financial Stability Report November 2018 available at <https://www.federalreserve.gov/publications/files/financial-stability-report-201811.pdf> (accessed 20 June 2022). This initial issue was followed by subsequent publications released twice a year, in May and November. See, for instance, Federal Reserve Financial Stability Report (May 2019) available at <https://www.federalreserve.gov/publications/files/financial-stability-report-201905.pdf> (accessed 20 June 2022); Federal Reserve Financial Stability Report (November 2019) available at <https://www.federalreserve.gov/publications/files/financial-stability-report-20191115.pdf> (accessed 20 June 2022); Federal Reserve Financial Stability Report (May 2020) available at <https://www.federalreserve.gov/publications/files/financial-stability-report-20200515.pdf> (accessed 20 June 2022). Federal Reserve Financial Stability Report (November 2020) available at <https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf> (accessed 20 June 2022). Federal Reserve Financial Stability Report (May 2021) available at <https://www.federalreserve.gov/publications/files/financial-stability-report-20210506.pdf> (accessed 20 June 2022); Federal Reserve Financial Stability Report (November 2021) available at <https://www.federalreserve.gov/publications/files/financial-stability-report-20211108.pdf> (accessed 20 June 2022); Federal Reserve Financial Stability Report (May 2022) available at <https://www.federalreserve.gov/publications/files/financial-stability-report-20220509.pdf> (accessed 20 June 2022).

⁶⁹³ Section 165(a)(1) of the Dodd-Frank Act. Allen F *et al* (2016) “Enhancing prudential standards in financial regulations” 49 *Journal of Financial Services Research* 133 at 134 observes that macro-prudential regulation is designed to prevent or mitigate systemic risk in order to preserve the stability of a financial system and thus, is key to ex-post GFC reforms incorporated in the Dodd-Frank Act. See further, Homburger RB *et al* (2014) 2nd ed *Banking regulation: Jurisdictional comparisons* 430.

⁶⁹⁴ Section 165(a)(1)(A) of the Dodd-Frank Act.

prudential standards even when they otherwise meet the criteria for the application of such standards.⁶⁹⁵

The Dodd-Frank Act adopts a tailored and tiered approach in terms of which the stringency of prudential standards applicable to BHCs and FBOs is calibrated to increase in proportion to the size, complexity and risk profile of the BHC or FBO concerned, amongst other factors.⁶⁹⁶ The tailoring of these stringent prudential standards was discretionary under section 165 of the Dodd-Frank Act⁶⁹⁷ but the EGRRCPA, as discussed below, subsequently modified the Dodd-Frank Act to make the tailoring of stringent prudential standards mandatory.⁶⁹⁸ In terms of the Dodd-Frank Act, the Federal Reserve may, on its own motion or pursuant to a recommendation by the Council in accordance with section 115, differentiate among US BHCs and FBOs by category, or on an individual basis with reference to their size, complexity, capital

⁶⁹⁵ Labonte M *et al* “Bank systemic risk regulation: The \$50 billion threshold in the Dodd-Frank Act” Congressional Research Service Report (December 2017) available at <https://fas.org/sgp/crs/misc/R45036.pdf> (accessed 20 February 2018). Labonte and Perkins pointed out that there was a certain bank whose assets ranged over 50 billion USD which was without a bank holding structure, therefore, it was not subject to enhanced prudential standards under section 165 of the Dodd-Frank Act. The authors indicated further that Zions Bancorporation, which is a former US BHC which maintained over 50 billion consolidated assets converted to a stand-alone bank and it was found by the Council not to be posing material risks to the US financial system, and hence, it did not become subject to stringent prudential standards after being converted to a stand-alone bank. See further, Fein ML (2010) “Dodd-Frank Act: Implications for bank holding companies and systemically important nonbank financial companies”

available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1657623 (accessed 3 March 2019) mentions that the scope of section 165 of the Dodd-Frank Act extends to BHCs, and such BHCs are already subject to the Federal Reserve’s supervisory authority pursuant to the Bank Holding Company Act, as indicated above in paragraph 3.2.

⁶⁹⁶ 12 USC § 5365(a)(1)(B) provides that when increasing the stringency of stringent prudential standards, the Federal Reserve must take into account differences among BHCs based on the following factors: a number of insured depository institutions, the engagement in nonfinancial activities, and any other risk-related factors. In terms of section 113(b)(3) of the Dodd-Frank Act, other factors that the Federal Reserve must take into consideration when exercising the authority to establish stringent prudential standards include the extent of the leverage of a BHC, the extent and nature of off-balance sheet exposures of a BHC, the extent and nature of the transactions and relationships of a BHC with other significant non-bank financial companies and significant BHCs, the importance of a BHC as a source of credit for US households, businesses, and State and local government as well as a source of liquidity for US financial system, the assets under management of a BHC, the nature, size, scale, scope, concentration, interconnectedness and mix of the activities of a BHC. Section 115 of the Dodd-Frank Act further states that the reliance of a BHC on short-term wholesale funding must also be taken into account when establishing stringent prudential standards for such a BHC. See further, Tarullo DK, Member of Board of Governors of the Federal Reserve System, a statement on “Application of enhanced prudential standards to bank holding companies”, before the Committee on Banking, Housing, and Urban Affairs US Senate March 19, 2015 Washington D.C. available at <https://www.federalreserve.gov/newsevents/testimony/files/tarullo20150319a.pdf> (accessed 29 August 2017).

⁶⁹⁷ Section 165(a)(2)(A) of the Dodd-Frank Act.

⁶⁹⁸ Section 401(a)(1)(B)(ii) of the EGRRCPA.

structure, riskiness, financial activities (including the financial activities of their subsidiaries) and any other risk-related factors that the Federal Reserve deems appropriate.⁶⁹⁹

*The Administrative Procedure Act*⁷⁰⁰ lays down a rulemaking procedure authorising US agencies to issue rules to prescribe and implement applicable laws.⁷⁰¹ Consistent with the Administrative Procedure Act, the Federal Reserve publishes proposed rules incorporating stringent prudential standards in the Federal Register and adopts such rules as “Final Rules” after incorporating public comment in order to implement section 165 of the Dodd-Frank Act, as amended by section 401 of the EGRRCPA discussed below.⁷⁰² The Federal Reserve codifies these “Final Rules” through regulations contained in the Code of Federal Regulations.

As indicated above, when prescribing stringent prudential standards, the Federal Reserve must act either on its own motion, or pursuant to the recommendations of the Council in accordance with section 115 of the Dodd-Frank Act.⁷⁰³ This means that although the Council itself does not apply these stringent prudential standards to the relevant US BHCs, its recommendations to the Federal Reserve for the application of such standards play a crucial role in contributing to the overall systemic protection of the US financial system. The Dodd-Frank Act requires the Federal Reserve to submit an annual Report to Congress regarding the implementation of these stringent

⁶⁹⁹ 12 USC § 5365(a)(2)(A).

⁷⁰⁰ The Administrative Procedure Act of 1946 – Pub. L. 79-404.

⁷⁰¹ 5 USC §553; Section 2 of the Administrative Procedure Act defines an agency as an authority of the US Government other than Congress, the courts, or the governments of the possessions, Territories, or the District of Columbia. It defines a rule as any agency statement of general application designed to implement, interpret, or prescribe law or policy while rulemaking refers to a process for the formulation, amendment or repeal of a rule. 5 USC § 553(b) states that general notice of proposed rulemaking shall be published in the Federal Register stating the reference to the legal authority under which the rule is proposed. USC§ 553(c) allows interested persons to participate in the rulemaking process by way of written data, views, arguments with or without an opportunity for oral presentation. Thereafter, a final rule shall be adopted incorporating a concise statement of the basis and purpose of the adopted rule. Interested parties may petition for the issuance, amendment, or repeal of a rule pursuant to section 4(d) of the Administrative Procedure Act.

⁷⁰² See paragraph 3.6 below.

⁷⁰³ Section 165(a)(1) of the Dodd-Frank Act; Section 115 of the Dodd-Frank Act stipulates that the Council may make recommendations to the Federal Reserve to apply stringent prudential standards to US BHCs and FBOs that are subject to the Federal Reserve’s supervision under section 165 of the Dodd-Frank Act. Section 165(a)(4) thereof requires the Federal Reserve to consult the primary financial regulatory agency of a functionally regulated subsidiary before imposing the stringent prudential standards with the significant impact on the affected subsidiary.

prudential standards, and their effectiveness in safeguarding the US financial system.⁷⁰⁴

Based on the asset-size threshold that was initially prescribed in section 165 of the Dodd-Frank Act, the Federal Reserve thus applied stringent prudential standards to US BHCs and FBOs with total consolidated assets of 50 billion USD or more. Further, the Federal Reserve tailored the application of the stringent prudential standards to a category called “advanced approaches bank holding companies” (advanced approaches BHCs). Consistent with the BCBS’s definition of advanced approaches banking organisations,⁷⁰⁵ US BHCs that are classified as advanced approaches BHCs are large and internationally active bank holding companies that maintain a minimum of 250 billion USD in total consolidated assets, or 10 billion USD or more, in on-balance sheet foreign exposure.⁷⁰⁶ The third category that was subject to the stringent prudential standards imposed by section 165 of the Dodd-Frank Act, (and which remains subject to the existing Dodd-Frank Act stringent prudential regime even under the EGRRCPA revised asset-framework as discussed below), comprises US BHCs that are identified as G-SIBs in accordance with the Federal Reserve’s G-SIB framework discussed in more detail below.⁷⁰⁷

3.5 Changing the asset-size threshold in section 165 of the Dodd-Frank Act

The asset-size threshold of 50 billion USD in total consolidated assets as initially set by section 165 of the Dodd-Frank Act, however, attracted significant criticism and there was increasing concern regarding the insignificant systemic implications of these “relatively small” US BHCs and FBOs.⁷⁰⁸ The consensus was that the application of

⁷⁰⁴ Section 165(b)(5) of the Dodd-Frank Act.

⁷⁰⁵ Under paragraphs 45 and 655 of the *Basel II framework*, “advanced approaches banks” are defined as large and internationally active banking organisations that use internal-ratings approach to calculate risk-based capital requirements for credit risk and advanced measurement approaches to calculate risk-based capital requirements for operational risk. See further, paragraphs 211 through 213 of the *Basel II framework*.

⁷⁰⁶ Board of Governors of the Federal Reserve System – Basel regulatory framework (February 2017) available at

<https://www.federalreserve.gov/supervisionreg/basel/advanced-approaches-capital-framework-implementation.htm> (accessed 29 August 20117). See subparagraph 3.7.2.1 below for the definition of an on-balance sheet foreign exposure.

⁷⁰⁷ See paragraph 3.7.1 below.

⁷⁰⁸ “Measuring the systemic importance of U.S. bank holding companies” Hearing before the Committee on Banking, Housing and Urban Affairs – one hundred fourteenth Congress first session on “Examining the appropriate criteria that the Federal Reserve and other regulators could use to determine whether an institution poses a systemic risk to the financial system” July 23, 2015 available at

stringent prudential standards to US BHCs and FBOs with such a small minimum asset threshold was unwarranted, given that they did not present systemic risks to the US financial system.⁷⁰⁹ In particular, Congress raised the insignificance of the 50 billion USD asset-size threshold under section 165 following a recommendation by the US Treasury Report of June 2017 titled *A financial system that creates economic opportunities – banks and credit unions*.⁷¹⁰ This Report maintained that an increased asset-size threshold would appropriately tailor stringent prudential standards to better reflect the systemic profile of US BHCs and FBOs.⁷¹¹

To contextualise the aforementioned: in the US, banks are unofficially classified into so-called “community banks” and “Wall Street banks”.⁷¹² The proponents of an increase in the asset-size threshold mainly argued that US BHCs and FBOs with a minimum asset-size of 50 billion USD are mostly “community banks” having traditional banking business models, and as such, they do not pose systemic risk.⁷¹³ In contrast to “community banks, the so-called “Wall Street banks” (generally with assets valued at hundreds of billions or trillions USD) comprise the largest and most complex

<http://mitsloan.mit.edu/shared/ods/documents/?DocumentID=4543> (accessed 30 September 2017); Tarullo DK, Member of the Board of Governors of the Federal Reserve, remarks on “Departing Thoughts” at the Woodrow Wilson School, Princeton University, Princeton, New Jersey April 4, 2017 available at

<https://www.federalreserve.gov/newsevents/speech/files/tarullo20170404a.pdf> (30 November 2017).

⁷⁰⁹ “Examining the regulatory regime for regional banks” Hearing before the Committee on Banking, Housing, and Urban Affairs United States Senate – one hundred fourteenth Congress first session on “Examining the impact of the existing regulatory framework on regional banks” March 19, 2015 available at

<https://www.govinfo.gov/content/pkg/CHRG-114shrg94375/pdf/CHRG-114shrg94375.pdf> (accessed 30 November 2017). During this hearing, witnesses included the former US regulators whose testimony greatly supported the introduction of an increased asset-size threshold under section 165 of the Dodd-Frank Act.

⁷¹⁰ U.S. Department of Treasury *A financial system that creates economic opportunities – banks and credit unions* (June 2017) available at

<https://www.cii.org/files/A%20Financial%20System.pdf> (accessed 6 November 2018). See further, Hoskins SM *et al* “Regulatory relief” for banking: Selected legislation in the 114th Congress” Congressional Research Service (November 2016) available at

<https://fas.org/sgp/crs/misc/R44035.pdf> (accessed 3 September 2017).

⁷¹¹ This Report recommended an asset-size higher than 50 billion USD, without specifying the suggested asset-size threshold.

⁷¹² Perkins DW “Tailoring bank regulations: Differences in bank size, activities and capital levels” Congressional Research Service Report (December 2017) available at

<https://fas.org/sgp/crs/misc/R45051.pdf> (accessed 2 March 2018); Quarles RK, the Vice Chairman for supervision of the Board of the Federal Reserve, statement before the Committee on Banking, Housing, and Urban Affairs US Senate October 2, 2018 available at

<https://www.federalreserve.gov/newsevents/testimony/files/quarles20181002a.pdf> (accessed 17 November 2019).

⁷¹³ *Ibid.*

banks.⁷¹⁴ These “Wall Street banks” are banks that could have hundreds or thousands of subsidiaries that substantially engage in risky non-banking activities such as underwriting and trading activities.⁷¹⁵

Reportedly, Barney Frank, the chairman of the US House Committee on Financial Services⁷¹⁶ who introduced the Dodd-Frank Bill, acknowledged that the 50 billion USD asset-size threshold as initially set by section 165 thereof was too minimal to raise systemic concerns.⁷¹⁷ Tarullo, a former member of the Federal Reserve, also contended that imposing stringent prudential standards on US BHCs and FBOs with a minimum asset-size of 50 billion USD does not attain the regulatory objective of eliminating the TBTF problem, given the negligible systemic implications of banks of such low threshold.⁷¹⁸ Barth also testified before the US House Committee on

⁷¹⁴ *Ibid.*

⁷¹⁵ “Examining the regulatory regime for regional banks” Hearing before the Committee on Banking, Housing, and Urban Affairs United States Senate – one hundred fourteenth Congress first session on “Examining the impact of the existing regulatory framework on regional banks” March 19, 2015 available at <https://www.govinfo.gov/content/pkg/CHRG-114shrg94375/pdf/CHRG-114shrg94375.pdf> (accessed 30 November 2017).

⁷¹⁶ This Committee oversees housing and financial services including banking sector, insurance industry and securities sector. It is responsible for reviewing laws relating to US Department of Housing and Urban Development, the Federal Reserve, the FDIC, GSEs and international development and finance agencies such as the World Bank and the IMF. Further, the Committee is responsible for enforcing housing and consumer protection laws. See U.S. House Committee on Financial Services website available at

<https://financialservices.house.gov/about/> (accessed 15 January 2020).

⁷¹⁷ Neidig H (2016) “Barney Frank admits ‘mistake’ in Dodd-Frank” The Hill (November 2016) available at <https://thehill.com/policy/finance/banking-financial-institutions/306906-barney-frank-admits-mistake-in-dodd-frank> (accessed 2 September 2017). Anand S (2011:9) states that Barney Frank steered the Dodd-Frank Bill in the White House on 2 December 2009 while Christopher John Dodd, the Chairman of the Senate Banking Committee, introduced a similar draft legislation in the Senate Banking Committee.

⁷¹⁸ Tarullo D, Member of the Board of the Federal Reserve System, on “Rethinking the aim of prudential regulation”, remarks at the Federal Reserve Bank of Chicago, Bank Structure Conference, Chicago, May 8, 2014 available at

<https://www.federalreserve.gov/newsevents/speech/files/tarullo20140508a.pdf>

(accessed 2 September 2017); Tarullo DK, Member of the Board of the Federal Reserve System, remarks on “Regulating systemically important firms”, at the Peter G. Peterson, Institute for International Economics Washington D.C. June 3, 2011 available at

<https://www.federalreserve.gov/newsevents/speech/files/tarullo20110603a.pdf>

(accessed 2 September 2017). See further, “Examining the designation and regulation of bank holding company SIFIs”, Hearing before the Subcommittee of Financial Institutions and Consumer Credit of the Committee of Financial Services U.S. House of Representatives – one hundred fourteenth Congress first session July 8, 2015 available at

<https://www.govinfo.gov/content/pkg/CHRG-114hhr96999/pdf/CHRG-114hhr96999.pdf> (accessed 2 September 2017); Labonte M (2018) “Systemically important or “Too-Big-To-Fail” financial institutions” Congressional Research Service Report available at <https://fas.org/sgp/crs/misc/R42150.pdf> (accessed 2 September 2017); Kupiec PH, Resident Scholar American Enterprise Institute, “Examining the designation and regulation of bank holding company SIFIs”, statement for the United States House

Financial Services in July 2015 that the application of the stringent prudential standards to US BHCs and FBOs with a 50 billion USD minimum asset-size, without the realisation of offsetting benefits such as low funding costs, was problematic.⁷¹⁹

Apart from the criticisms regarding the exact monetary limit that should be attached to the asset-size threshold as trigger for the application of stringent prudential standards, there were also criticisms against using asset-size as a sole indicator of when the application of stringent prudential standards should be triggered. Perkins observes that, although an asset-size threshold is a speedy, simple and transparent criterion for determining the applicability criteria of stringent prudential standards for US BHCs and FBOs, it also correlates with complexity and interconnectedness.⁷²⁰ A pertinent criticism levelled by the OFR against the asset-size threshold in general, was that relying on the size indicator alone as trigger for the application of stringent prudential standards, negates other systemic indicators that comprehensively capture the systemic importance of a bank.⁷²¹

According to Labonte and Perkins, the asset-size threshold as deciding trigger (under section 165 of the Dodd-Frank Act prior to its amendment by section 401 of the EGRRCPA) for the application of stringent prudential standards could potentially produce unintended outcomes due to the inability to determine the precise point at which a bank ceases to become systemically irrelevant.⁷²² They pointed out that a

of Representatives, Committee on Financial Services, Subcommittee on Financial Institutions and Consumer Credit July 8, 2015 available at https://financialservices.house.gov/uploadedfiles/07.08.2015_paul_h._kupiec_testimony.pdf (accessed 2 September 2017).

⁷¹⁹ Barth JR “Examining the designation and regulation of bank holding company SIFs”, statement before Financial Institutions and Consumer Credit Subcommittee on Financial Services U.S. House of Representatives

https://financialservices.house.gov/uploadedfiles/07.08.2015_james_r._barth_testimony.pdf July 8, 2015 available at (accessed 2 September 2017).

⁷²⁰ Perkins DW *et al* “Economic Growth, Regulatory Relief, and Consumer Protection Act (Pub. L. 115-174) and selected policy issues” Congressional Research Service Report (June 2018) available at <https://fas.org/sgp/crs/misc/R45073.pdf> (accessed 5 November 2018). The authors contend that there is a good cause for setting the asset-size threshold low to avoid the risk of labelling banks officially TBTF.

⁷²¹ The OFR Viewpoint, Size alone is not sufficient to identify systemically important banks (October 2017) available at

https://www.financialresearch.gov/viewpoint-papers/files/OFRvp_17-04_Systemically-Important-Banks.pdf (accessed 20 February 2018).

⁷²² Labonte M *et al* “Bank systemic risk regulation: The \$50 billion asset threshold in the Dodd-Frank Act” Congressional Research Service Report (December 2017) available at <https://fas.org/sgp/crs/misc/R45036.pdf> (accessed 20 February 2018).

lower asset-size threshold may capture even non-systemic banks while a higher one may potentially exclude banks that, although “small”, are in fact systemically important. Their view was that the asset-size threshold is likely to generate a *de facto* list of TBTF banks, in stark contrast to the regulatory objective of eliminating the moral hazard linked to TBTF banks.⁷²³ Further, the asset-size threshold may incentivise banks to reduce their asset-size in an attempt to avoid the application of stringent prudential standards.⁷²⁴

3.6 Section 401 of the EGRRCPA

Section 401 of the EGRRCPA, subsequently, amended section 165 of the Dodd-Frank Act with effect from 24 May 2018. It raised the minimum asset-size threshold for automatic application of stringent prudential standards to US BHCs and FBOs to 250 billion USD in consolidated assets.⁷²⁵ The EGRRCPA further grants the Federal Reserve the discretion to impose stringent prudential standards, by order or rule promulgated pursuant to the Administrative Procedure Act,⁷²⁶ on US BHCs and FBOs that maintain a minimum consolidated asset-size threshold of equal to or more than 100 (hundred) billion USD, but less than 250 billion USD.⁷²⁷ The Federal Reserve is required to exercise such discretion if it determines that the application of stringent prudential standards is appropriate to prevent or mitigate risks to financial stability in the US posed by such (smaller) BHCs or FBOs or to promote the safety and soundness of such entities.⁷²⁸

⁷²³ *Ibid.*

⁷²⁴ “Examining the regulatory regime for regional banks” Hearing before the Committee on Banking, Housing, and Urban Affairs United States Senate – one hundred fourteenth Congress first session on “Examining the impact of the existing regulatory framework on regional banks” March 19, 2015 available at

<https://www.govinfo.gov/content/pkg/CHRG-114shrg94375/pdf/CHRG-114shrg94375.pdf> (accessed 30 November 2017).

⁷²⁵ 12 USC § 5365(a)(1); 12 USC § 5365 implements the enhanced prudential standards for US BHCs and non-bank financial companies that are supervised by the Federal Reserve consistent with the EGRRCPA revised asset-size threshold. See further, Board of Governors of the Federal Reserve System Statement regarding the impact of the Economic Growth, Regulatory Relief, and Consumer Protection Act (July 2018) available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20180706b1.pdf> (accessed 10 October 2018).

⁷²⁶ The Administrative Procedure Act of 1946 – Pub. L. 79-404. See paragraph 3.4 above for the Federal Reserve’s rulemaking procedure.

⁷²⁷ 12 USC § 5365(a)(2)(C).

⁷²⁸ 12 USC § 5365(a)(2)(C)(i).

The EGRRCPA revised asset-size threshold came into operation in two stages. During the first phase, at the date of the enactment of the EGRRCPA on 24 May 2018, the stringent prudential standards under section 165 of the Dodd-Frank Act ceased to apply with immediate effect to US BHCs and FBOs with minimum total consolidated assets of 50 billion USD,⁷²⁹ except for the automatic application of the risk-management and risk committee requirements imposed by the EGRRCPA.⁷³⁰ Notably, BHCs that maintained a minimum of 10 billion USD in total consolidated assets were subject to risk committee and risk-management requirements under the Dodd-Frank Act.⁷³¹ The EGRRCPA subsequently raised the 10 billion USD asset-size threshold that was provided for in the Dodd-Frank Act to a 50 billion USD asset-size threshold and this revision effectively subjected BHCs that hold 50 billion USD total consolidated assets to these risk committee and risk-management requirements. However, they were released from the application of the rest of the stringent prudential requirements with immediate effect on the date of the enactment of the EGRRCPA.⁷³²

In the second stage of entry into force of the EGRRCPA, the effective date for the revised asset-size threshold for US BHCs and FBOs with a minimum asset-size range of 250 billion USD was set to be eighteen months after the enactment of the EGRRCPA,⁷³³ namely November 2019.⁷³⁴

3.7 The applicability criteria for categories of stringent prudential standards under the EGRRCPA

In order to implement the revised asset-size threshold introduced by the EGRRCPA, the Federal Reserve issued a Proposed Rule in October 2018, titled *Prudential Standards for Large Bank Holding Companies and Savings and Loan Holding Companies*, which sought to determine the criteria for the application of stringent

⁷²⁹ Section 401(1)(d)(2) of the EGRRCPA.

⁷³⁰ Section 401(a)(4) of the EGRRCPA.

⁷³¹ Section 165(h)(2) of the Dodd-Frank Act required a publicly traded BHC maintaining 10 billion USD in total consolidated assets to establish a risk committee responsible for the oversight of the enterprise-wide risk-management of a BHC.

⁷³² Section 401(a)(4) of the EGRRCPA.

⁷³³ Section 401(d)(1) of the EGRRCPA. Section 401(1)(d)(3) of the EGRRCPA conferred the Federal Reserve with the discretion to exempt US BHCs and FBOs with less than 250 billion USD in total consolidated assets from the enhanced prudential regime before the entry into force of the EGRRCPA revised asset-size threshold. Further, section 401(1)(d)(4) thereof authorised the Federal Reserve to subject these BHCs and FBOs to enhanced prudential standards before the effective date of the EGRRCPA.

⁷³⁴ See paragraph 3.7 below.

prudential standards to US BHCs (but not FBOs).⁷³⁵ Subsequently in April 2019, the Federal Reserve further issued a Proposed Rule entitled *Prudential Standards for Large Foreign Banking Organizations; Revisions to Proposed Prudential Standards for Large Domestic Bank Holding Companies and Savings and Loan Holding Companies*.⁷³⁶ The latter Proposed Rule, which would be broadly consistent with the first mentioned Proposed Rule for domestic US BHCs, similarly sought to determine the criteria for the application of stringent prudential standards to FBOs in accordance with the EGRRCPA revised asset-size threshold.⁷³⁷ In October 2019, the Federal Reserve published a joint Final Rule titled *Prudential Standards for Large Bank Holding Companies, Savings and Loan Holding Companies, and Foreign Banking Organizations (the Stringent Prudential Standards Categories Final Rule)*, which became effective from 31 December 2019.⁷³⁸

The *Stringent Prudential Standards Categories Final Rule* establishes a framework for determining the applicability criteria for four categories of stringent prudential standards to US BHCs and FBOs under the EGRRCPA revised asset-size threshold, namely: Category I, Category II, Category III and Category IV stringent prudential standards.⁷³⁹ As alluded to above,⁷⁴⁰ the discussion hereafter will focus on the identification criteria and the resultant stringent prudential standards for US BHCs

⁷³⁵ Prudential Standards for Large Bank Holding Companies and Savings and Loan Holding Companies (November 2018) available at <https://www.federalreserve.gov/aboutthefed/boardmeetings/files/draft-frb-fr-notice-20181031.pdf> (accessed 5 February 2019).

⁷³⁶ Prudential Standards for Large Foreign Banking Organizations; Revisions to Proposed Prudential Standards for Large Domestic Bank Holding Companies and Savings and Loan Holding Companies (May 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-05-15/pdf/2019-07895.pdf> (accessed 10 October 2019).

⁷³⁷ *Ibid.*

⁷³⁸ Prudential Standards for Large Bank Holding Companies, Savings and Loan Holding Companies, and Foreign Banking Organizations (November 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-11-01/pdf/2019-23662.pdf> (accessed 15 November 2019). The Federal Reserve extended the scope of the Stringent Prudential Standards Categories Final Rule to SLHCs pursuant to section 10(g) of the Home Owners' Loan Act of 1933 – Pub. No. 43-73D authorising the Federal Reserve to issue such regulations and orders including capital regulations to advance the purposes of the Act. Therefore, the Federal Reserve indicated that SLHCs will be subject to stringent prudential standards because they present risks to the US financial system and pose safety and soundness concerns as they engage in credit intermediation and short-term wholesale funding as well as other financial activities that are performed by BHCs. The Federal Reserve further indicated that it will impose prudential standards to SLHCs under Categories II to IV stringent prudential standards (as discussed below) in the same manner as similarly imposed on BHCs. The Federal Reserve further pointed out that SLHCs will not be subject to Category I stringent prudential standards (discussed below) because the definition of US BHCs that are G-SIBs exclude SLHCs.

⁷³⁹ Part I of the Stringent Prudential Standards Categories Final Rule.

⁷⁴⁰ See paragraph 3.1.

only. As pointed out in the discussions hereinafter,⁷⁴¹ except for the G-SIB surcharge, enhanced supplementary leverage ratio and TLAC requirements, the rest of other stringent prudential standards that apply to US G-SIBs are also applied, with necessary modifications, to Categories II, III and IV BHCs.

Category I stringent prudential standards, which are the most stringent and intrusive, apply to US BHCs that are identified as US G-SIBs in accordance with the Federal Reserve's G-SIB framework⁷⁴² (as discussed in more detail below).⁷⁴³ The Final Rule further determines the applicability criteria for Category II, Category III and Category IV stringent prudential standards for US BHCs based on the total consolidated assets of such US BHCs and FBOs as well as size thresholds for the risk indicators of cross-jurisdictional activity, non-bank assets, off-balance sheet exposure, and weighted short-term wholesale funding, which reflect the extent of their risk profile.⁷⁴⁴ Thus, it looks at size of a US BHC both with respect to consolidated assets as well as the size of specific risk indicators, for example the extent of a BHC's cross-jurisdictional exposure.

The Federal Reserve is of the view that applying risk indicators with size thresholds enhances the risk sensitivity of the categories of stringent prudential standards and facilitates transparency and comparability across banking organisations.⁷⁴⁵ This risk

⁷⁴¹ See paragraph 3.8 below.

⁷⁴² Part V of the Stringent Prudential Standards Categories Final Rule.

⁷⁴³ See paragraph 3.7.1 below.

⁷⁴⁴ *Ibid.* The OFR had argued that the application of stringent prudential standards to US BHCs and FBOs based on the total consolidated assets in accordance with section 165 of the Dodd-Frank Act was not comprehensive enough to capture a banks' systemic importance and recommended that the Federal Reserve should extend its indicator-based measurement approach of the G-SIB framework to the US domestic financial system to specifically identify US BHCs that are domestic systemically important. See OFR view point, Size alone is not sufficient to identify systemically important banks (October 2017) available at

https://www.financialresearch.gov/viewpoint-papers/files/OFRvp_17-04_Systemically-Important-Banks.pdf (accessed 30 November 2017). In contrast to the OFR's recommendation, the Federal Reserve decided to employ a size threshold plus the specified risk indicators under Category II through Category IV stringent prudential standards to determine the systemic importance of US BHCs and FBOs. In part III of the above stated Proposed Rule for US BHCs, the Federal Reserve had suggested that it would deploy the indicator-based measurement approach to identify US banks that are systemically important on a domestic economy (as an alternative to the current stringent prudential standards categories framework) but later decided not to adopt it in the Final Rule.

⁷⁴⁵ The Final Rule notes that, for simplicity, transparency and reduction of compliance costs, this risk indicator-based approach tracks measures that the Federal Reserve already employ for existing regulatory frameworks and that are publicly reported by US BHCs. In particular, 12 USC § 5365 (2)(A) requires the Federal Reserve to tailor the mandatory stringent prudential standards having regard to

indicators-based approach thus calibrates the stringency of each of the categories of stringent prudential standards for US BHCs by taking into account their size, complexity and systemic risk profile. This approach enables BHCs as well as the public to predict the applicability of a particular category of stringent prudential standards to a specific BHC.⁷⁴⁶ The Federal Reserve specifically takes into consideration the degree of presence of each specified risk-based indicator (in terms of monetary exposure) in order to assess the financial stability and safety and soundness risks that are posed by individual BHCs.⁷⁴⁷

US BHCs must determine the category of stringent prudential standards that apply to them for the first time (or for a migration to a new category) based on the average value of the applicable indicators, which are reported for the preceding four quarters of a calendar year (or which a BHC has reported for any quarter or quarters, if such a BHC has not reported the value of indicators of the preceding four quarters).⁷⁴⁸ The higher the average value of the indicators for a specific US BHC, the more stringent the prudential standards that will be applied to such a US BHC.

3.7.1 Category I stringent prudential standards

As aforementioned,⁷⁴⁹ Category I stringent prudential standards are the most stringent prudential standards and apply to US BHCs that are identified as G-SIBs in accordance with the Federal Reserve G-SIB framework,⁷⁵⁰ which is broadly based on the *Basel G-SIB framework*.⁷⁵¹ Category I stringent prudential standards are thus

the capital structure, riskiness, complexity, financial activities, size of a BHC, and any other risk-related factors.

⁷⁴⁶ *Ibid.* The Federal Reserve enhances the transparency of the risk indicator-based approach to incentive BHCs to reduce their systemic importance to avoid the application of stringent prudential standards. On the other hand, it is important for the public to be informed of the criteria for assessing the systemic importance of BHCs to reinforce the disclosure requirements of the standards of the BCBS.

⁷⁴⁷ Part IV of the Stringent Prudential Standards Categories Final Rule.

⁷⁴⁸ Under Part IV of the Stringent Prudential Standards Categories Final Rule, the Federal Reserve opines that an average of four quarters will provide an objective view of a BHC's significant changes in risk profile, rather than capturing temporary fluctuations, while maintaining incentives for a decreased systemic risk profile. A BHC that changes from one category of applicable stringent prudential standards to another category must generally comply with the new set of applicable stringent prudential standards no later than on the first day of the second quarter following the change in category. The Federal Reserve does not discretionarily adjust the thresholds of risk indicators in determining the applicable category of stringent prudential standards to avoid reducing the transparency and predictability of the risk indicator-based approach.

⁷⁴⁹ See paragraph 3.7 above.

⁷⁵⁰ 12 USC § 252.5(b); Part I of the Stringent Prudential Standards Categories Final Rule.

⁷⁵¹ The *Basel G-SIB framework* is discussed in paragraph 2.2, subparagraph 2.2.1, of Chapter Two.

intended to address the gravest risks that are posed by US G-SIBs to the US financial system given their heightened systemic risk profile.⁷⁵²

To contextualise the discussion of Category 1 stringent prudential standards, it is necessary to provide a brief overview of the Federal Reserve's G-SIB framework, especially given that US G-SIBs would obviously also be US D-SIBs. US G-SIBs are, thus, systemically important banks at both a global and domestic level as their failure would inevitably also disrupt the US financial system and domestic economy.⁷⁵³ The Federal Reserve G-SIB framework thus assesses the systemic importance of US BHCs using a global reference system.⁷⁵⁴

In August 2015, the Federal Reserve issued a Final Rule entitled *Regulatory Capital Rules: Implementation of Risk-based Capital Surcharges for Global Systemically Important Bank Holding Companies* which established a methodology for the identification of US G-SIBs (*US G-SIB Surcharge Final Rule*).⁷⁵⁵ The primary purpose of the *US G-SIB Surcharge Final Rule* is to facilitate the application of the G-SIB surcharge to US G-SIBs.⁷⁵⁶

In particular, the *US G-SIB Surcharge Final Rule* applies to US BHCs that hold minimum total consolidated assets of 250 billion USD, or on-balance sheet foreign exposure of 10 billion USD, or more (that is, advanced approaches US BHCs, as discussed above).⁷⁵⁷ Specifically, section 401(f) of the EGRRCPA provides that any BHC, regardless of its asset-size, that has been identified as a US G-SIB under section 217.402 of Title 12 of the Code of Federal Regulations⁷⁵⁸ shall be considered to be a

⁷⁵² Paragraph IV of the Stringent Prudential Standards Categories Final Rule.

⁷⁵³ BCBS RCAP Assessment of Basel III G-SIB framework and review of D-SIB frameworks – United States (June 2016) available at <https://www.bis.org/bcbs/publ/d369.pdf> (accessed 29 August 2017).

⁷⁵⁴ Put differently, the Federal Reserve G-SIB framework is not designed to identify US BHCs that are systemically important in relation to the domestic economy. Effectively, all US G-SIBs are US D-SIBs, but not all US D-SIBs are US G-SIBs.

⁷⁵⁵ Regulatory Capital Rules: Implementation of Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies (August 2015) available at <https://www.govinfo.gov/content/pkg/FR-2015-08-14/pdf/2015-18702.pdf> (accessed 29 August 2017).

⁷⁵⁶ See paragraph 3.8.1, subparagraph 3.8.1.2 below, for the discussion of the G-SIB surcharge for US G-SIBs.

⁷⁵⁷ Part II of the US G-SIB Surcharge Final Rule. The scope of application of the US G-SIB Surcharge Final Rule excludes US BHCs that do not qualify as advanced approaches US BHCs with the result that they cannot be identified as US G-SIBs. See paragraph 3.4 above.

⁷⁵⁸ The Code of Federal Regulations is the codification of the rules published in the Federal Register by the departments and agencies of the Federal Government. Refer to Code of Federal Regulations (CFR),

BHC with total consolidated assets equal to or greater than 250 billion USD for purposes of the application of stringent prudential standards. In terms of section 217.402 of Title 12 of the *Code of Federal Regulations*, a systemic score, as calculated under the indicator-based measurement approach (method 1 score) that equals or exceeds 130 basis points,⁷⁵⁹ is required for a BHC to be identified as a US G-SIB.⁷⁶⁰

Accordingly, advanced approaches US BHCs carry out an assessment to determine their systemic importance on an annual basis.⁷⁶¹ To facilitate the assessment process, the systemic risk data of advanced approaches US BHCs are gathered quarterly using the *Systemic Risk Report* (FR Y-15) that has to be filed electronically with the BHC's district Federal Reserve on a quarterly basis.⁷⁶² The FR Y-15 Report collects systemic risk data from US BHCs for purposes of monitoring their systemic profile.⁷⁶³ The *US G-SIB Surcharge Final Rule* uses both the indicator-based measurement approach

1996 to present available at <https://www.govinfo.gov/help/cfr> (accessed 16 January 2020); Code of Federal Regulations (annual edition) available at <https://www.govinfo.gov/app/collection/cfr/> (accessed 1 October 2020).

⁷⁵⁹ See paragraph 2.2 of Chapter Two for a definition of a basis point.

⁷⁶⁰ 12 CFR § 217.404(a) states that a BHC's method 1 score is the sum of its systemic indicator scores for the twelve systemic indicators of the indicator-based measurement approach, as discussed in more detail below. The Federal Reserve employs an "expected impact approach framework" to calibrate systemic scores for US G-SIBs. This approach creates a hypothetical or an actual US BHC that serves as a "reference bank" appearing between the US G-SIB with the lowest systemic score and the US BHC with the highest systemic score, which has not been identified as a G-SIB. The "reference bank" is then used to approximate the systemic impact of the least ranking US G-SIB with that of the highest-ranking US BHC that immediately falls below the systemic score threshold. In the expected impact approach framework, the Federal Reserve indicates that if the systemic losses that result from a failure of the least ranking G-SIB doubles that of the highest-ranking US BHC that falls below the systemic score cut-off line, the G-SIB surcharge of the least ranking G-SIB will be calibrated to be twice as much as that of the said highest-ranking US BHC. Refer to Board of Governors of the Federal Reserve System Calibrating the GSIB Surcharge (July 2015) available at <https://www.federalreserve.gov/aboutthefed/boardmeetings/gsib-methodology-paper-20150720.pdf> (accessed 9 September 2017).

⁷⁶¹ Part II of the US G-SIB Surcharge Final Rule.

⁷⁶² Systemic Risk Report – FR Y-15 available at

https://www.federalreserve.gov/reportforms/forms/FR_Y-1520200630_f.pdf (accessed 15 August 2020); Bank Organization Systemic Risk Report – FR Y-15 available at

https://www.federalreserve.gov/reportforms/formsreview/FR_Y-15%20Form%20Revised%20final.pdf (accessed 29 August 2017); Systemic Risk Report – FR Y-15 available at

https://www.federalreserve.gov/reportforms/forms/FR_Y-1520200630_f.pdf (accessed 15 August 2020).

⁷⁶³ Board of Governors of the Federal Reserve System, Instructions for preparation of Bank Organization Systemic Risk Report (December 2016) available at

https://www.federalreserve.gov/reportforms/forms/FR_Y-1520180630_i.pdf (assessed 29 August 2017). In part XV of the Stringent Prudential Standards Categories Final Rule, the Federal Reserve states that BHCs with minimum of 50 billion USD in total consolidated assets are no longer required to file FR Y-15 Report for purposes of systemic assessment.

and the short-term wholesale funding framework to calculate the systemic scores for US G-SIBs.

3.7.1.1 The indicator-based measurement approach

To facilitate a better understanding of the discussions that follow, Table 3.7.1.1 below demonstrates the indicator-based measurement approach.

Category	Systemic indicator	Indicator weighting
Size	Total exposure	20%
Interconnectedness	<ul style="list-style-type: none"> Intra-financial system assets 	6.67%
	<ul style="list-style-type: none"> Intra-financial system liabilities 	6.67%
	<ul style="list-style-type: none"> Securities outstanding 	6.67%
Substitutability	<ul style="list-style-type: none"> The total value of payment transactions 	6.67%
	<ul style="list-style-type: none"> Assets under custody 	6.67%
	<ul style="list-style-type: none"> Underwritten transactions in debt and equity markets 	6.67%
Complexity	<ul style="list-style-type: none"> Notional amount of OTC derivatives 	6.67%
	<ul style="list-style-type: none"> Trading and available for sale securities 	6.67%
	<ul style="list-style-type: none"> Level 3 assets 	6.67%
Cross-jurisdictional activity	<ul style="list-style-type: none"> Cross-jurisdictional assets 	10%

	<ul style="list-style-type: none"> • Cross-jurisdictional liabilities 	10%
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The *US G-SIB Surcharge Final Rule* mirrors the *Basel G-SIB framework* to the extent that it also establishes the systemic importance of a US BHC using an indicator-based measurement approach consisting of the categories of: size, interconnectedness, substitutability, complexity and cross-jurisdictional activity.⁷⁶⁴ As discussed below, these categories of systemic importance have indicators and risk weights that are akin to those of the *Basel G-SIB framework*.⁷⁶⁵ The systemic score for a G-SIB under the Federal Reserve's indicator-based measurement approach will thus be calculated similar to a systemic score under the Basel indicator-based measurement approach described in Chapter Two,⁷⁶⁶ as these two approaches are generally consistent. However, a US G-SIB's systemic score will be based on the average of twelve indicators of the Federal Reserve's indicator-based measurement approach relative to thirteen indicators established by the Basel approach, but these thirteen indicators and twelve indicators fall under the same five categories that are equally risk-weighted at 20 per cent.⁷⁶⁷ Consistent with the Basel approach, banks that obtain a systemic score of 130 basis points or more are identified as US G-SIBs.⁷⁶⁸ It should be noted that this will be a G-SIB's systemic score under the method 1 score and not the method 2 score.

3.7.1.1.1 Size indicator

The size of a US BHC is measured through its total exposures comprising derivatives exposures, securities financing transactions, on-balance sheet exposures, and off-

⁷⁶⁴ Part II of the US G-SIB Surcharge Final Rule. The indicator-based measurement approach of the *Basel G-SIB framework* is examined in paragraph 2.2, subparagraph 2.2.1, of Chapter Two.

⁷⁶⁵ See paragraph 2.2, subparagraph 2.2.1, of Chapter Two.

⁷⁶⁶ See paragraph 2.2, subparagraph 2.2.1, of Chapter Two.

⁷⁶⁷ Part II of the US G-SIB Surcharge Final Rule.

⁷⁶⁸ *Ibid.*

balance sheet exposures,⁷⁶⁹ as explained in Chapter Two of this thesis.⁷⁷⁰ In terms of section 165 of the Dodd-Frank Act, as amended by the EGRRCPA, the asset-size indicator is based on total consolidated assets as reported in the FR Y-9C.⁷⁷¹

According to the Federal Reserve, the asset-size threshold is a simple measure of the potential systemic impact that may result from a BHC's distress or failure causing risks to financial stability as well as safety and soundness concerns.⁷⁷² Further, the asset-size indicator measures the degree of the magnitude of loss or significant disruption to customers or counterparties should a BHC encounter financial distress or failure and can be indicative of a complex resolution process⁷⁷³ owing to various customers and counterparties.⁷⁷⁴

The Federal Reserve point out that the asset-size indicator may also create operational and managerial complexities given the larger scale of a bank's activities coupled with complex business lines and broader geographical scope compared to relatively smaller banks.⁷⁷⁵ Asset-size can further be a proxy for other measures of complexity such as the amount of trading and available-for-sale securities and Level 3 assets.⁷⁷⁶ The size-category proved to be especially relevant for the evaluation of

⁷⁶⁹ Schedule A of the FR Y-15; See further, OFR view point: Size alone is not sufficient to identify systemically important banks (October 2017) available at https://www.financialresearch.gov/viewpoint-papers/files/OFRvp_17-04_Systemically-Important-Banks.pdf (accessed 30 November 2017).

⁷⁷⁰ See paragraph 2.2, subparagraph 2.2.1.1, of Chapter Two, for the definitions of derivatives exposures, securities financing transactions, on-balance sheet exposures and off-balance sheet exposures, with respect to the total exposure of a bank.

⁷⁷¹ The FR Y-9C is a Report that is a primary analytical tool for on-site inspections that collects basic financial data from US BHCs, SLHCs, US IHCs and securities holding companies (SHCs) on a consolidated basis in the form of a balance sheet, an income statement and detailed supporting schedules, including schedules of off-balance sheet items. The information that is aggregated in this Report is used to assess and monitor the overall financial condition of these holding company organisations which may include parent company, banks and non-bank entities. The FR Y-9C Report is the most widely reviewed Report at the holding company level. See FR Y-9C – Consolidated financial statements for holding companies available at <https://www.federalreserve.gov/apps/reportforms/reportdetail.aspx?sOoYJ+5BzDa18cbqnRxZRg==> (accessed 10 November 2019). Other Report forms of the Federal Reserve, such as FR Y-9C, do not have other terms such as the FR Y-15 that is also called a Systemic Risk Report, (alluded to in subparagraph 3.7.1 above).

⁷⁷² Part III of the Stringent Prudential Standards Categories Final Rule.

⁷⁷³ See the *FSB Key Attributes* for an overview of the resolution regime, as discussed in subparagraph 2.4.7 of Chapter Two.

⁷⁷⁴ Part III of the Stringent Prudential Standards Categories Final Rule.

⁷⁷⁵ *Ibid.*

⁷⁷⁶ *Ibid.* See paragraph 3.7.1.1.4 below.

systemic importance in the US financial system given the existence of various outsized BHCs.⁷⁷⁷

3.7.1.1.2 Interconnectedness indicator

Interconnectedness is another ground that establishes the systemic importance of US BHCs, by measuring the extent to which a US BHC is systemically intertwined with other financial institutions.⁷⁷⁸ The systemic indicators for the category of interconnectedness are: intra-financial system assets, intra-financial system liabilities and securities outstanding.⁷⁷⁹ Intra-financial system assets are those deposits and loans made by a US BHC to other financial institutions.⁷⁸⁰ These assets incorporate certificates of deposits; the unused portion of committed lines that are extended to other financial institutions; holdings of securities that are issued by other financial institutions;⁷⁸¹ net positive current exposure of securities financing transactions with other financial institutions; and OTC derivatives contracts with other financial institutions that have a net positive fair value.⁷⁸²

Intra-financial system liabilities are deposits held by a US BHC that are due to other depository and non-depository institutions and the loans of other financial institutions to a US BHC.⁷⁸³ These liabilities also incorporate the unused portion of committed lines that are obtained from other financial institutions; net negative current exposure

⁷⁷⁷ “What makes a bank systemically important?” Hearing before the Subcommittee on Financial Institutions and Consumer Protection of the Committee on Banking, Housing, and Urban Affairs, United States Senate –one hundred thirteenth Congress second session on “Examining the Characteristics of Banks that make some of them systemically important” July 16, 2014 available at <https://www.govinfo.gov/content/pkg/CHRG-113shrg91384/html/CHRG-113shrg91384.htm> (accessed 29 August 2017). See paragraph 3.7.1.3 below.

⁷⁷⁸ Schedule B of the FR Y – 15 states that other financial institutions include banking institutions and non-banks institutions, bank holding companies, securities brokers, securities dealers, insurance companies, mutual funds, hedge funds, pension funds, investment banks, and central counterparties. Refer to paragraph 2.2, subparagraph 2.2.1.2, of Chapter Two, for a discussion of the interconnectedness indicator of the *Basel G-SIB framework*.

⁷⁷⁹ Schedule B of the FR Y – 15.

⁷⁸⁰ *Ibid.*

⁷⁸¹ Schedule B of the FR Y-15 states that the holdings of securities indicator include secured debt securities, senior unsecured securities, subordinated debt securities, commercial paper, and equity securities. Section 3(a)(11) of the Securities Exchange Act states that “equity security” include any stock or similar security or any security convertible carrying any warrant or right to subscribe to or purchase such as a security. Refer to paragraph 2.2.1, subparagraph 2.2.1.2, of Chapter Two, for the definitions of certificate of deposits and committed lines. See paragraph 2.2.1, subparagraph 2.2.1.1 thereof, for the definitions of securities financing transactions and OTC derivatives.

⁷⁸² Schedule B of the FR Y-15.

⁷⁸³ *Ibid.*

of securities financing transactions with other financial institutions; and OTC derivatives contracts with other financial institutions that have a net negative fair value.⁷⁸⁴ Securities outstanding as an indicator of interconnectedness refer to all the outstanding securities of a US BHC irrespective of whether or not they are held by other financial institutions.⁷⁸⁵

3.7.1.1.3 Substitutability indicator

The substitutability-category measures the degree to which a US BHC's financial services and products can be substituted, and has the following indicators: the volume of payment transactions, assets under custody and underwritten transactions in equity and debt markets.⁷⁸⁶ In respect of the volume of payment transactions, reference is made to the total value of payments of a US BHC that are made through large-value payments systems or agent banks.⁷⁸⁷ Assets under custody refer to assets that a US BHC keeps as a custodian on behalf of private and institutional customers.⁷⁸⁸ Lastly, a failure of a US BHC with a large total market share in underwritten transactions in the debt and equity market is likely to pose a systemic risk associated with asset fire sales.⁷⁸⁹

As with the *Basel G-SIB framework*, the *US G-SIB framework* caps the substitutability criterion to mitigate the effects of large systemic scores for US BHCs that dominantly engage in activities captured under the indicators of payment activity, assets under custody and underwriting transactions.⁷⁹⁰ Notably, the OFR is of the view that the substitutability cap may underestimate the systemic profile of BHCs that are dominant

⁷⁸⁴ *Ibid.*

⁷⁸⁵ *Ibid.*

⁷⁸⁶ Schedule C of the FR Y – 15. Refer to paragraph 2.2, subparagraph 2.2.1.3, of Chapter Two, for a discussion of the substitutability indicator of the *Basel G-SIB framework*.

⁷⁸⁷ *Ibid.*

⁷⁸⁸ FR Y-15 Report defines a custodian bank as a bank that manages the assets of the customers for safekeeping. Section 402(a) of the EGRRCPA defines a “custodian bank” as any depository institution holding company, including any insured depository institution subsidiary of this holding company, predominantly engaged in custody, safekeeping, and asset servicing activities.

⁷⁸⁹ Schedule C of the FR Y-15 states that equity market includes initial public offerings, additional offerings of stock and depository receipts, whereas the debt instruments include secured debt instruments, covered bonds, asset-backed securities and unsecured debt securities. See paragraph 1.5 of Chapter One for the definition of asset fire sale.

⁷⁹⁰ See paragraph 2.2, subparagraph 2.2.1.3, of Chapter Two.

in these activities, thereby potentially distorting their actual systemic scores and exacerbating systemic crisis in the event of their distress or collapse.⁷⁹¹

Additionally, the OFR recommends that the concentration of a US BHC in clearing and settlement services should constitute another indicator under the substitutability criterion considering the critical role of the proper operation of clearing and settlement services in the financial system.⁷⁹² Currently, the Federal Reserve G-SIB framework does not incorporate this recommendation by the OFR.

3.7.1.1.4 Complexity indicator

Consistent with the *Basel G-SIB framework*, the Federal Reserve's complexity criterion relates to the adverse systemic impact of a US BHC arising from complex, time-consuming, and resource-intensive resolution of such entity.⁷⁹³ The complexity of a US BHC is measured using OTC derivatives, trading and available-for-sale securities, as well as Level 3 assets.⁷⁹⁴

The OTC derivatives indicator, in particular, reflects a US BHC's OTC derivatives transactions that are cleared through a central counterparty or settled bilaterally.⁷⁹⁵ Trading securities are purchased and sold for profit-generating purposes on short-term fluctuations in prices, and available-for-sale securities are not classified as trading securities.⁷⁹⁶ According to the Federal Reserve, trading and available-for-sale securities are vulnerable to asset fire sales during market distress and they, therefore, complicate the resolution process of US BHCs.⁷⁹⁷ Level 3 assets are described in

⁷⁹¹ OFR view point, Size alone is not sufficient to identify systemically important banks (October 2017) available at

https://www.financialresearch.gov/viewpoint-papers/files/OFRvp_17-04_Systemically-Important-Banks.pdf (accessed 30 November 2017).

⁷⁹² *Ibid*; Subparagraph 2.2.1.3 of Chapter One highlighted the importance of financial markets infrastructure in a financial system.

⁷⁹³ Schedule D of the FR Y-15. See paragraph 2.2.1.4 of Chapter Two for a discussion of the complexity indicator of the indicator-based measurement approach of the *Basel G-SIB framework*. As highlighted in subparagraph 2.4.7 of Chapter Two, the resolution regime is incorporated under the *FSB Key Attributes*.

⁷⁹⁴ Schedule D of the FR Y-15.

⁷⁹⁵ *Ibid*.

⁷⁹⁶ See paragraph 2.2, subparagraph 2.2.1.4, of Chapter Two, describes the difference between trading securities and available for sale securities.

⁷⁹⁷ Part III of the US G-SIB Surcharge Final Rule.

terms of their characteristics, namely, illiquidity and the inability for their fair market value to be readily available.⁷⁹⁸

3.7.1.1.5 Cross-jurisdictional activity indicator

Cross-jurisdictional activity evaluates the systemic importance of a US BHC with reference to cross-jurisdictional claims and cross-jurisdictional liabilities.⁷⁹⁹ Cross-jurisdictional claims are those assets of a US BHC that are held by financial institutions that are outside of the BHC's home jurisdiction (thus outside the US).⁸⁰⁰ Cross-jurisdictional liabilities, on the other hand, refer to loans and borrowings of branches and subsidiaries of a US BHC from financial institutions in foreign jurisdictions.⁸⁰¹

As pointed out in the *Stringent Prudential Standards Categories Final Rule*, the cross-jurisdictional activity indicator poses safety and soundness and financial stability risks because it can complicate a BHC's operations during normal times thus requiring sophisticated risk-management frameworks.⁸⁰² BHCs with significant cross-border activities may also create a complex resolution process in the event of failure given the legal and regulatory complexities related to resolution in various jurisdictions.⁸⁰³

3.7.1.2 The short-term wholesale funding framework

To facilitate a better understanding of the discussions that follow, Table 3.7.1.2 below set out the criteria for calculation of the components of short-term wholesale funding in accordance with the set maturity date.⁸⁰⁴

Component of short-term wholesale funding	Remaining maturity of 30 days of	Remaining maturity of 31 to 90 days	Remaining maturity of 91 to 180 days	Remaining maturity of 181 to 365 days

⁷⁹⁸ See paragraph 2.2, subparagraph 2.2.1.4, of Chapter Two, for the definition of Level 3 assets.

⁷⁹⁹ See Schedule E of the FR Y-15 Report. The cross-jurisdictional activity indicator is one of the categories of systemic importance that identifies G-SIBs under the *Basel G-SIB framework*, as discussed in paragraph 2.2.1.5 of Chapter Two.

⁸⁰⁰ Schedule E of the FR Y-15 Report.

⁸⁰¹ *Ibid.*

⁸⁰² Part V of the Stringent Prudential Standards Categories Final Rule.

⁸⁰³ *Ibid.*

⁸⁰⁴ 12 CFR § 217.406(b)(3).

	less or no maturity			
Category 1	25%	10%	0%	0%
<ul style="list-style-type: none"> Secured funding transactions secured by a level 1 asset 				
<ul style="list-style-type: none"> Unsecured wholesale funding where the customer or counterparty is not a financial sector entity or a consolidated subsidiary thereof 				
<ul style="list-style-type: none"> Brokered deposits provided by a retail customer or counterparty; and 				
<ul style="list-style-type: none"> Short positions where the borrowed asset does 				

not qualify as either a level 1 liquid asset or level 2A liquid asset.				
Category 2	50%	25%	10%	0%
<ul style="list-style-type: none"> Secured funding transaction secured by level 2A liquid asset; and 				
<ul style="list-style-type: none"> Covered asset exchanges involving the future exchange of a level 1 liquid asset for a level 2A liquid asset. 				
Category 3	75%	50%	25%	10%
<ul style="list-style-type: none"> Secured funding transactions secured by a level 2B liquid asset; 				
<ul style="list-style-type: none"> Covered asset exchange 				

(other than those described in Category 2); and				
<ul style="list-style-type: none"> Unsecured wholesale funding (other than unsecured wholesale funding described in Category 1). 				
Category 4	100%	75%	50%	25%
<ul style="list-style-type: none"> Any other component of short-term wholesale funding. 				

The Federal Reserve G-SIB framework deviates from the *Basel G-SIB framework* insofar as it uses the short-term wholesale funding framework (and not supervisory judgment), in addition to the indicator-based measurement approach, to calculate the relevant systemic scores of a given US BHC (method 2 score) as stipulated in the *US G-SIB Surcharge Final Rule*.⁸⁰⁵

The short-term wholesale funding framework measures the systemic importance of US BHCs using the four categories of the indicator-based measurement approach

⁸⁰⁵ 12 CFR § 217.405 states that method 2 score is equal to the sum of a US G-SIB nine systemic indicators measuring the categories of size, interconnectedness, complexity and cross-jurisdictional activity under the indicator-based measurement approach, as discussed in subparagraph 3.7.1.1 above, plus the short-term wholesale funding score calculated using systemic indicators, as explained below. The Basel supervisory judgment methodology is analysed in paragraph 2.2, subparagraph 2.2.2, of Chapter Two.

(size, interconnectedness, complexity and cross-jurisdictional activity) and replaces the category of substitutability with that of short-term wholesale funding. In other words, it evaluates the systemic significance of a US G-SIB consistently with the indicator-based measurement approach to the extent of employing the specified categories and deviates from it based on its reliance on a BHC's short-term wholesale funding sources instead of the substitutability indicator.⁸⁰⁶

Passmore indicates that the rationale for using the short-term wholesale funding framework is to mitigate systemic liquidity risk,⁸⁰⁷ which in the opinion of the Federal Reserve, is not adequately addressed by the *Basel III LCR framework*.⁸⁰⁸ Tarullo further points out that the short-term wholesale funding framework specifically focuses on the problem of systemic losses arising from undue reliance on short-term wholesale funding by huge and complex US BHCs that may cause a liquidity crisis in the US financial system.⁸⁰⁹

The indicators of the short-term wholesale funding category are: secured funding transactions, unsecured wholesale funding, covered asset exchanges, short positions and brokered deposits and brokered sweep deposits.⁸¹⁰ To measure its weighted short-term wholesale funding, a G-SIB must calculate the amount of its short-term

⁸⁰⁶ Note that the category of substitutability of the indicator-based measurement approach is replaced with the short-term wholesale funding in 12 CFR d§ 217. 405.

⁸⁰⁷ Passmore W *et al* (2019) "Are Basel's surcharges for global systemically important banks too small?" 15 *International Journal of Central Banking* 107; See further, Jean-Pierre D "A macro-prudential liquidity regulation" South African Reserve Bank Financial Stability Research Conference, October 26-27, 2017, South Africa. Jean Pierre indicated that there is a need for a macro-prudential approach to liquidity regulation as the Basel III LCR and the *Basel III NSFR* are micro-prudential regulatory frameworks in the sense that they are insufficient to withstand periods of systemic liquidity crisis. See also, Jean-Pierre D "A macroprudential progress report" (snb.ch) Society for Financial Econometrics (SoFiE) Conference October 11, 2013, Lugano.

⁸⁰⁸ Refer to the US G-SIB Surcharge Final Rule; See paragraph 2.4.5, subparagraph 2.4.5.1, of Chapter Two, for the discussion of the *Basel III LCR framework*.

⁸⁰⁹ Tarullo DK, Member of the Board of the Federal Reserve System, on "Regulating large foreign banking organizations", remarks at the Harvard Law School Symposium on "Building the financial system of the twenty-first century: An agenda for Europe and the United States" Armonk, New York, March 27, 2014 available at

<https://www.federalreserve.gov/newsevents/speech/files/tarullo20140327a.pdf> (accessed 5 September 2017). The wholesale funding ratio was one of the indicators that measured the interconnectedness of a bank under the *Basel G-SIB framework* (November 2011). It was subsequently replaced with the securities outstanding indicator under the *Basel G-SIB framework* (July 2013) and the *Basel G-SIB framework* (July 2018). See paragraph 2.2, subparagraph 2.2.1, of Chapter Two.

⁸¹⁰ 12 CFR § 217.406.

wholesale funding on a consolidated basis for each business day of the previous calendar year and weight the components of short-term wholesale funding.⁸¹¹

Secured funding transactions refer to transactions that are subject to a legally binding agreement and give rise to cash obligations to wholesale customers or counterparties that are secured on securities or loans with priority claim over such securities if the institution concerned becomes bankrupt, and such securities are not issued or owned by the concerned institution.⁸¹² These are the funds that a BHC must pay under each secured funding, other than operational deposits, with a remaining maturity of one year or less.⁸¹³ According to the Federal Reserve, secured funding transactions tend to be unstable and unreliable sources of funding when counterparties cease to roll over or revolve the funding during a period of financial distress, resulting in liquidity shortfalls.⁸¹⁴

Unsecured wholesale funding refers to a liability or obligation of a Board-regulated institution⁸¹⁵ to a wholesale customer or counterparty that is not a secured funding transaction.⁸¹⁶ These are funds that a bank must pay under all unsecured wholesale funding, other than an operational deposit, with a remaining maturity of one year or less.⁸¹⁷ As demonstrated during the 2008 GFC, uncollateralised liabilities can be a source of credit default risk and may cause significant liquidity risks.⁸¹⁸

Under covered asset exchanges transactions, a counterparty provides a non-cash asset of a given liquidity category to another counterparty in exchange for an asset of

⁸¹¹ 12 CFR § 217.406(b)(1).

⁸¹² Part VI of the NSFR Final Rule. FSB Strengthening oversight and regulation of shadow banking – policy framework for addressing shadow banking risks in secured lending and repos (August 2013) available at https://www.fsb.org/wp-content/uploads/r_130829b.pdf (August 30 November 2019). This framework states that the engagement in securities lending can create “bank-like” activities associated with maturity mismatch and liquidity risk posing financial stability risks. See further, Jackson TH *et al* (1979) “Secured financing and priorities among creditors” 88 *The Yale Law Journal* 1143.

⁸¹³ 12 CFR § 217.406(b)(2)(i).

⁸¹⁴ Part II of the US G-SIB Surcharge Final Rule.

⁸¹⁵ 12 CFR § 249.3 defines Board-regulated institution as “a state member bank, covered depository institution holding company, U.S. intermediate holding company or covered nonbank company.”

⁸¹⁶ Part VI of the NSFR Final Rule. The sources of unsecured wholesale funding cover wholesale deposits, unsecured advances from public sector entities or US government enterprises, unsecured notes, bonds, or other unsecured debt securities.

⁸¹⁷ 12 CFR § 217.406(b)(2)(ii).

⁸¹⁸ Van Rixtel A *et al* “Financial crises and bank funding: Recent experience in the euro area” BIS Working Papers March 2013 available at <https://www.bis.org/publ/work406.pdf> (assessed 30 November 2019).

a higher liquidity category, to be returned to each other at an agreed future date.⁸¹⁹ It entails the calculation of the fair value of an asset as determined under Generally Acceptable Accounting Principles (GAAP) that a BHC must return under a covered asset exchange with a remaining maturity of one year or less.⁸²⁰

Short positions refer to transactions involving borrowing of security from one counterparty to sell it to another counterparty and then returning it to the counterparty that originally sold it after the sale with the second counterparty has been effected.⁸²¹ These entail the fair value of an asset as determined under GAAP that a BHC must return under a short position to the extent that the borrowed asset does not qualify as a Level 1 liquid asset or a Level 2A liquid asset.⁸²²

Brokered deposits are obtained from a US BHC through direct or indirect facilitation by a broker⁸²³ and are obtained from a retail customer or counterparty.⁸²⁴ Brokered deposits that are provided by retail customers with a remaining maturity of one year or more are more stable than other types of deposits assigned a lower available stable funding factor.⁸²⁵ Brokered sweep deposits are “idle” deposits that are “swept away” from other financial institutions to a Board-regulated institution’s accounts for investment purposes.⁸²⁶ The Federal Reserve points out that the affiliates of a BHC tend to be the first to receive brokered sweep deposits and the last from which such deposits are withdrawn and hence these deposits from affiliates are more reliable than those of the non-affiliates of a BHC and are more similar to other types of retail deposits.⁸²⁷ Brokered deposits and brokered sweep deposits obtained from non-retail

⁸¹⁹ 12 USC § 249.3 provides that asset exchanges exclude secured funding and secured lending transactions. The FR Y-15 provides that the categories of liquid assets in descending order are Level 1 liquid assets, Level 2A liquid assets, Level 2B liquid assets.

⁸²⁰ 12 CFR § 217.406(b)(2)(iii).

⁸²¹ Part II of the US G-SIB Surcharge Final Rule. Some concerns have been raised that short positions can destabilise market prices and be a potential source of disruptions in a financial system. For this, see Elfakhani S (2000) “Short positions, size effect, and the liquidity hypothesis: Implications for stock performance” 10 *Applied Financial Economics* 105 at 106.

⁸²² 12 CFR § 217.406(b)(2)(iv). See subparagraph 3.8.4.1 below for the discussions on the concepts of Level 1 liquid asset and Level 2A liquid asset

⁸²³ 12 CFR § 249.3; Section 29(g)(1) of the Federal Deposit Insurance Act defines a deposit broker as any person engaged in the business of deposits placement or facilitation thereof of third parties with banks for the purpose of selling interests to those deposits to third parties.

⁸²⁴ 12 CFR § 217.406(b)(2)(v).

⁸²⁵ Part VII of the NSFR Final Rule.

⁸²⁶ Part II of the US G-SIB Surcharge Final Rule.

⁸²⁷ Part VII of the US G-SIB Surcharge Final Rule.

customers tend to be unstable during financial market stress in spite of being covered under the FDIC's deposit insurance framework.⁸²⁸

3.7.1.3 US G-SIBs

In Chapter Two, it was highlighted that the Financial Stability Board (FSB), as the international body mandated with overseeing financial stability on a global level, is responsible for identifying G-SIBs in consultation with the BCBS, in accordance with the *Basel G-SIB framework*. It was also indicated that the FSB has annually published the list of G-SIBs since November 2011.⁸²⁹ In November 2022, the FSB identified eight US BHCs as G-SIBs, namely: Citigroup, JP Morgan Chase, Bank of America, Goldman Sachs, Bank of New York Mellon, Morgan Stanley, State Street and Wells Fargo.⁸³⁰

The FSB's list of US G-SIBs is similar to the list of US G-SIBs that were identified by the Federal Reserve in terms of the indicator-based measurement approach. As pointed out by the Federal Reserve, the short-term wholesale funding framework also generates the same list of US G-SIBs as the indicator-based measurement approach except that the application of the short-term wholesale funding framework results in more stringent G-SIB surcharges, as discussed below.⁸³¹

3.7.2 Category II, Category III and Category IV stringent prudential standards

To facilitate a better understanding of the discussions that follow, Table 3.7.2 below lists Categories I, II, III and IV US BHCs discussed hereinafter.

⁸²⁸ As indicated in paragraph 3.2 above, Title III of the Dodd-Frank Act places the FDIC as the resolution authority for troubled financial companies charged with insuring the deposits of customers that are held by US banks in terms of section 29 of the Federal Deposit Insurance Act, as amended by the Dodd-Frank Act.

⁸²⁹ See paragraph 2.2 of Chapter Two.

⁸³⁰ FSB 2022 List of Global Systemically Important Banks (G-SIBS) available at <https://www.fsb.org/wp-content/uploads/P211122.pdf> (accessed 30 November 2022); See further, Allahrakha M *et al* "Systemic importance indicators for 33 U.S. bank holding companies: An overview of recent data" February 2015 Office of Financial Research Brief Series available at <https://www.financialresearch.gov/briefs/files/2015-02-12-systemic-importance-indicators-for-us-bank-holding-companies.pdf> (accessed 29 August 2017).

⁸³¹ Board of Governors of the Federal Reserve, Calibrating the GSIB Surcharge (July 2015) available at <https://www.federalreserve.gov/aboutthefed/boardmeetings/gsib-methodology-paper-20150720.pdf> (accessed 9 September 2017). See paragraph 3.8.1.3 below.

Categories of stringent prudential standards	Total consolidated assets	Risk indicators and thresholds
Category II US BHCs	<ul style="list-style-type: none"> • 700 billion USD or more; or • 100 billion USD or more; 	<ul style="list-style-type: none"> • and 75 billion USD in cross-jurisdictional activity.
Category III	<ul style="list-style-type: none"> • 250 billion USD or more; 	<ul style="list-style-type: none"> • and 75 billion USD in any risk indicators of weighted short-term wholesale funding, non-bank assets or off-balance sheet exposures.
Category IV	<ul style="list-style-type: none"> • 100 billion USD or more. 	

As indicated,⁸³² the *Stringent Prudential Standards Categories Final Rule* establishes Category I, Category II, Category III and Category IV stringent prudential standards applying to US BHCs based on their asset-size threshold and risk indicators (with size thresholds) of: cross-jurisdictional activity, weighted short-term wholesale funding, non-bank assets and off-balance sheet exposure.

3.7.2.1 Category II stringent prudential standards

Category II stringent prudential standards, as discussed in more detail below, apply to US BHCs with 700 billion USD or more in total consolidated assets or 100 billion USD in total assets and 75 billion USD or more in cross-jurisdictional activity (Category II BHCs).⁸³³ As mentioned, cross-jurisdictional activity is an indicator that captures cross-jurisdictional assets and cross-jurisdictional liabilities in the assessment of systemic importance of US G-SIBs.⁸³⁴ Under Category II stringent prudential

⁸³² Paragraph 3.7.2

⁸³³ 12 CFR § 252.5(c); Part IV of the Stringent Prudential Standards Categories Final Rule.

⁸³⁴ See paragraph 3.7.1.1.5 above.

standards, the cross-jurisdictional activity indicator replaces the on-balance sheet foreign exposure indicator, being one of the thresholds that the Federal Reserve employs in the definition of advanced approaches US BHCs.⁸³⁵ According to the Federal Reserve, the substitution of the on-balance sheet foreign exposure indicator with the cross-jurisdictional activity indicator is justified in light of the broader measurement of a BHC's cross-border operations covering both cross-jurisdictional assets and cross-jurisdictional liabilities, as opposed to the on-balance sheet foreign exposure indicator which only covers cross-jurisdictional assets.⁸³⁶

Category II US BHCs are large and internationally active banking organisations with significant cross-border operations, which may potentially pose complexities during the resolution process⁸³⁷ should they encounter failure.⁸³⁸ Accordingly, Category II stringent prudential standards are generally consistent with the BCBS prudential standards that are applied to large and internationally active banking organisations in order to promote competitive equity among banks across jurisdictions, reduce regulatory arbitrage, and facilitate the compliance of US banks with prudential standards in other foreign jurisdictions.⁸³⁹ As observed by the Federal Reserve, empirical evidence from the GFC demonstrated that the distress or failure of outsized BHCs pose elevated risks to the financial system and give rise to operational and managerial complexity, given the diversity of their business lines and their ongoing complex financial activities.⁸⁴⁰

⁸³⁵ Part IV of the Stringent Prudential Standards Categories Final Rule; It was indicated in paragraph 3.4 above that advanced approaches US BHCs constituted another category that was subject to stringent prudential standards under the Federal Reserve's original framework that was tailored in accordance with section 165 of the Dodd-Frank Act.

⁸³⁶ Part IV of the Stringent Prudential Standards Categories Final Rule.

⁸³⁷ See the *FSB Key Attributes* for an overview of the resolution regime, as discussed in subparagraph 2.4.7 of Chapter Two.

⁸³⁸ Part IV of the Stringent Prudential Standards Categories Final Rule.

⁸³⁹ Paragraph V of the Stringent Prudential Standards Categories Final Rule.

⁸⁴⁰ In the Stringent Prudential Standards Categories Final Rule, the Federal Reserve notes that Wachovia Corporation, the then US financial holding company owning multiple depository subsidiaries, was exemplary of the complexities inherent in outsized financial institutions. It substantially engaged in toxic investment activities that saw the company in severe liquidity needs during the GFC. The FDIC subsequently assisted Citigroup to acquire Wachovia Corporation. For this, see Regulatory reform 10 years after the Financial Crisis: Systemic risk regulation of nonbank financial institutions Congressional Research Service Report (April 2018) available at <https://crsreports.congress.gov/product/pdf/R/R45162/7> (accessed 11 November 2019).

3.7.2.2 Category III stringent prudential standards

Category III stringent prudential standards apply to US BHCs that maintain total consolidated assets of at least 250 billion USD or 100 billion USD or more in total assets and 75 billion USD or more in any of the risk-indicators of weighted short-term wholesale funding, non-bank assets or off-balance sheet exposures.⁸⁴¹

As noted, the “weighted short-term wholesale funding”-indicator is a systemic indicator gauging the short-term funding sources of a bank from wholesale counterparties, which is reported in the FR Y – 15.⁸⁴² As also pointed out, this indicator is significant because an over-dependence on short-term wholesale funding as a less stable source of funding, renders BHCs susceptible to liquidity risk.⁸⁴³ The “weighted short-term wholesale funding”-indicator measures the liquidity characteristics of collateral in secured funding. It does so by assigning different risk weights to determine the degree to which the quality of assets used as collateral may mitigate asset fire sales.⁸⁴⁴ As further mentioned above, this indicator is intended to complement the *US Liquidity Coverage Ratio (LCR) framework* discussed hereinafter.⁸⁴⁵ This is because the LCR framework is by itself inadequate to address a systemic liquidity crisis and certain types and maturities of funding with the potential to result in significant losses from asset fire sales hence warranting heightened capital and liquidity standards.⁸⁴⁶

“Non-bank assets” are the assets of non-bank subsidiaries that are reported in the FR Y – 9LP⁸⁴⁷ for the “capital plan rule” discussed below.⁸⁴⁸ These type of assets indicate the extent of a bank’s business and operational complexity through corporate

⁸⁴¹ 12 CFR § 252.5(d).

⁸⁴² It was noted in subparagraph 3.7.1.2 above that this indicator is used to calculate the applicable G-SIB surcharge for US G-SIBs after these BHCs have been identified as G-SIBs in accordance with the indicator-based measurement approach of the Federal Reserve G-SIB framework.

⁸⁴³ See paragraph 3.7.1.2 above that discusses short-term wholesale funding sources and how they may cause systemic liquidity crisis.

⁸⁴⁴ Part V of the Stringent Prudential Standards Categories Final Rule.

⁸⁴⁵ See paragraph 3.8.4.1.

⁸⁴⁶ *Ibid.*

⁸⁴⁷ FR Y-9LP collects basic financial data from US BHCs, SLHCs, US IHCs and Securities holding companies (SHCs) on a parent-only basis in the form of a balance sheet, an income statement, supporting schedules relating to investments, cash flow and certain memoranda items for purposes of the assessment of their overall financial condition. See FR Y-9LP – Parent company only financial statements for large bank holding companies available at

www.federalreserve.gov/apps/reportforms/reportdetail.aspx?sOoYJ+5BzDYeK/+NsOyV7PkVi3bV1QrX (accessed 13 November 2019).

⁸⁴⁸ See paragraph 3.8.1.1 below.

structures and funding relationships that present a heightened resolvability risk which is correlated with the bank's adverse systemic impact.⁸⁴⁹ Specifically, a BHC's substantial engagement in non-bank activities, such as derivatives through non-bank subsidiaries, is riskier than the traditional banking activities of depository subsidiaries.⁸⁵⁰ This is because activities of non-bank subsidiaries are not subject to separate capital and liquidity requirements⁸⁵¹ or the direct regulation and supervision applicable to a regulated banking entity. Consequently, they pose greater concerns regarding safety and soundness and financial stability.⁸⁵²

The *Stringent Prudential Standards Categories Final Rule* thus states that the "non-bank assets"- indicator is intended in part to identify activities that a BHC conducts via subsidiaries that may be subject to lesser prudential regulation in an endeavour to address these risks. Particularly, the Federal Reserve's concern is that the distress or failure of a non-bank subsidiary could result in loss of public confidence in a BHC and cause significant systemic disruption, given that market participants generally evaluate the financial condition of a bank on a consolidated basis.⁸⁵³

The "off-balance sheet exposures"-indicator⁸⁵⁴ complements the asset-size indicator (as one of the items reported under the total exposures in the FR Y – 15)⁸⁵⁵ by taking into consideration additional risks that are not reflected in a BHC's measure of "on-

⁸⁴⁹ According to part V of the *Stringent Prudential Standards Categories Final Rule*, resolvability risk signifies a situation whereby a bank's resolution plan is not feasible and credible and as a result, such a BHC may potentially collapse in a disorderly manner and thus be bailed out with taxpayers' money.

⁸⁵⁰ In paragraph 1.2 of Chapter One, it was indicated that the introduction of derivatives transactions in the banking industry was among the factors that caused a heightened systemic risk that accounted for the global financial meltdown in 2008.

⁸⁵¹ Part IV of the *Stringent Prudential Standards Categories Final Rule*. Capital and liquidity requirements are fully discussed in paragraph 3.8 under the Federal Reserve framework for stringent prudential standards.

⁸⁵² Part IV of the *Stringent Prudential Standards Categories Final Rule*.

⁸⁵³ *Ibid.*

⁸⁵⁴ Section 165(k)(3) of the Dodd-Frank Act defines an off-balance sheet liability as an existing liability of a company that is not currently a balance sheet liability but may become one upon the happening of some future event. These include, but are not limited to the following transactions: direct credit substitutes in which a bank substitutes its own credit for a third party including standby letters of credit, irrevocable letters of credit that guarantee repayment of commercial paper, acceptances, sale and repurchase agreements, credit swaps, commodities contracts, forward contracts and securities contracts.

⁸⁵⁵ See paragraph 3.7.1 above.

balance sheet”-items.⁸⁵⁶ It is indicative of the degree to which customers or counterparties may be exposed to a risk of loss or may suffer disruption in the provision of financial services arising from off-balance sheet activities.⁸⁵⁷

As stated by the BCBS, “off-balance sheet-exposures” can also lead to significant liquidity draws, such as reliance on committed lines of credit,⁸⁵⁸ during market stress and their opacity is a potential source of systemic risk.⁸⁵⁹ Particularly, the funding of some off-balance sheet exposures such as derivatives transactions, during market stress, can lead to significant capital and liquidity draws and may result in a systemic crisis.⁸⁶⁰ In addition, derivatives transactions may pose contagion risk that could result in the amplification of a systemic crisis due to the triggering of terminations of derivatives contracts upon default by one of the contracting parties (early termination events).⁸⁶¹

3.7.2.3 Category IV stringent prudential standards

The scope of application of Category IV stringent prudential standards extends to US BHCs that hold minimum total consolidated assets of 100 billion USD, which are neither US G-SIBs nor meet the asset-size threshold for Category II and Category III US BHCs.⁸⁶² The Federal Reserve is of the view that the material financial distress or failure of US BHCs that are subject to Category IV stringent prudential standards will not greatly impact financial stability in the US relative to those US BHCs that are subject to Categories I, II and III stringent prudential standards.⁸⁶³

The reason the Federal Reserve, nonetheless, imposes Category IV stringent prudential standards on these US BHCs is because they operate on a wider scale of

⁸⁵⁶ Section 165 of the Dodd-Frank Act stipulates that a size of a BHC is measured based on total consolidated assets as reported in FR Y-9C, which is defined in subparagraph 3.7.1.1.1 above, and this definition excludes off-balance sheet items.

⁸⁵⁷ Part IV of the Stringent Prudential Standards Categories Final Rule

⁸⁵⁸ See paragraph 2.2, subparagraph 2.2.1.2, of Chapter Two, for the definition of committed lines of credit.

⁸⁵⁹ BCBS Management of banks’ off-balance sheet exposures (March 1986) available at <https://www.bis.org/publ/bcbssc134.pdf> (accessed 13 November 2019).

⁸⁶⁰ *Ibid.*

⁸⁶¹ As discussed in subparagraph 3.7.1.1 above, contagion risk arises from the transmission of financial distress among financial institutions owing to their interconnectedness. See also paragraph 1.2 of Chapter One for the definition of contagion risk.

⁸⁶² 12 CFR § 252.5(e).

⁸⁶³ Paragraph V of the Stringent Prudential Standards Categories Final Rule.

activities that give rise to operational and managerial complexity relative to smaller banks, and they can indeed have significant economic growth effects which may present safety and soundness risks.⁸⁶⁴ Category IV stringent prudential standards are thus tailored to the lower systemic risk profile characterising these BHCs.

3.8 Tailoring stringent prudential standards under section 401 of the EGRRCPA: amending section 165 of the Dodd-Frank Act

The Dodd-Frank Act, as amended by the EGRRCPA, sets mandatory stringent prudential standards as well as additional stringent prudential standards to be applied to US G-SIBs, Categories I, II and III US BHCs.⁸⁶⁵ In addition to these mandatory and additional stringent prudential standards, the Federal Reserve may also prescribe any other stringent prudential requirements that it deems appropriate.⁸⁶⁶

In particular, the Dodd-Frank Act provides for the following exhaustive list of mandatory stringent prudential standards:⁸⁶⁷

- (a) risk-based capital requirements and leverage limits;
- (b) liquidity requirements;
- (c) risk-management requirements;
- (d) resolution plans; and
- (e) concentration limits.

Further, the Act lists additional stringent prudential standards which include, but are not limited to:⁸⁶⁸

- (a) a contingent capital requirement;
- (b) enhanced public disclosures; including credit exposure reports
- (c) short-term debt limits.

⁸⁶⁴ In Part V of the Stringent Prudential Standards Categories Final Rule, the Federal Reserve notes that a failure or distress of BHCs that are subject to this Category may translate to the real economic, for example, it could result in loss of employment. However, US BHCs with minimum total consolidated assets of 100 billion USD that are subject to Category IV stringent prudential standards pose lesser systemic risk compared to US BHCs that hold minimum total consolidated assets of 100 billion USD and 75 billion USD in total assets in any of risk indicator of cross-jurisdictional activity, non-bank assets, weighted short-term wholesale funding and off-balance sheet exposure.

⁸⁶⁵ 12 USC § 5365(b)(1)(A) and (B).

⁸⁶⁶ 12 USC § 5365(b)(1)(B)(iv).

⁸⁶⁷ 12 USC § 5365(b)(1)(A)(i), (ii), (iii), (iv) and (v).

⁸⁶⁸ 12 USC § 5365(b)(1)(B)(i), (ii) and (iii). See paragraph 3.9 below for the discussions of these additional stringent prudential requirements.

As discussed in more detail below, the Federal Reserve’s implementation of section 165 of the Dodd-Frank Act, as subsequently amended by section 401 of the EGRRCPA, incorporates the following stringent prudential requirements: the capital buffer regime (the CCvB, the CCyB and the G-SIB surcharge), the supplementary leverage ratio, the enhanced supplementary leverage ratio, the liquidity standards (the LCR and the NSFR), the enhanced prudential standards incorporated in Regulation YY, resolution plans, single counterparty credit limits and total loss absorbing capacity (TLAC) requirements.⁸⁶⁹

3.8.1 The Federal Reserve’s capital buffer regime

To facilitate a better understanding of the discussions below, Table 3.8.1 outlines the Federal Reserve’s capital framework.⁸⁷⁰

US BHCs Categories	The capital framework
US G-SIBs	<ul style="list-style-type: none"> • CCvB plus any applicable CCyB and G-SIB surcharge.
Categories II and III standardised approach BHCs	<ul style="list-style-type: none"> • Standardised approach”-CCvB requirement that equals the stress capital buffer (SCB) requirement (discussed below) plus any applicable CCyB.
Categories II and II advanced approaches BHCs	<ul style="list-style-type: none"> • “Advanced approaches”-CCvB requirement that entails a CCvB of 2.5% of CET1 capital plus any applicable CCyB.
Category IV	<ul style="list-style-type: none"> • “Generally applicable capital” requirements under <i>the Collins Amendment</i>.

⁸⁶⁹ These stringent prudential requirements are discussed below in subparagraphs 3.8.1, 3.8.2, 3.8.3, 3.8.4, 3.8.5, 3.8.6, 3.8.7 and 3.8.8.

⁸⁷⁰ Discussed under subparagraph 3.8.1.1 below.

As part of the stringent prudential requirements to be applied to SIFI BHCs in the US, the Federal Reserve's capital buffer regime comprises the capital conservation buffer (CCvB), the countercyclical capital buffer (CCyB), and the G-SIB surcharge. The US capital buffer regime is implemented in Regulation Q, enacted in 2013, which sets forth minimum regulatory capital requirements for US BHCs, SLHCs and State member banks.⁸⁷¹

The Federal Reserve introduced the CCvB and the CCyB as part of its implementation of the *Basel III capital framework*⁸⁷² through a Final Rule entitled *Regulatory capital rules: regulatory capital, implementation of Basel III, capital adequacy, transition provisions, prompt corrective action, standardized approach for risk weighted assets, market discipline and disclosure requirements, advanced approaches risk-based capital rule, and market risk capital rule (Regulatory Capital Final Rule)*.⁸⁷³ The *Regulatory Capital Final Rule* was published in October 2013 and phased-in from January 2015 to January 2018.

3.8.1.1 The capital conservation buffer (CCvB)

The scope of the CCvB regime extends to board-regulated institutions, namely State member banks, BHCs, or SLHCs. It must also be noted that the CCvB ranges above the minimum regulatory capital.⁸⁷⁴ The CCvB is solely composed of CET1 capital.⁸⁷⁵ The applicable CCvB requirement for board-regulated institutions depends on whether an institution calculates risk weighted assets for purposes of determining risk-based capital requirements using a standardised approach or an advanced approaches framework.⁸⁷⁶ Board-regulated institutions that use the standardised approach must

⁸⁷¹ Title 12 CFR Part 217 – Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks (Regulation Q) available at <https://ecfr.io/Title-12/Part-217> (accessed 29 August 2017).

⁸⁷² Refer to paragraph 2.4, subparagraphs 2.4.1 and 2.4.2, of Chapter Two for the discussion of the Basel CCvB and CCyB regime.

⁸⁷³ Regulatory capital rules: regulatory capital, implementation of Basel III, capital adequacy, transition provisions, prompt corrective action, standardized approach for risk weighted assets, market discipline and disclosure requirements, advanced approaches risk-based capital rule, and market risk capital rule (October 2013) available at <https://www.govinfo.gov/content/pkg/FR-2013-10-11/pdf/2013-21653.pdf> (accessed 27 September 2017); Refer to paragraph 2.2 of Chapter Two for the definition of the concept of regulatory capital.

⁸⁷⁴ 12 CFR § 217.10(a)(1)(i), (ii), (iii) and (iv) sets out minimum capital ratios comprising of CET1 capital of 4.5 per cent, a Tier 1 capital of 6 per cent, total capital of 8 per cent and a leverage ratio of 4 per cent.

⁸⁷⁵ 12 CFR § 217.11(a)(1).

⁸⁷⁶ See paragraph 3.4 above for the definition of advanced approaches.

maintain the “standardised approach”-CCvB requirement that equals the Stress Capital Buffer (SCB) requirement discussed in more detail below, plus any applicable CCyB and any applicable G-SIB surcharge.⁸⁷⁷ According to the *Basel II framework*, the standardised approach entails the employment of external credit ratings agencies to determine a bank’s risk-based capital requirements.⁸⁷⁸ Institutions that are advanced approaches BHCs are required to hold an “advanced approaches”-CCvB requirement that entails a CCvB of 2.5 per cent of CET1 capital plus any applicable CCyB and the applicable G-SIB surcharge.⁸⁷⁹

As part of its stringent prudential regulation, a board-regulated institution is prohibited from making capital distributions or discretionary bonus payments or creating obligations to make such distributions or payments that exceeds its maximum pay-out amount during the current calendar year.⁸⁸⁰ A maximum pay-out amount equals an institution’s eligible retained income multiplied by a maximum pay-out ratio.⁸⁸¹ The “maximum pay-out ratio” is defined as a percentage of eligible retained income that an institution can pay out in the form of distributions and discretionary bonuses during a calendar quarter.⁸⁸² Thus, an institution to which a “standardised approach”- or “advanced approaches” -CCvB requirement applies that is greater than the required CCvB amount, will not be subject to a maximum pay-out amount. Alternatively, if its

⁸⁷⁷ 12 CFR § 217.11(c)(1)(iii)(A); See paragraph 3.8.5.1 below for the discussion of the stress buffer requirement. See paragraph 3.8.1.2 below for the discussion of the countercyclical buffer requirement; For the discussion of G-SIB surcharge, see paragraph 3.8.1.3 below.

⁸⁷⁸ See paragraph 50 of the *Basel II framework*.

⁸⁷⁹ 12 CFR § 217.11(c)(1)(iii)(B).

⁸⁸⁰ 12 CFR § 217.11(c)(1)(i).

⁸⁸¹ 12 CFR § 217.11(a)(2)(ii).

⁸⁸² 12 CFR § 217.11 (a)(2)(iii); 12 CFR § 217.11(c)(1)(ii); 12 CFR § 217.11(a)(2)(i) defines eligible retained income as the greater of a bank’s net income, as applicable, for the four preceding calendar quarters, net of any distributions and associated tax effects not already reflected in net income, and the average of a bank’s net income, as applicable, over the preceding four quarters. As per the Final Rule entitled *Regulatory Capital Rule and Total Loss-Absorbing Capacity Rule: Eligible Retained Income* (October 2020) 2020-19829.pdf (govinfo.gov) (accessed 15 December 2020), the maximum amount of capital distributions that a bank can make is limited as a percentage of its eligible retained income; 12 CFR § 217. 11(a)(2)(i)(B)(1); 12 CFR § 217. 11(a)(2)(i)(B)(1)(iii); 12 CFR § 217. 2 defines a distribution as a reduction of Tier 1 capital through repurchase of Tier 1 capital instrument or by other means and describes a discretionary bonus as payment made to an executive of a Board-regulated institution where such an institution retains the discretion as to whether to make payment and the amount of payment is determined by an institution without prior promise or agreement with the executive where such an executive has no express or implied contractual right to such bonus payment.

leverage buffer, as discussed below,⁸⁸³ is greater than the requirement of 2 per cent of CET1 capital, it will also not be subject to a maximum pay-out amount.⁸⁸⁴

The application of stringent prudential requirements in this context further entails that an institution will be prohibited from making capital distributions or discretionary bonus payments during a current calendar quarter in the following circumstances: if an institution's eligible retained income is negative; if the "standardised approach"-CCvB was less than its Stress Capital Buffer (SCB) requirement;⁸⁸⁵ or if the "advanced approaches"-CCvB was less than 2.5 per cent of the CET1 capital as of the end of the previous calendar quarter, and if the leverage buffer was less than its leverage buffer requirement, as of the end of the previous calendar quarter.⁸⁸⁶

3.8.1.2 The countercyclical capital buffer (CCyB)

The Dodd-Frank Act incorporates the CCyB regime as part of the reforms of the *Basel III capital framework*, and reached full transition in January 2019.⁸⁸⁷ This regime applies to advanced approaches US BHCs or Category III US BHCs.⁸⁸⁸ Consistent with the Basel CCyB regime, the US CCyB regime is an extension of the CCvB discussed above⁸⁸⁹ which is designed to absorb losses that are realised during market downturns and to regulate credit expansion.⁸⁹⁰ The CCyB regime recognises the centrality of advanced approaches BHCs or Category III US BHCs in credit intermediation.⁸⁹¹

⁸⁸³ See paragraph 3.8.3 below.

⁸⁸⁴ 12 CFR § 217.11(c)(1)(iv); 12 CFR § 217.11(a)(2)(v).

⁸⁸⁵ See paragraph 3.8.5.1 below for the discussion of the stress capital buffer requirement.

⁸⁸⁶ 12 CFR § 217.11(c)(1)(v). 12 CFR § 217.11(c)(1)(v) allows institutions that are barred from making capital distributions or discretionary bonus payments to make a request to the Federal Reserve to be granted permission to make such distributions or payments. The Federal Reserve may permit such institutions to make distributions or payments if it determines that those distributions or payments would not negatively impact on the institution's safety and soundness, and in making such a determination, the Federal Reserve will consider the nature and extent of such a request and the particular circumstances giving rise to it.

⁸⁸⁷ Section 616(a), (b), and (c) of the Dodd-Frank Act; See Paragraph 2.4.2 of Chapter Two for the analysis of the Basel CCyB regime.

⁸⁸⁸ 12 CFR § 217.11(b)(1).

⁸⁸⁹ See paragraph 3.8.2.1.

⁸⁹⁰ 12 CFR § 217.11(b)(1)(i).

⁸⁹¹ Part IV of the Stringent Prudential Standards Categories Final Rule.

The initial CCyB amount is fixed at zero per cent of RWAs.⁸⁹² The Federal Reserve may adjust this requirement to an amount that is set up to 2.5 per cent of RWAs.⁸⁹³ The Federal Reserve is expected to consider the applicable level of the CCyB at least annually. As at March 2019, the Federal Reserve stated that the US CCyB regime would remain at the current level of zero per cent of a bank's RWAs,⁸⁹⁴ thus, indicating a normal period that is not associated with a build-up of systemic risk. As at December 2020, the Federal Reserve announced that the rate of the CCyB would still remain at zero per cent of a bank's RWAs,⁸⁹⁵ and this rate has not been adjusted as yet.

The Federal Reserve issued a policy statement entitled *Regulatory capital rules: the Federal Reserve Board's framework for implementing the U.S. Basel III countercyclical capital buffer (The Federal Reserve countercyclical capital buffer policy statement)*. This statement became effective from October 2016, and provides the framework for setting the CCyB for advanced approaches US BHCs with regard to US-based credit exposures.⁸⁹⁶ According to this policy statement, the Federal Reserve will activate the CCyB on prior notice of twelve months, when systemic vulnerabilities such as high leverage in the financial sector, are judged to be meaningfully above normal, demonstrating periods of accelerated credit growth. It will reduce or release the CCyB when systemic vulnerabilities abate or recede, or will deactivate it when it becomes necessary to promote financial stability.⁸⁹⁷ The Federal Reserve's decision regarding the adjustment of the CCyB is informed by a range of macroeconomic indicators, and

⁸⁹² 12 CFR § 217.11(b)(2)(i).

⁸⁹³ 12 CFR § 217.11(b)(2)(iii).

⁸⁹⁴ Press release: Federal Reserve Board votes to affirm the countercyclical capital buffer (CCyB) at the current level of 0 percent (March 2019) available at <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20190306c.htm> (accessed 30 November 2019).

⁸⁹⁵ Federal Reserve Board votes to affirm the countercyclical capital buffer (CCyB) at the current rate of 0 percent (December 2020) available at <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201218c.htm> (accessed 19 May 2021).

⁸⁹⁶ Federal Reserve System Regulatory capital rules: the Federal Reserve Board's framework for implementing the U.S. Basel III countercyclical capital buffer (September 2016) available at <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20160908b1.pdf> (accessed 27 September 2017).

⁸⁹⁷ Part III of the Federal Reserve countercyclical capital buffer policy statement states that given that the countercyclical capital buffer is a macro-prudential tool rather than a micro-prudential instrument, its activation or deactivation will depend on broader developments in the US financial system rather than focusing on the activities of individual banking institutions. Appendix A of this statement mentions that factors that monitor credit expansion widely vary from jurisdiction to jurisdiction, and the Credit-to-GDP ratio is established in the Basel CCyB regime as the main indicator. See paragraph 2.4.2 of Chapter Two.

financial and supervisory information indicating an increase in systemic risk including but not limited to, the Credit-to-GDP ratio,⁸⁹⁸ asset prices and other factors indicative of relative credit and liquidity expansion or contraction.⁸⁹⁹

An increased CCyB requirement takes effect 12 months from the date of announcement unless the Federal Reserve establishes an earlier date with substantiated grounds.⁹⁰⁰ A decreased CCyB requirement will be effective on the day following an announcement of the final determination or the earliest date permissible under applicable law or regulation.⁹⁰¹ Notably, the CCyB amount will return to zero percent 12 months after the effective date that the adjusted CCyB amount is announced, unless the adjusted CCyB is maintained or if it is adjusted again before the expiration of the 12 months period.⁹⁰²

3.8.1.3 G-SIB surcharge

To facilitate a better understanding of the discussions that follow, Table 3.8.1.3 below demonstrates the Federal Reserve's G-SIB surcharge regime.

Method 1 score (in basis points)	Method 1 surcharge
• Below 130	0.0%
• 130-229	1.0%
• 230-329	1.5%
• 330-429	2.0%
• 430-529	2.5%
• 530-629	3.5%

⁸⁹⁸ See subparagraph 2.4.2 of Chapter Two for the definition of Credit-to-GDP ratio.

⁸⁹⁹ 12 CFR § 217.11(b)(2)(iv). See further, Federal Reserve Financial Stability Report (May 2021) available at

<https://www.federalreserve.gov/publications/files/financial-stability-report-20210506.pdf> (accessed 20

June 2022); Federal Reserve Financial Stability Report (November 2021) available at

<https://www.federalreserve.gov/publications/files/financial-stability-report-20211108.pdf> (accessed 20

June 2022); Federal Reserve Financial Stability Report (May 2022) available at

<https://www.federalreserve.gov/publications/files/financial-stability-report-20220509.pdf> (accessed 20

June 2022).

⁹⁰⁰ 12 CFR 217.11(b)(2)(v)(A).

⁹⁰¹ 12 CFR 217.11(b)(2)(v)(B).

⁹⁰² 12 CFR 217.11(b)(2)(vi).

<ul style="list-style-type: none"> • 630 or greater. 	3.5% plus 1.0% for every 100 basis points increase in score.
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Method 2 score (in basis points)	Method 2 surcharge
<ul style="list-style-type: none"> • Below 130 	0.0%
<ul style="list-style-type: none"> • 130-229 	1.0%
<ul style="list-style-type: none"> • 230-329 	1.5%
<ul style="list-style-type: none"> • 330-429 	2.0%
<ul style="list-style-type: none"> • 430-529 	2.5%
<ul style="list-style-type: none"> • 530-629 	3.0%
<ul style="list-style-type: none"> • 630-729 	3.5%
<ul style="list-style-type: none"> • 730-829 	4.0%
<ul style="list-style-type: none"> • 830-929 	4.5%
<ul style="list-style-type: none"> • 930-2029 	5.0%
<ul style="list-style-type: none"> • 1030-1129 	5.5%
<ul style="list-style-type: none"> • 1130 or greater. 	5.5% plus 0.5% for

As noted above in the discussion of the assessment methodology for US G-SIBs, the G-SIB surcharge, as incorporated by the *Basel G-SIB framework*,⁹⁰³ was implemented through the *US G-SIB Surcharge Final Rule* in August 2015.⁹⁰⁴ The *US G-SIB Surcharge Final Rule*⁹⁰⁵ only applies to US G-SIBS and requires US G-SIBs to compute the G-SIB surcharge using a “bucketing”-approach. This bucketing approach ranks individual G-SIBs in terms of their systemic scores corresponding to the level of their applicable G-SIB surcharge.⁹⁰⁶ The G-SIB surcharge extends the CCvB, which is further augmented by any applicable CCyB⁹⁰⁷ as discussed above.⁹⁰⁸ The G-SIB

⁹⁰³ See paragraph 2.2, subparagraph 2.2.1, of Chapter Two.

⁹⁰⁴ See paragraph 3.7.1.

⁹⁰⁵ See subparagraph 3.7.1 above.

⁹⁰⁶ 12 CFR § 217.403 (a); Part II of the US G-SIB Surcharge Final Rule; See further, Lutz C (2016) “Systemically important banks and increased capital requirements in the Dodd-Frank era” 138 *Economic Letters* 75; Berg SA (2011) “Systemic surcharges and measures of systemic importance” 19 *Journal of Financial Regulation and Compliance* 383; BCBS RCAP Assessment of Basel III G-SIB framework and review of D-SIB frameworks – United States (June 2016) available at <https://www.bis.org/bcbs/publ/d369.pdf> (accessed 29 August 2017).

⁹⁰⁷ 12 CFR § 217. 11(a)(1); 12 CFR § 217. 11(a)(2)(i)(B)(2).

⁹⁰⁸ The CCvB and the CCyB are respectively discussed in subparagraphs 3.8.1.1 and 3.8.1.2 above.

surcharge for US G-SIBs is calculated using the method 1-score⁹⁰⁹ under the indicator-based measurement approach to generate the method 1-surcharge,⁹¹⁰ as well as the method 2-score⁹¹¹ under the short-term wholesale funding framework to produce the method 2-surcharge.⁹¹²

The method 1-score allocates the method 1-surcharge to four buckets corresponding to the systemic footprint of a particular US G-SIB.⁹¹³ Thus the higher the bucketed weighting of a G-SIB, the higher the surcharge it attracts. Bucket one, having a rate of 1 per cent G-SIB surcharge, applies to US G-SIBs that obtain a systemic score that is between 130 and 229 basis points.⁹¹⁴ Bucket two has a rate of 1.5 per cent G-SIB surcharge and applies to US G-SIBs that score between 230 and 329 basis points. Bucket three, attracting a 2 per cent G-SIB surcharge, covers US G-SIBs that score between 330 and 429 basis points. Bucket four has a rate of 2.5 per cent G-SIB surcharge and it is imposed on US G-SIBs that have a systemic score that is between 430 and 529 basis points. The fifth bucket is empty and has an elevated G-SIB surcharge of 3.5 per cent to encourage US G-SIBs to reduce their systemic risk profile so that they avoid meeting the requirements for the applicability of the higher surcharge applicable to bucket five.⁹¹⁵ Notably, bucket five applies to a G-SIB that obtains a systemic score that is between 530 and 629 basis points. If a systemic score of a US G-SIB equals or exceeds 630 basis points, the applicable G-SIB surcharge equals 4.5 per cent.⁹¹⁶ An additional 1 per cent G-SIB surcharge applies for every 100 basis points obtained by a US G-SIB if such a G-SIB scores beyond 630 basis points.⁹¹⁷

⁹⁰⁹ See subparagraph 3.7.1 above for the definition of the method 1 score.

⁹¹⁰ As per 12 CFR § 217.403 (b)(1), the method 1 surcharge is the amount of the G-SIB surcharge that applies to a G-SIB based on the number of basis points it obtains in method 1 score under the indicator-based measurement approach.

⁹¹¹ The method 2 score is defined in subparagraph 3.7.1.2 above.

⁹¹² 12 CFR § 217.403(c)(1) defines the method 2 surcharge as the amount of the G-SIB surcharge that applies to a G-SIB corresponding to its method 2 score under the short-term wholesale funding framework. See subparagraphs 3.7.1.1 and 3.7.1.2 above for the discussion of the Federal Reserve's indicator-based measurement approach and the short-term wholesale funding framework, respectively.

⁹¹³ 12 CFR § 217.403 (b)(1).

⁹¹⁴ See paragraph 1.7 of Chapter One for the definition of a basis point.

⁹¹⁵ 12 CFR § 217.403(c)(2).

⁹¹⁶ 12 CFR § 217.403(b)(2)(i).

⁹¹⁷ 12 CFR § 217.403(b)(2)(ii).

The Financial Stability Board (FSB)'s current list of G-SIBs⁹¹⁸ shows the individual US G-SIBs surcharges that are applicable under the method 1-surcharge. JP Morgan Chase populates the fourth bucket and is subject to a 2.5 per cent G-SIB surcharge. Bank of America and Citigroup occupy the third bucket and are each subject to a 2.0 per cent G-SIB surcharge. Goldman Sachs is located in the second bucket and attracts a 1.5 per cent G-SIB surcharge. Bank of New York Mellon, Morgan Stanley, State Street and Wells Fargo are allocated a first bucket assigned a 1 per cent G-SIB surcharge.

Under the method 2-surcharge, the first four buckets produce G-SIB surcharges that are similar to those generated in the method 1-surcharge, ranging from 1 per cent for the least ranking US G-SIB with a systemic score that is between 130 basis points and 229 basis points to 2.5 per cent for a US G-SIB that populates the fourth bucket and attracting a systemic score that is between 430 and 529 basis points.⁹¹⁹

However, in contrast to the method 1-surcharge, the method 2-surcharge's fifth bucket attracts a 3 per cent G-SIB surcharge, thereby covering G-SIBs with a systemic score that is between 530 and 629 basis points. US G-SIBs occupying the sixth bucket have a systemic score that is between 630 and 729 basis points, thereby corresponding to a 3.5 per cent G-SIB surcharge. US G-SIBs that populate the seventh bucket with a systemic score between 730 and 829 basis points, are subject to a 4 per cent G-SIB surcharge. US G-SIBs with a systemic score between 830 and 929 basis points fall into the eighth bucket and are assigned a G-SIB surcharge of 4.5 per cent. The ninth bucket is populated by US G-SIBs with a systemic score that is between 930 and 1029 basis points and are allocated a 5 per cent G-SIB surcharge. US G-SIBs with a systemic score between 1030 and 1129 basis points fall into the tenth bucket and are assigned a 5.5 per cent G-SIB surcharge. If a G-SIB assumes a systemic footprint to such an extent that its score is equal to or beyond 1130 basis points, it will attract a G-SIB surcharge of 6.5 per cent, which will escalate with 0.5 five per cent for each 100 basis points that the G-SIB scores beyond 1130 basis points.⁹²⁰

⁹¹⁸ FSB 2022 *List of Global Systemically Important Banks (G-SIBs)* available at <https://www.fsb.org/wp-content/uploads/P211122.pdf> (accessed 30 November 2022).

⁹¹⁹ 12 CFR § 217.403(c)(1).

⁹²⁰ 12 CFR § 217.403(c)(2).

If the systemic footprint of a G-SIB rises, an increased G-SIB surcharge becomes effective one calendar year after the date of calculation of the basis point score.⁹²¹ A decrease in the G-SIB surcharge applies in January of the year following the calendar year in which a decreased G-SIB surcharge was calculated.⁹²²

The Federal Reserve applies the G-SIB surcharges, produced under the method 2-surcharge of the short-term wholesale funding framework to US G-SIBs, and not the surcharges generated under the method 1-surcharge of the indicator-based measurement approach. As is evident from the discussion above, the method 2-surcharge generates higher systemic scores resulting in higher G-SIB surcharge rates compared to the method 1-surcharge approach.⁹²³ Thus, the Federal Reserve considers the US G-SIB framework to be more stringent than the *Basel G-SIB framework*.⁹²⁴ This approach is in line with the view that the BCBS standards are minima and that jurisdictions are free to impose stricter prudential requirements than those indicated by the BCBS framework.⁹²⁵ The US G-SIB surcharge was concurrently phased-in with the CCvB and the CCyB from January 2016, and fully implemented by January 2019.

3.8.2 The supplementary leverage ratio framework

To facilitate a better understanding of the discussions that follow, Table 3.8.2 below illustrates the Federal Reserve's supplementary leverage ratio and enhanced supplementary leverage ratio frameworks discussed hereinafter.⁹²⁶

⁹²¹ 12 CFR § 217.403(d)(1).

⁹²² 12 CFR § 217.403(d)(2).

⁹²³ Part I of the US G-SIB Surcharge Final Rule.

⁹²⁴ Part II of the US G-SIB Surcharge Final Rule; Board of the Federal Reserve, Calibrating the GSIB Surcharge (July 2015) available at

<https://www.federalreserve.gov/aboutthefed/boardmeetings/gsib-methodology-paper-20150720.pdf>

(accessed 9 September 2017). See further, Glasserman PG *et al* "A comparison of U.S. and International global systemically important banks" Office of Financial Research brief series (August 2015) available at

https://www.financialresearch.gov/briefs/files/OFRbr-2015-07_A-Comparison-of-US-and-International-Global-Systemically-Important-Banks.pdf (accessed 29 August 2017). Glasserman and Loudis observe that US G-SIBs have a high systemic score ranking in terms of the systemic indicators of the indicator-based measurement methodology.

⁹²⁵ See paragraph 2.2, subparagraph 2.2.2, of Chapter Two.

⁹²⁶ Discussed under this subparagraph (subparagraph 3.8.2), and subparagraph 3.8.3 below.

Categories	The supplementary leverage ratio
Categories II and III BHCs	<ul style="list-style-type: none"> • 3% supplementary leverage ratio of a BHC's total exposure.
Category IV BHCs	<ul style="list-style-type: none"> • "US leverage ratio" under the Collins Amendment.
US G-SIBs	<ul style="list-style-type: none"> • Enhanced supplementary leverage ratio of 3% of a G-SIB's total exposure • plus 2% leverage buffer
US G-SIBs' insured depository institutions	<ul style="list-style-type: none"> • 6% of an insured depository institution's total exposure amounting to "well capitalised" requirement under Collins Amendment.

The US supplementary leverage ratio is established under the *Regulatory Capital Final Rule*,⁹²⁷ which was implemented in the US financial system in 2013 as part of the *Basel III capital framework*. It applies to advanced approaches BHCs or Category III BHCs.⁹²⁸ Consistent with the Basel III supplementary leverage ratio as discussed in Chapter Two,⁹²⁹ these BHCs are subject to a supplementary leverage ratio that consists of 3 per cent of Tier 1 capital to total exposure of a BHC, consisting of on-balance sheet and off-balance sheet items⁹³⁰ and a supplementary leverage ratio is intended to regulate the build-up of leverage caused by excessive credit expansion in the US financial system. The supplementary leverage ratio is subject to a quarterly public disclosure requirement.⁹³¹

In November 2019, the Federal Reserve issued a Final Rule entitled *Regulatory Capital Rule: revisions to the supplementary leverage ratio to exclude certain central bank deposits of banking organizations predominantly engaged in custody*,

⁹²⁷ The Regulatory Capital Final Rule is highlighted in subparagraph 3.8 above.

⁹²⁸ 12 CFR § 217.10 (a)(1)(v).

⁹²⁹ See subparagraph 2.4.4 of Chapter Two.

⁹³⁰ 12 CFR § 217.10 (a)(1)(v); 12 CFR § 217.10 (c)(4)(i); See subparagraph 2.4.4 of Chapter Two for the definition of on-balance sheet and off-balance sheet exposure.

⁹³¹ 12 CFR § 217.172(d).

*safekeeping, and asset servicing activities.*⁹³² This Final Rule amended the *Regulatory Capital Final Rule*⁹³³ to exclude from the supplementary leverage ratio certain funds of a “custodial banking organisation” that are deposited with a qualifying central bank and those deposited in the account of a “custodial banking organisation” that are linked to fiduciary, custodial, safekeeping and asset servicing activities.⁹³⁴ A “custodial banking organisation” is defined as a top-tier depository institution holding company⁹³⁵ that keeps assets under custody for safekeeping which are at least 30 times the amount of its total assets, or a State member bank that is a subsidiary of such a depository institution holding company.⁹³⁶

Notably, in April 2020, the Federal Reserve issued an *interim Final Rule* excluding US Treasury securities and deposits at Federal Reserve banks from the total leverage exposure to allow BHCs flexibility to act as credit intermediaries in the wake of the recent global Covid19 pandemic.⁹³⁷

3.8.3 The enhanced supplementary leverage ratio for US G-SIBs

In May 2014, the Federal Reserve, jointly with the OCC and the FDIC, issued a Final Rule on *Regulatory capital, enhanced supplementary leverage ratio standards for certain bank holding companies and their insured institutions (Enhanced Supplementary Leverage Ratio Final Rule)* prescribing enhanced supplementary leverage ratio for US G-SIBs and their insured depository institutions.⁹³⁸ The enhanced

⁹³² Regulatory Capital Rule: revisions to the supplementary leverage ratio to exclude certain central bank deposits of banking organizations predominantly engaged in custody, safekeeping, and asset servicing activities (November 2019) available at

<https://www.fdic.gov/news/board/2019/2019-11-19-notice-sum-b-fr.pdf> (accessed 4 April 2020).

⁹³³ The Regulatory Capital Final Rule is discussed in subparagraph 3.8.1 above.

⁹³⁴ 12 CFR § 217.10(c)(4)(J); Section 402(b)(2) of the EGRRCPA; In terms of section 402(b) (1) of the EGRRCPA, a central bank in this context means the Federal Reserve System, the European Central Bank and central banks of member countries of the OECD that are assigned a zero per cent risk weight under 12 CFR § 217.32 and 12 CFR § 324.32 under the regulatory capital requirements of Federal Reserve and the FDIC, respectively, and the sovereign debt of such a member country must not be, or have not been in default during the previous five years.

⁹³⁵ 12 CFR § 217.2 defines a depository institution holding company as a BHC or SLHC.

⁹³⁶ 12 CFR § 217.2.

⁹³⁷ Temporary exclusion of U.S. Treasury securities and deposits at Federal Reserve Banks from the supplementary leverage ratio (April 2020) available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20200401a1.pdf> (accessed 1 October 2020).

⁹³⁸ Regulatory capital rules: regulatory capital, enhanced supplementary leverage ratio standards for certain bank holding companies and their subsidiary insured depository institutions (May 2014) available at

<https://www.gpo.gov/fdsys/pkg/FR-2014-05-01/pdf/2014-09367.pdf> (accessed 18 September 2017).

supplementary leverage ratio for US G-SIBs is composed of a minimum leverage buffer of 2 per cent of Tier 1 capital, plus the Basel III minimum supplementary leverage ratio of 3 per cent of Tier 1 capital.⁹³⁹

Further, the insured depository institutions of US G-SIBs are subject to a supplementary leverage ratio of 6 per cent of Tier 1 capital which will have them to be considered “well capitalised”.⁹⁴⁰ The “well capitalised” rule recognises that the 4 per cent leverage ratio (“US leverage ratio”) that applies to the insured depository institutions⁹⁴¹ pursuant to section 171 of the Dodd-Frank Act (Collins Amendment)⁹⁴² results in lower required capital levels, given the exclusion of off-balance sheet exposures.⁹⁴³ In other words, the off-balance sheet exposure component of the Basel supplementary leverage ratio is unaccounted for in the “US leverage ratio”.⁹⁴⁴ Therefore, the *Enhanced Supplementary Leverage Final Rule* posits that the increased supplementary leverage ratio for insured depository institutions of US G-SIBs raises capital levels to match Basel III leverage ratio requirements.⁹⁴⁵ A breach of the enhanced supplementary leverage ratio attracts constraints on capital distributions and discretionary bonus payments, just like the rules that apply when the CCvB requirement is violated.⁹⁴⁶

⁹³⁹ 12 CFR § 217. 11(c) (4)(i) states that a leverage buffer is composed solely of Tier 1 capital; 12 CFR § 217. 11(c) (4)(ii) states that a G-SIB has a leverage buffer that equals its supplementary leverage ratio minus 3 per cent; 12 CFR § 217. 11(a)(2)(v) stipulates that a BHC’s leverage buffer requirement is 2 per cent.

⁹⁴⁰ See part I of the Enhanced Supplementary Leverage Ratio Final Rule. Section 38 (b)(A) of the Federal Deposit Insurance Act defines a “well capitalised” insured depository institution as a depository institution that significantly exceeds the required minimum level for each relevant capital measure.

⁹⁴¹ 12 CFR § 217.10 (a)(iv).

⁹⁴² Section 171 of the Dodd-Frank Act, known as the Collins Amendment, is named after the drafter, Senator Susan Collins. The Collins Amendment authorises appropriate Federal banking agencies to impose generally applicable leverage capital requirements to insured depository institutions, which is defined as Tier 1 capital to average total assets (“US leverage”). This authority is conferred under section 38 of the Deposit Insurance Act relating to prompt corrective action aimed at resolving problems to protect insured fund.

⁹⁴³ The “US leverage” ratio is incorporated in the Regulatory Capital Final Rule, highlighted in paragraph 3.8.1 above, as part of the Federal Reserve’s minimum capital ratios.

⁹⁴⁴ The Basel supplementary leverage ratio is discussed at paragraph 2.4, subparagraph 2.4.4, of Chapter Two.

⁹⁴⁵ Part I of the Enhanced Supplementary Leverage Ratio Final Rule.

⁹⁴⁶ See subparagraph 3.8.1.2 above; See also paragraph 2.4, subparagraph 2.4.1, of Chapter Two regarding the rules that are applicable for breach of the CCvB.

In April 2018, the Federal Reserve and the OCC jointly issued a notice of proposed rulemaking that sought to amend the *Enhanced Supplementary Leverage Ratio Final Rule*.⁹⁴⁷ In terms of this Proposed Rule, US G-SIBs would be required to hold a supplementary leverage ratio of 3 per cent of Tier 1 capital *plus* a leverage buffer tailored to each G-SIB that is set at 50 per cent of the G-SIB surcharge and that would replace the 2 per cent leverage buffer of Tier 1 capital that uniformly applies to all G-SIBs. For instance, if the G-SIB surcharge of a particular bank is 2 per cent, it would be required to hold a minimum of 4 per cent supplementary leverage ratio, which would consist of a 3 per cent supplementary leverage ratio plus 1 per cent of CET1 capital constituting half of the applicable G-SIB surcharge.⁹⁴⁸ The *Proposed Rule* further states that the insured depository institutions of G-SIBs would similarly be required to maintain a supplementary leverage ratio of 3 per cent of Tier 1 capital plus 50 per cent of the G-SIB surcharge that applies to a particular G-SIB. Thus, a “well capitalised” threshold would be a half of the G-SIB surcharge that applies to a US G-SIB.

According to the Federal Reserve, the proposed amendment of the *Enhanced Supplementary Leverage Ratio Final Rule* envisaged reducing the stringency of the enhanced supplementary leverage ratio to ensure that the supplementary leverage ratio requirement serves its purpose of supplementing the capital requirements by including off-balance sheet items in the total exposure of a bank, in addition to on-balance sheet assets.⁹⁴⁹ The rationale for the relaxation of the enhanced supplementary leverage ratio requirements would be to take account of the stringency of capital requirements such as the G-SIB surcharge,⁹⁵⁰ and the Total-Loss Absorbing Capacity (TLAC) requirement⁹⁵¹ (as discussed below) which are already applicable to

⁹⁴⁷ Joint notice of proposed rulemaking to modify the enhanced supplementary leverage ratio standards applicable to U.S. global systemically important bank holding companies and certain of their insured depository institution subsidiaries (April 2018) available at <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20180411a1.pdf> (accessed 10 October 2018).

⁹⁴⁸ Press release – Rule proposed to tailor ‘enhanced supplementary leverage ratio’ requirements (April 2018) available at <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20180411a.htm> (accessed 10 October 2018).

⁹⁴⁹ Joint notice of proposed rulemaking to modify the enhanced supplementary leverage ratio standards applicable to U.S. global systemically important bank holding companies and certain of their insured depository institution subsidiaries (April 2018) available at <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20180411a1.pdf> (accessed 10 October 2018).

⁹⁵⁰ See paragraph 3.8.1.3 above.

⁹⁵¹ See paragraph 3.8.8 below.

US G-SIBs. However, as indicated above, the *Enhanced Supplementary Leverage Ratio Proposed Rule* would increase the supplementary leverage ratio requirements with the applicable G-SIB surcharge when the G-SIBs systemic footprint rises.⁹⁵²

3.8.4 The Federal Reserve’s liquidity regulatory framework

To facilitate a better understanding of the below discussions, Table 3.8.4 below outlines the Federal Reserve’s liquidity regulation framework discussed hereinafter.⁹⁵³

Categories of BHCs	LCR	NSFR
US G-SIBs, Category II, and Category III BHCs with 75 billion USD or more in average weighted short-term wholesale funding	<ul style="list-style-type: none"> They are subject to the full LCR requirement. 	<ul style="list-style-type: none"> They are subject to the full NSFR requirement.
Category III BHCs with average weighted short-term wholesale funding below 75 billion USD and Category IV BHCs with 50 billion USD or more in average weighted short-term wholesale funding	<ul style="list-style-type: none"> They are subject to a reduced LCR requirement. 	<ul style="list-style-type: none"> They are subject to a reduced LCR requirement.

3.8.4.1 The US Liquidity Coverage Ratio (LCR)

In October 2014, the Federal Reserve, the OCC, and the FDIC issued a Final Rule on *Liquidity Coverage Ratio: Liquidity Risk Measurement Standards* (the *US LCR framework*) covering advanced approaches US BHCs and their depository institutions

⁹⁵² The supplementary ratio requirement is fully detailed in subparagraph 3.8.2 above.

⁹⁵³ See subparagraphs 3.8.4.1 and 3.8.4.2 below.

with minimum consolidated assets of 10 billion USD.⁹⁵⁴ The *US LCR framework*, as codified in Regulation WW,⁹⁵⁵ and phased-in in January 2015 to January 2017, complements the liquidity risk-management and liquidity stress-testing and buffer requirements, as discussed below.⁹⁵⁶ The US LCR is publicly disclosed quarterly.⁹⁵⁷ In July 2017, the BCBS assessed the *US LCR framework* and found it to be generally compliant with the *Basel III LCR framework*.⁹⁵⁸

In November 2019, the Federal Reserve, the OCC and the FDIC jointly released a Final Rule titled *Changes to applicability thresholds for regulatory capital and liquidity requirements (Regulatory Capital and Liquidity Tailoring Final Rule)*. This Rule determines the applicability criteria of the above-discussed capital requirements⁹⁵⁹ and the liquidity standards for US G-SIBs, as well as Category II, Category III and Category IV US BHCs, in line with the EGRRCPA revised asset-size threshold,⁹⁶⁰ as implemented in the *Stringent Prudential Standards Categories Final Rule*⁹⁶¹. The *Capital and Liquidity Tailoring Final Rule* subsequently extended the sphere of application of the *US LCR framework* to US G-SIBs and their depository institution subsidiaries with 10 billion USD or more in consolidated assets, Category II and

⁹⁵⁴ Liquidity Coverage Ratio: Liquidity risk measurement standards (October 2014) available at <https://www.gpo.gov/fdsys/pkg/FR-2014-10-10/pdf/2014-22520.pdf> (accessed 11 September 2017); For liquidity regulation in the US, see also Tarullo DK, remarks on “Liquidity regulation” at the Clearing House 2014 annual conference, New York, November 20, 2014 available at <https://www.federalreserve.gov/newsevents/speech/tarullo20141120a.pdf> (accessed 11 September 2017).

⁹⁵⁵ Title 12 CFR Part 249 – Liquidity Risk Measurements Standards (Regulation WW) available at <https://ecfr.io/Title-12/Part-249> (accessed 1 October 2020).

⁹⁵⁶ See paragraph 3.8.5.2 below.

⁹⁵⁷ 12 CFR § 249.91; Liquidity Coverage Ratio: public disclosure requirements; extension of compliance period

for certain companies to meet the Liquidity Coverage Ratio requirements (December 2016) available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20161219a1.pdf> (accessed 28 June 2017).

⁹⁵⁸ BCBS RCAP Assessment of Basel III LCR regulations – United States of America (July 2017) available at

<https://www.bis.org/bcbs/publ/d409.pdf> (accessed 29 August 2017). In particular, the compliance of the *US LCR framework* was judged to be compliant in respect of the definition of HQLA, liquidity outflows, liquidity inflows, and disclosure requirements, as set out in the *Basel III LCR framework* discussed in paragraph 2.4.5, subparagraph 2.4.5.1, of Chapter Two.

⁹⁵⁹ See subparagraph 3.8.1 above.

⁹⁶⁰ Changes to applicability thresholds for regulatory capital and liquidity requirements (November 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-11-01/pdf/2019-23800.pdf> (accessed 30 November 2019).

⁹⁶¹ See paragraph 3.7 above.

Category III US BHCs, as well as Category IV US BHCs with 50 billion USD or more in average weighted short-term wholesale funding.⁹⁶²

Specifically, US G-SIBs and Category II US BHCs, or Category III US BHCs with 75 billion USD or more in average weighted short-term wholesale funding, are subject to the full requirements of the *US LCR framework*. Category III US BHCs which fall below the specified threshold of average weighted short-term wholesale funding, and Category IV US BHCs with 50 billion USD or more in average weighted short-term wholesale funding, are subject to a reduced LCR requirement calibrated at 85 per cent and 70 per cent of the full LCR requirement, respectively. US G-SIBs, Category II US BHCs and Category III US BHCs must calculate the LCR daily while Category IV US BHCs are required to compute it on a monthly basis.⁹⁶³ The reduced LCR for Category IV US BHCs takes into consideration their lesser systemic importance relative to that of the other Categories.⁹⁶⁴ The Federal Reserve utilises the *Complex Institution Liquidity Monitoring Report (FR 2052a)* to collect data for monitoring the liquidity profile of BHCs.⁹⁶⁵

An institution's LCR is determined by taking High Quality Liquid Assets (HQLA), as explained in Chapter Two,⁹⁶⁶ divided by the institution's total net cash outflows over a thirty calendar day stress period under idiosyncratic and market stress events or any additional scenarios that are tailored to the liquidity risk profile of a BHC.⁹⁶⁷ Further, the US LCR caps total cash inflows at 75 per cent of total cash outflows to guarantee the availability at all times of 25 per cent of the total HQLA.⁹⁶⁸ Total cash inflows are

⁹⁶² 12 CFR § 249.1 (b).

⁹⁶³ 12 CFR § 249.10(a).

⁹⁶⁴ Part IV of Capital and Liquidity Tailoring Final Rule.

⁹⁶⁵ FR 2052a Report collects information on selected assets, liabilities, funding activities and contingent liabilities and data on different business lines of BHCs to identify and monitor their liquidity risk profile and put in place supervisory mechanisms for liquidity risk-management. Refer to FR 2052a – Complex Liquidity Monitoring Report available at <https://www.federalreserve.gov/apps/reportforms/reportdetail.aspx?sOoYJ+5BzDbpqbkiRe3/1zdGfyNn/SeV> (accessed 29 August 2019).

⁹⁶⁶ See paragraph 2.4.5.1 thereto.

⁹⁶⁷ 12 CFR § 249.30; 12 CFR § 249.32 includes the following cash outflows: retail funding outflows, brokered deposit outflow for retail customers or counterparties, unsecured wholesale funding outflows and secured funding and asset exchange outflows.

⁹⁶⁸ 12 CFR § 249.33(b) encompasses inflows which include but are not limited to: net derivative cash inflow amount, retail cash inflow amount, unsecured wholesale cash inflow amount, securities cash, secured lending and asset exchange cash inflows.

capped to discourage undue reliance on cash inflows for meeting LCR requirements, in line with the *Basel III LCR framework*.⁹⁶⁹

Consistent with the BCBS definition, HQLA is defined in the *US LCR framework* as “assets that are easily monetised without experiencing a substantial loss of value during stressful events, or with no loss of value at all.”⁹⁷⁰ HQLA are accordingly classified as Level 1 liquid assets that consist of a minimum of 60 per cent of the total composition of the HQLA, and Level 2A and Level 2B liquid assets that constitute not more than 40 per cent of the total HQLA and which are subject to 50 per cent haircuts.⁹⁷¹ Level 1 liquid assets include: Federal Reserve banks balances; foreign withdrawable reserves; a security issued or guaranteed by the US Treasury; a security issued by the US government agency and security issued or guaranteed by sovereign entities, the BIS, the IMF, the ECB, European Community or a multilateral development bank that is assigned a zero per cent risk weight; and a security that is liquid and readily marketable, and issued or guaranteed by an entity whose obligations have a proven record as a reliable source of liquidity in repurchase or sales markets during stressed market conditions.⁹⁷²

Level 2A liquid assets are liquid and readily marketable and include: a security issued or guaranteed by US Government Sponsored Enterprises (US GSEs), a security issued by sovereign entities or multilateral development banks not assigned higher than 20 per cent risk weight and issued by or guaranteed by an entity that has a proven record of reliable liquidity in times of stress.⁹⁷³ Level 2B liquid assets are liquid and

⁹⁶⁹ Part II of the *US LCR framework*.

⁹⁷⁰ 12 CFR § 249.22(a).

⁹⁷¹ 12 CFR § 249.21; See paragraph 2.4.5, subparagraph 2.4.5.1, of Chapter Two, for the definition of a haircut.

⁹⁷² 12 CFR § 249.20(a).

⁹⁷³ 12 CFR § 249.20(b); Section 403 of the EGRRCPA amended section 18(z)(aa)(2) of the Federal Deposit Insurance Act to incorporate certain municipal bonds as Level 2B liquid assets for purposes of compliance with the *US LCR framework*, with a proviso that they should be investment graded, liquid and readily marketable; 12 CFR § 1.2 (d) defines investment grade as the adequate capacity of the issuer of a security to meet financial commitments under the security for the projected life of an asset or exposure even in instances of risk of default by the obligor; 12 CFR § 249.3(3)(ii) defines “liquid and readily marketable” as a security that is traded in an active secondary market with more than two committed market makers, a large number of non-market makers participants on the buying and selling sides of transactions with timely and observable market prices and a high trading volume. Refer also to Liquidity Coverage Ratio rule: treatment of certain municipal obligations as high liquid assets (May 2019) available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20180822a1.pdf> (accessed 10 October 2019).

readily marketable and comprise: corporate debt securities issued or guaranteed by an entity whose obligations have a proven record as a reliable source of liquidity during stress events and their market price not declining by more than 20 per cent during significant periods of stress, as well as publicly traded common equity shares and municipal obligations.⁹⁷⁴

Some of the characteristics of HQLA are: a low risk profile, the exhibition of a high degree of liquidity amid stress scenarios, the attraction of an elevated volume of trading from diverse market participants including ‘flight to quality’ from investors,⁹⁷⁵ being liquid-and-readily marketable and being cash assets.⁹⁷⁶ To be eligible as HQLA, assets should meet certain criteria. In particular, HQLA must be unencumbered,⁹⁷⁷ must not be a client pool security held in a segregated account and must not have been received from a security financing transaction involving client pool securities held in a segregated account.⁹⁷⁸ Eligible HQLA are subject to certain operational requirements, namely: capability of monetisation at any time, in accordance with systems and procedures put in place as well as placement under the control of management function with demonstrated ability for monetisation, at any time, under the established policies.⁹⁷⁹

When the LCR falls below 100 per cent of a BHC’s HQLA, either as a result of unanticipated liquidity needs or as a demonstration of deficiency in liquidity risk-management, the BHC is obligated to send a notification to the Federal Reserve.⁹⁸⁰ The Federal Reserve then requires a remediation plan if the LCR requirement is contravened for three consecutive days.⁹⁸¹ The remediation plan includes an

⁹⁷⁴ 12 CFR § 249.20(c).

⁹⁷⁵ Part II of the *US LCR framework* states that “flight to quality” means that during times of distress, investors prefer to buy this kind of liquid assets.

⁹⁷⁶ 12 CFR § 252.35(b)(3)(i); Part II of the *US LCR framework* defines “liquid and marketable liquid assets” as those assets that are traded in high volumes in an active secondary market by more than two committed market makers and large number of committed non-market maker participants and have timely and observable market prices.

⁹⁷⁷ 12 CFR § 252.35(b)(iii).

⁹⁷⁸ 12 CFR § 249.22(b)(1) and (2); 12 CFR § 249.22(b) provides that an unencumbered asset is free from legal, regulatory, contractual or other restrictions on the liability of a firm to liquidate, sell or transfer the asset and is either not pledged or used to secure or provide credit enhancement to any transaction pledged to a central bank or a US GSE.

⁹⁷⁹ 12 CFR § 249.22(a).

⁹⁸⁰ 12 CFR § 249.40(a).

⁹⁸¹ 12 CFR § 249.40(b) (1) and (2).

assessment of the BHC's liquidity position, and the actions that the Federal Reserve will take to enforce compliance include: adjusting the BHC's risk profile, setting an estimated timeframe for achieving compliance, and a commitment to report to the Federal Reserve no less than weekly on the progress to achieve compliance.⁹⁸² This serves to enable the Federal Reserve to issue an appropriate response that accords with the unique circumstances of the particular bank's liquidity risk profile. It also includes taking additional supervisory actions or enforcement actions to address non-compliance with the LCR requirement.⁹⁸³

3.8.4.2 The US Net Stable Funding Ratio (NSFR) Final Rule

In June 2016, the Federal Reserve, the FDIC and the OCC (the agencies) issued a notice of proposed rulemaking titled *Net Stable Funding Ratio: Liquidity Risk Measurement Standards and Disclosure Requirements*. This proposed rule set out the Net Stable Funding Ratio (NSFR) for US BHCs, SLHCs and depository institutions that have 250 billion USD in total consolidated assets or 10 billion USD or more in total on-balance sheet foreign exposures, and depository institutions with 10 billion USD or more in total consolidated assets that are consolidated subsidiaries of such BHCs and SLHCs.⁹⁸⁴ The final version of this Proposed Rule was adopted in February 2021.⁹⁸⁵ The US domestic top tier depository institution holding companies are subject to the NSFR disclosure requirements for each calendar quarter.⁹⁸⁶

In line with the *Capital and Liquidity Tailoring Final Rule*,⁹⁸⁷ the scope of application of the NSFR framework has been tailored to BHCs with total consolidated assets of 100 billion USD or more, together with their depository institutions subsidiaries,⁹⁸⁸ for purposes of giving effect to the revised threshold of the EGRRCPA as implemented in

⁹⁸² 12 CFR § 249.40 (b)(3).

⁹⁸³ 12 CFR § 249.40(c).

⁹⁸⁴ Net Stable Funding Ratio: Liquidity Risk Measurement Standards and Disclosure Requirements (June 2016) (The US proposed NSFR Rule) available at <https://www.govinfo.gov/content/pkg/FR-2016-06-01/pdf/2016-11505.pdf> (accessed 11 September 2017). In addition, the Proposed Rule would have applied a modified NSFR to BHCs with total consolidated assets of 50 billion USD or more under section 65 of the Dodd-Frank Act, prior to the promulgation of the EGRRCPA.

⁹⁸⁵ Federal Register: Net Stable Funding Ratio: Liquidity Risk Measurement Standards and Disclosure Requirements (February 2021) (accessed 20 May 2021).

⁹⁸⁶ Part IX of the NSFR Final Rule.

⁹⁸⁷ See paragraph 3.8.4.1 above.

⁹⁸⁸ Part V of the NSFR Final Rule.

the *Stringent Prudential Standards Categories Final Rule*.⁹⁸⁹ In particular, US G-SIBs, Category II BHCs, and Category III BHCs with average weighted short-term wholesale funding of 75 billion USD or more, are subject to the full requirement of the *NSFR Final Rule*.⁹⁹⁰ Category III BHCs with average weighted short-term wholesale funding that is less than 75 billion USD are subject to a reduced NSFR requirement calibrated at 85 per cent of the full NSFR requirement. The reduced requirement of the NSFR calibrated at 70 per cent of the full NSFR requirement is imposed on Category IV BHCs to take into account their decreased risk profile.

Consistent with the *Basel III NSFR framework*,⁹⁹¹ the *US NSFR Final Rule* requires the institutions under its scope of application to maintain available stable funding on an ongoing basis to provide required stable funding over one year period.⁹⁹² The available stable funding would comprise of liabilities and capital of these institutions, and its degree of availability as a stable funding source would be measured having regard to the funding tenor, the funding type and the counterparty type.⁹⁹³ A longer funding tenor, such as a year, is considered to be more stable, while six months and less than a year funding tenor is considered partially stable because this funding should be repaid before a one-year time horizon. A less than six months funding tenor is considered the least stable because it must be repaid in the near future.⁹⁹⁴ Further, retail funding is regarded as more stable than short-term wholesale funding because retail customers are considered to provide more reliable and stable funding than wholesale customers.⁹⁹⁵ Finally, counterparties that are retail customers are regarded as more stable, relative to financial institutions, because of the latter's susceptibility to "bank runs" owing to their intermediary function.⁹⁹⁶

⁹⁸⁹ See paragraph 3.7 above.

⁹⁹⁰ Part V of the US NSFR Final Rule.

⁹⁹¹ See subparagraph 2.4.5.2 of Chapter Two for an analysis of the *Basel III NSFR framework*.

⁹⁹² Part I of the NSFR Final Rule.

⁹⁹³ Part IV of the NSFR Final Rule. The definition of available stable funding for advanced approaches US BHCs is consistent with the BCBS definition of available stable funding in paragraph 17 of the *Basel III NSFR framework*, as discussed in subparagraph 2.4.5.2 of Chapter Two.

⁹⁹⁴ Part VII of the US NSFR Final Rule; As noted in subparagraph 2.4.5.2 of Chapter Two, the *Basel III NSFR framework* states that longer-term liabilities are more stable than short-term liabilities.

⁹⁹⁵ Part VII of the NSFR Final Rule; This is noted in the *Basel III NSFR framework*, as discussed in paragraph 2.4.5.2 of Chapter Two.

⁹⁹⁶ Part VII of the NSFR Final Rule; As discussed in subparagraph 2.4.5.2 of Chapter Two, the BCBS is of the view that retail customers and customers from small and medium-size businesses are regarded as more stable relative to wholesale counterparties and financial institutions.

The required stable funding would be based on the liquidity characteristics of an asset, such that the less liquid the asset is, the greater the degree to which its stable funding is required in order to reduce asset fire sales and ensure that it can be converted into cash quickly and easily.⁹⁹⁷ A longer funding tenor requires more stable funding since inflows may only be realised after a long time, unlike in the case of a shorter funding tenor.⁹⁹⁸ Regarding the counterparty, it is to be noted that more stable funding is considered to be obtained from non-financial counterparties vis-à-vis financial sector entities.⁹⁹⁹ Further, an encumbered asset may be held for the specified duration and cannot be monetized during this time, and thus require more stable funding.¹⁰⁰⁰ Another factor that is considered in determining the required stable funding is the credit quality of an asset: the higher the credit quality of an asset the more likely will it be purchased and the less volatile it is across market conditions than an asset with a lower credit quality which would require more stable funding.¹⁰⁰¹ Further, assets that are traded in transparent and standardised markets with more participants are regarded to offer more reliable liquidity than those that are offered in information asymmetry markets with few participants.¹⁰⁰²

Compliance with the NSFR is required on an ongoing basis, and in the case of any shortfall due to a period of extreme liquidity stress, notification is sent to the appropriate financial regulatory agency within ten days of the shortfall.¹⁰⁰³ A bank is required to submit a remediation plan to enable an appropriate supervisory response, followed by a report showing progress on the required compliance.¹⁰⁰⁴

⁹⁹⁷ Part VII of the NSFR Final Rule; The definition of the required stable funding in the US NSFR Final Rule is consistent with that of the *Basel III NSFR framework*, as detailed in subparagraph 2.4.5.2 of Chapter Two.

⁹⁹⁸ Part VII of the NSFR Final Rule; See the *Basel III NSFR framework*, as discussed in subparagraph 2.4.5.2 of Chapter Two.

⁹⁹⁹ Part VII of the NSFR Final Rule; See the discussion of the *Basel III NSFR framework* in subparagraph 2.4.5.3 of Chapter Two.

¹⁰⁰⁰ Part VII of the NSFR Final Rule.

¹⁰⁰¹ Part VII of the NSFR Final Rule.

¹⁰⁰² *Ibid.*

¹⁰⁰³ Part VIII of the NSFR Final Rule.

¹⁰⁰⁴ *Ibid.*

3.8.5 Enhanced prudential standards for US BHCs with 100 billion USD or more asset-size threshold

To facilitate a better understanding of the below discussions, Table 3.8.5 outlines the Federal Reserve's enhanced prudential requirements discussed below.¹⁰⁰⁵

Categories of BHCs	Enhanced prudential standards
US G-SIBs, Categories II and III BHCs	<ul style="list-style-type: none"> • Capital plan rule, annual supervisory stress-testing and periodic company-run stress-testing and stress capital buffer. • Risk-management and risk committee requirements. • Monthly liquidity stress-testing and buffer requirements. • A daily liquidity calculation.
Category IV BHCs	<ul style="list-style-type: none"> • Capital plan rule, supervisory stress-testing every other year and capital stress buffer. • Risk-management and risk committee requirements • Quarterly calculation of liquidity stress-testing and buffer requirements. • Monthly liquidity data reporting.

The Federal Reserve adopted the Final Rule titled *Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations (Enhanced Prudential Standards Final Rule)* in March 2014. This *Final Rule* originally applied to US BHCs and FBOs with minimum total consolidated assets of 50 billion USD as per the original section 165-threshold. The *Enhanced Prudential Standards Final Rule* was

¹⁰⁰⁵ See subparagraphs 3.8.5.1, 3.8.5.2 and 3.8.5.3 below.

implemented through Regulation YY,¹⁰⁰⁶ and became effective from June 2014.¹⁰⁰⁷ Regulation YY was subsequently modified in 2019 by tailoring the applicability of stringent prudential standards for US BHCs and FBOs with minimum total consolidated assets of 100 billion USD in line with the *Stringent Prudential Standards Categories Final Rule* to give effect to the EGRRCPA asset-size threshold.

Subpart D of Regulation YY implements the *Enhanced Prudential Standards Final Rule* for US BHCs through the following stringent prudential standards: risk-based and leverage capital requirements and stress-testing requirements¹⁰⁰⁸ (which are implemented under the capital planning and stress capital buffer (SCB) requirements¹⁰⁰⁹), risk-management and risk committee requirements,¹⁰¹⁰ liquidity risk-management requirements and liquidity stress-testing and buffer requirements.¹⁰¹¹

3.8.5.1 Capital planning and Stress Capital Buffer (SCB) requirement

As discussed in more detail below, the capital planning and stress-testing requirements were implemented by the *Capital Plan Rule*¹⁰¹² and the Dodd-Frank Act stress tests,¹⁰¹³ respectively, and were subsequently integrated with the stress capital buffer (SCB) requirement.¹⁰¹⁴

¹⁰⁰⁶ Title 12 Part 252 – Enhanced Prudential Standards (Regulation YY) available at <https://ecfr.io/Title-12/Part-252> (accessed 15 August 2017).

¹⁰⁰⁷ Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations (March 2014) available at

<https://www.gpo.gov/fdsys/pkg/FR-2014-03-27/pdf/2014-05699.pdf> (accessed 15 August 2017); See further, Allen F *et al* (2016) “Enhancing prudential standards in financial regulations” 49 *Journal of Financial Services Research* 133; Enhanced prudential regulation of large banks Congressional Research Service Report May 2019 available at

<https://fas.org/sgp/crs/misc/R45711.pdf> (accessed 30 November 2019).

¹⁰⁰⁸ 12 CFR § 252.32; As discussed in subparagraph 3.8.1 above, the risk-based capital requirements were further implemented under the Federal Reserve’s capital framework to incorporate the *Basel III capital framework*.

¹⁰⁰⁹ See subparagraph 3.8.5.1 below.

¹⁰¹⁰ See subparagraph 3.8.5.2 below.

¹⁰¹¹ See subparagraph 3.8.5.3 below.

¹⁰¹² See subparagraph 3.8.5.1.1 below.

¹⁰¹³ See subparagraph 3.8.5.1.2 below.

¹⁰¹⁴ See subparagraph 3.8.5.1.3 below.

3.8.5.1.1 The Capital Plan Rule

In December 2011, the Federal Reserve adopted a Final Rule entitled *Capital plans (Capital Plan Rule)*, which amended Regulation Y¹⁰¹⁵ by requiring BHCs with 50 billion USD minimum total consolidated assets (that is under the old threshold requirement of the Dodd-Frank Act) to develop and annually submit capital plans to the Federal Reserve before making capital distributions.¹⁰¹⁶ Notably, the *Enhanced Prudential Standards Final Rule*¹⁰¹⁷ has been modified to apply to BHCs with 100 billion USD or more in total consolidated assets in line with the EGRRCPA revised criteria. Therefore, the *Capital Plan Rule* applies to US G-SIBs, Category II, Category III and Category IV US BHCs.¹⁰¹⁸

A capital plan¹⁰¹⁹ is defined as a written presentation of a BHC's capital planning strategies and capital adequacy process that ensures that any deficiencies in capital are appropriately remedied. Such a plan includes the following mandatory elements: an assessment of the expected uses and sources of capital over the planning horizon that reflects the BHC's size, complexity, risk profile and scope of operation assuming both expected and stressful conditions including projected losses and revenues and the discussion of the stress tests results; a description of all planned capital actions; a detailed description of processes for assessing capital adequacy such as how the BHC will maintain capital commensurate with its risks under stressful conditions; the BHC's capital policy;¹⁰²⁰ and a discussion of any expected changes to the BHC's business plan that may potentially impact its capital adequacy or liquidity.¹⁰²¹ The robustness of a BHC's capital planning are assessed through factors such as sound risk-

¹⁰¹⁵ Regulation Y regulates the acquisitions of control of banks by companies and individuals together with non-bank activities of BHCs under the Bank Holding Company Act. See Title 12 CFR § 225 – Bank Holding Companies and Change in Bank Control (Regulation Y) available at <https://ecfr.io/Title-12/Part-225> (1 October 2020).

¹⁰¹⁶ Capital Plans (December 2011) available at <https://www.govinfo.gov/content/pkg/FR-2011-12-01/pdf/2011-30665.pdf> (accessed 30 November 2017). The Federal Reserve established the Capital Plan Rule to enhance the Supervisory Capital Assessment Program which was introduced at the height of the GFC to evaluate the losses incurred by US BHCs under adverse economic conditions with the objective of restoring such entities to financial health. For this, refer to the Board of Governors of the Federal Reserve System Supervisory Capital Assessment Program: Design and Implementation (federalreserve.gov) (April 2009) (accessed 30 September 2017).

¹⁰¹⁷ See subparagraph 3.8.1 above.

¹⁰¹⁸ Part IV of the Stringent Prudential Standards Categories Final Rule.

¹⁰¹⁹ 12 CFR § 225.8 (d)(7).

¹⁰²⁰ 12 CFR § 225.8(d) states that a bank's capital policy describes principles and guidelines for capital planning, capital distribution and a plan for addressing capital deficiencies.

¹⁰²¹ 12 CFR § 225.8 (e)(2).

management processes, processes for translating such risks into potential losses, available capital resources and robust internal capital controls.¹⁰²²

A BHC's board of directors is responsible for approving the capital plan, reviewing the robustness of the BHC's process for assessing its capital plan, at least annually, and remedying any deficiencies.¹⁰²³ BHCs must annually submit a capital plan to the Federal Reserve.¹⁰²⁴ When reviewing a capital plan, the Federal Reserve is obliged to consider the following factors: the reasonableness of a BHC's capital plan; the assumptions and analysis underlying the capital plan; the robustness of its capital adequacy; relevant supervisory information of a BHC and its subsidiaries; regulatory and financial reports; stress test results; and any other information required by the Federal Reserve.¹⁰²⁵ A BHC is required to resubmit a capital plan if, for example, there has been or will be any material change to the BHC's risk profile, financial condition, or corporate structure, or if the capital plan is incomplete.¹⁰²⁶

The *Capital Plan Rule* is facilitated through the *Comprehensive Capital Analysis and Review* (CCAR), consisting of quantitative and qualitative components.¹⁰²⁷ The quantitative component monitors a BHC's compliance with minimum regulatory capital stipulated in Regulation Q¹⁰²⁸ while continuing credit intermediation with a demonstrated ability to maintain minimum capital requirements under severely adverse economic conditions taking into account planned capital distributions.¹⁰²⁹ The

¹⁰²² Part IV of the Capital Plan Rule.

¹⁰²³ 12 CFR 225.8(e)(1)(iii).

¹⁰²⁴ 12 CFR § 225.8(e)(1)(ii).

¹⁰²⁵ 12 CFR § 225.8(g).

¹⁰²⁶ 12 CFR § 225.8(e)(4)

¹⁰²⁷ Capital Plans December 2011 available at

https://www.federalreserve.gov/reportforms/formsreview/RegY13_20111201_ffr.pdf (accessed 30 November 2017).

¹⁰²⁸ See subparagraph 3.8.1 above for the discussion of Regulation Q.

¹⁰²⁹ Board of Governors of the Federal Reserve System Comprehensive Capital Analysis and Review 2017 summary

instructions for LISCC and large and complex firms (February 2017) available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20170203a4.pdf>

(accessed 18 September 2017); Board of Governors of the Federal Reserve System Comprehensive Capital Analysis and Review 2018 summary instructions (February 2018)

available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20180201a2.pdf>

(accessed 18 September 2019); Board of Governors of the Federal Reserve System Comprehensive Capital Analysis and Review 2018: Assessment framework and results June 2018 available at

quantitative component further contained the now eliminated, quantitative objection¹⁰³⁰ by means of which the Federal Reserve could limit a BHC's ability to distribute capital when it fell below the minimum required levels until a remediation plan was made.¹⁰³¹

The qualitative aspect of the CCAR focuses on the identification, measurement, and monitoring of a BHC's capital needs relative to its risks as well as the management of those risks.¹⁰³² Initially, the Federal Reserve could raise objections to a BHC's capital plan under the qualitative assessment of the CCAR on grounds of deficiencies in capital planning or unresolved supervisory issues.¹⁰³³ In February 2017, the Federal Reserve revised the *Capital Plan Rule* to exempt large and non-complex BHCs (those with 50 billion USD or more in total consolidated assets but less than 250 billion USD, non-bank assets of less than 75 billion USD) from the qualitative objection of the CCAR. This exemption meant that the Federal Reserve could no longer raise objections to the capital plan based on deficiencies in the BHC's capital planning process. However, the Federal Reserve indicated that the identified deficiencies would be incorporated in its regular supervisory review of capital plans.¹⁰³⁴ The revised Final Rule thus limited the scope of the qualitative objection to BHCs with a size higher than the above specified size thresholds (large and complex BHCs).

The Final Rule was further modified, and with effect from March 2019, the Federal Reserve phased out the qualitative objection of the CCAR for BHCs that were subject to the requirement for four consecutive years, and whose capital plan had not been objected to during the fourth year as it clearly meant that their risk-management

<https://www.federalreserve.gov/publications/files/2018-ccar-assessment-framework-results-20180628.pdf> (accessed 18 September 2019); See further, Buerger P (2015) "CCAR in review: A risk manager's guide" 11 *The RMA Journal* 56-60.

¹⁰³⁰ See subparagraph 3.8.5.1.3 below that sets forth grounds for the elimination of the quantitative objection of the CCAR.

¹⁰³¹ Board of Governors of the Federal Reserve System Comprehensive Capital Analysis and Review 2018: Assessment framework and results (June 2018) available at <https://www.federalreserve.gov/publications/files/2018-ccar-assessment-framework-results-20180628.pdf> (accessed 18 September 2019).

¹⁰³² *Ibid.*

¹⁰³³ *Ibid.*

¹⁰³⁴ Amendments to the Capital Plan and Stress Test Rules; Regulations Y and YY (February 2017) available at <https://www.gpo.gov/fdsys/pkg/FR-2017-02-03/pdf/2017-02257.pdf> (accessed 22 August 2017).

practices had improved and their capital positions had been strengthened.¹⁰³⁵ However, these BHCs would still be subject to regular supervisory (thus not stringent) review for capital planning.¹⁰³⁶ The Federal Reserve further indicated that the qualitative assessment of the CCAR would continue to apply to BHCs that recently became subject to the *Capital Plan Rule* and whose capital plans had not been subject to qualitative assessment for any period of four years to provide such BHCs with an opportunity to improve their capital planning before the qualitative objection is removed. This requirement would subsequently be released upon the completion cycle of four years provided a BHC does not receive an objection during the fourth year.¹⁰³⁷ However, if a BHC receives a qualitative objection in the fourth year, it will remain subject to a potential qualitative objection until January 1 of the year after the first year in which such BHC does not receive a qualitative objection.¹⁰³⁸ In addition, except for a BHC that receives a qualitative objection in the fourth year and in subsequent years, the Federal Reserve would not object to the capital plan of any BHC based on qualitative deficiencies after December 31, 2020.¹⁰³⁹

For BHCs that are currently subject to the qualitative assessment, an objection to the capital plan may be based on: the unreasonableness or inappropriateness of assumptions and analysis underlying the capital plan; or methodologies and practices supporting capital plan processes; and unsafe and unsound capital planning process practices.¹⁰⁴⁰ Where an objection has been raised to a BHC's capital plan, the BHC concerned must seek approval from the Federal Reserve before making capital distributions until a non-objection notice is issued.¹⁰⁴¹

3.8.5.1.2 The Dodd-Frank Act stress tests

The stress-testing regime for SIFI BHCs in the US is conducted through the Final Rule titled *Supervisory and company-run stress test requirements for covered companies (Supervisory and company-run stress test Final Rule)*. This Final Rule was adopted in

¹⁰³⁵ Amendment to the Capital Plan Rule (March 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-03-13/pdf/2019-04515.pdf> (accessed 22 November 2019).

¹⁰³⁶ *Ibid.*

¹⁰³⁷ 12 CFR § 225.8(h)(5)(2)(i).

¹⁰³⁸ Part II of the Amendment to the Capital Plan Rule March 2019.

¹⁰³⁹ *Ibid.*

¹⁰⁴⁰ 12 CFR § 225.8(5)(2).

¹⁰⁴¹ 12 CFR 225.8(k).

October 2012,¹⁰⁴² implementing the Dodd-Frank Act supervisory-run stress-testing (DFAST) and company-run stress-testing requirements (together labelled the Dodd-Frank Act stress tests).¹⁰⁴³ The Final Rule covered BHCs with 50 billion USD or more in total consolidated assets (that is under the original threshold of the Dodd-Frank Act). Similar to the *Capital Plan Rule*, the *Enhanced Prudential Standards Final Rule*¹⁰⁴⁴ has tailored the application of the Dodd-Frank Act stress tests to BHCs maintaining 100 billion USD or more in total consolidated assets to give effect to the EGRRCPA revised asset criteria.

US G-SIBs, Category II and Category III US BHCs are subject to annual supervisory-run stress tests and periodic company-run stress tests, to address risks presented by their huge size and significant cross-border activity.¹⁰⁴⁵ Information on these risks are facilitated by the collection of data using the FR Y – 14 reporting requirements.¹⁰⁴⁶ Category IV BHCs are subject to revised stress-testing that correspond to their decreased risk profile, as facilitated by FR Y – 14 reporting.¹⁰⁴⁷ They are required to conduct supervisory stress-testing every other year rather than annually compared to US G-SIBs, Category II and Category III US BHCs.¹⁰⁴⁸ Company-run stress tests and

¹⁰⁴² Supervisory and company-run stress test requirements for covered companies (October 2012) available at <https://www.govinfo.gov/content/pkg/FR-2012-10-12/pdf/2012-24987.pdf> (accessed 30 November 2017).

¹⁰⁴³ Section 165(i)(1)(A) and (2)(A) of the Dodd-Frank Act; The capital and stress-testing rules apply to BHCs that are subject to the Federal Reserve's consolidated supervision framework for large banking organisations, which is coordinated by the Large Institution Supervision Coordinating Committee (LISCC). The LISCC is a multi-disciplinary body consisting of the governors and representatives of the Federal Reserve System, market analysts and research economists, amongst others, coordinating the supervision of these BHCs, otherwise known as LISCC firms, that pose an elevated risk to the US financial system. Thus, the LISCC is knowledgeable in the cross-firm perspective of risk regulation drawing from an in-depth expertise and understanding of the financial markets. Refer to Board of Governors of the Federal Reserve System Consolidated Supervision Framework for Large Financial Institutions (December 2012) available at <https://www.federalreserve.gov/supervisionreg/srletters/sr1217.pdf> (accessed 29 September 2017); See further, Board of Governors of the Federal Reserve System Governance Structure of the Large Institution Supervision Coordinating Committee (LISCC) Supervisory Program (April 2015) available at <https://www.federalreserve.gov/supervisionreg/srletters/sr1507.pdf> (accessed 15 September 2017).

¹⁰⁴⁴ See subparagraph 3.8.1 above.

¹⁰⁴⁵ Part IV of the Stringent Prudential Standards Categories Final Rule.

¹⁰⁴⁶ Part IV of the Stringent Prudential Standards Categories Final Rule. FR Y-14 Report is used to collect data for purposes of capital planning to support supervisory stress test for BHCs. See Board of Governors of the Federal Reserve System FR Y-14 Capital assessments and stress testing information collection Q&As (September 2020) available at <https://www.federalreserve.gov/publications/files/fr-y-14-qas.pdf> (accessed 15 August 2020).

¹⁰⁴⁷ Part IV of the Stringent Prudential Standards Categories Final Rule.

¹⁰⁴⁸ *Ibid.*

public disclosure requirements are eliminated from Category IV stringent prudential standards.¹⁰⁴⁹

The supervisory-run stress test is a forward-looking macro-prudential tool that the Federal Reserve annually utilises to enhance a BHC's resilience by projecting the losses the BHC would incur under baseline and severely adverse hypothetical stress scenarios, and any additional stress scenario that the Federal Reserve may consider appropriate.¹⁰⁵⁰ It is designed to evaluate whether a BHC is sufficiently capitalised to absorb losses and to continue credit intermediation as well as to fulfil obligations that are due.¹⁰⁵¹ Notably, supervisory-run stress tests results in the US are subject to public disclosure.¹⁰⁵² These supervisory stress tests results are used for the following purposes: as part of a BHC's capital plan and capital planning; for the assessment of a BHC's exposures, concentrations and risk positions; and for the development and implementation of a BHC's recovery and resolution planning.¹⁰⁵³

In addition to the supervisory-run stress test, US G-SIBs, Category II and Category III US BHCs are subject to periodic company-run stress tests over baseline and severely adverse hypothetical stress scenarios in accordance with methodologies that are established by the relevant Federal primary regulatory agency.¹⁰⁵⁴ Company-run

¹⁰⁴⁹ *Ibid.*

¹⁰⁵⁰ Supervisory and company-run stress test requirements for covered companies (October 2012) available at <https://www.govinfo.gov/content/pkg/FR-2012-10-12/pdf/2012-24987.pdf> (accessed 30 November 2017); 12 CFR § 252.44(b); 12 CFR § 252.47; 12 CFR § 252.42 defines severely adverse scenario as a set of conditions that affect the US economy or the financial condition of a BHC and that overall are significantly more severe than those associated with the baseline scenario and may include trading or other additional components. Section 401(e) of the ECRRCPA automatically subjects BHCs with 100 billion USD minimum total consolidated assets to supervisory-run stress test. See further, Board of Governors of the Federal Reserve System Dodd-Frank Act Stress Test 2017: Supervisory stress test methodology and results (June 2017) available at <https://www.federalreserve.gov/publications/files/2017-dfast-methodology-results-20170622.pdf> (accessed 22 August 2017); Wall LD (2014) "The adoption of stress testing: Why the Basel capital measures were not enough" 15 *Journal of Banking Regulation* 266 at 271.

¹⁰⁵¹ 12 CFR § 252.46(a).

¹⁰⁵² 12 CFR § 252.46(b).

¹⁰⁵³ 12 CFR § 252.47(a).

¹⁰⁵⁴ 12 CFR § 252.54; 12 CFR § 252.56; Section 165(i)(2) of the Dodd-Frank Act required BHCs to conduct company-run stress tests semi-annually. Section 401(5)(B)(i) of the ECRRCPA abolished mid-cycle company-run stress test and introduced periodic company-run stress test. According to the Stringent Prudential Standards Categories Final Rule, this frequency will provide the Federal Reserve with the flexibility to respond to changes in the risk profile of a banking organisation in times of stress and offer risk-management benefits relative to annual stress tests while at the same time reducing semi-annual reporting burden. See paragraph 3.2 above for the definition of a primary financial regulatory agency.

stress test results are reported to the Federal Reserve and further publicly disclosed.¹⁰⁵⁵ Similarly, the role of company-stress results is to enable a BHC to engage in capital planning.¹⁰⁵⁶ The EGRRCPA has eliminated the “adverse stress scenario”, which was provided for in the Dodd-Frank Act, from supervisory-run stress tests and company-run stress tests.¹⁰⁵⁷

3.8.5.1.3 Stress Capital Buffer requirement

In April 2018, the Federal Reserve issued a notice of proposed rulemaking titled *Amendments to the Regulatory Capital, Capital Plan, and Stress Test Rules*. This rule sought to integrate the *Capital Plan Rule* and the CCAR and the stress-testing rules in order to simplify the capital framework regime.¹⁰⁵⁸ In line with the EGRRCPA revised asset-size threshold, the Federal Reserve subsequently released a Final Rule titled *Regulation, Q, Y, and YY: Regulatory Capital, Capital Plan, and Stress Test Rules (Capital Planning and Stress Capital Buffer Final Rule)* in March 2020 establishing Capital Planning and Stress Capital Buffer (SCB) requirements for US BHCs with 100 billion USD in minimum total consolidated assets.¹⁰⁵⁹

The *Capital Planning and Stress Capital Buffer Final Rule* integrates the *Capital Plan Final Rule* with the CCAR and utilises supervisory-run stress test results to establish a SCB requirement for BHCs (and the SCB replaces the static 2.5 per cent of the RWAs component of the CCvB requirement).¹⁰⁶⁰ The objective of the SCB requirement is to eliminate redundant elements of capital and stress-testing frameworks, which were developed separately but are designed to achieve similar objectives, while at the same time simplifying and preserving the strong capital requirements.¹⁰⁶¹

¹⁰⁵⁵ 12 CFR § 252.57; 12 CFR § 252.58.

¹⁰⁵⁶ 12 CFR § 252.56(c)(3).

¹⁰⁵⁷ Section 401(a)(5)(A) of the EGRRCPA amended section 165(i)(B)(i) of the Dodd-Frank Act to eliminate “adverse stress scenario” from supervisory-run stress-testing while section 401(a)(5) (B) (ii) of the EGRRCPA removed “adverse stress scenario” from the company-run stress test.

¹⁰⁵⁸ Amendment to the Regulatory Capital, Capital Plan, and Stress Test Rules (April 2018) available at 2018-08006.pdf (govinfo.gov) (accessed 1 November 2019).

¹⁰⁵⁹ Regulations Q, Y, and YY: Regulatory Capital, Capital Plan, and Stress Test Rules (March 2020) available at

<https://www.govinfo.gov/content/pkg/FR-2020-03-18/pdf/2020-04838.pdf> (accessed 1 October 2020); 12 CFR § 225.8(a) and (b).

¹⁰⁶⁰ See subparagraph 3.8.1.1 above.

¹⁰⁶¹ *Ibid.*

Accordingly, the *Capital Planning and Stress Capital Buffer Final Rule* requires BHCs with a minimum asset-size of 100 billion USD to develop and maintain a capital plan¹⁰⁶² as described above.¹⁰⁶³ After the submission of a capital plan, the Federal Reserve must determine the SCB requirement that applies under the regulatory capital framework (Regulation Q).¹⁰⁶⁴ The Federal Reserve must annually calculate the SCB requirement for US G-SIBs, Category II and Category III US BHCs and must compute the SCB for Category IV US BHCs biennially.¹⁰⁶⁵ The SCB requirement is equal to the greater of: the ratio of a BHC's CET1 capital to RWAs (as calculated as of the final quarter of the previous capital plan cycle), minus the BHC's lowest projected ratio of CET1 capital to RWAs (as calculated in any quarter of the planning horizon under a supervisory stress test), plus the ratio of the sum of the BHC's planned common stock dividends (for each of the fourth through seventh quarter of a specific planning horizon) relative to the BHC's RWAs in the quarter in which the BHC had its lowest projected ratio of CET1 capital to RWAs (as calculated in any quarter of the planning horizon under a supervisory stress test), as well as 2.5 per cent of CET1 capital.¹⁰⁶⁶

Specifically, the Federal Reserve must provide a BHC with notice of the SCB requirement and an explanation of supervisory stress test results¹⁰⁶⁷ elaborated above.¹⁰⁶⁸ Supervisory stress test results are utilised to establish the SCB requirement, which varies based on a BHC's risk profile.¹⁰⁶⁹ Within two business days of receipt of notice of application of a SCB requirement, a BHC must determine whether the planned capital distributions for the fourth through seventh quarters of the planning horizon under the baseline scenario of supervisory-run stress test would be consistent with effective capital distribution limitations (assuming that the SCB requirement applied).¹⁰⁷⁰ When making this determination, a BHC must limit its planned capital distributions included in the capital plan to those that would be

¹⁰⁶² 12 CFR § 225.8(e)(1)(i).

¹⁰⁶³ See subparagraph 3.8.5.1.1.

¹⁰⁶⁴ 12 CFR § 225.8(f)(1); 12 CFR § 225.8(f)(3) states that the Federal Reserve may recalculate a BHC's stress capital buffer if the BHC concerned resubmits a capital plan.

¹⁰⁶⁵ *Ibid.*

¹⁰⁶⁶ 12 CFR § 225.8(f)(2).

¹⁰⁶⁷ 12 CFR § 225.8(h).

¹⁰⁶⁸ See subparagraph 3.8.5.1.3.

¹⁰⁶⁹ 12 CFR § 252.47; Section 165(i) and (j) of the Dodd-Frank Act; 12 CFR §252.42(c) §252.153.

¹⁰⁷⁰ 12 CFR § 225.8(h)(2)(ii)(A)(1).

consistent with effective capital distribution limitations assuming that any applicable CCyB and any applicable G-SIB surcharge remained at the required levels.¹⁰⁷¹

Thus, if planned capital distributions would not be consistent with effective capital distributions limitations if the SCB requirement is in effect, a BHC must adjust its planned capital distributions to be consistent with effective capital distributions restrictions assuming that the SCB applied.¹⁰⁷² However, if planned capital distributions would be consistent with effective capital distributions limitations when the SCB is applied, a BHC may adjust its planned capital distributions, and in so doing, it must not adjust these capital distributions to be inconsistent with the effective capital distribution constraints assuming the SCB applied.¹⁰⁷³ A BHC must notify the Federal Reserve of any adjustments effected to planned capital distributions.¹⁰⁷⁴

The Federal Reserve will provide a BHC with a notice of its final SCB requirement and confirmation of the final planned capital distributions by the end of August of the calendar year that it submitted the capital plan, unless the Federal Reserve determines otherwise.¹⁰⁷⁵ The planned capital distributions and final SCB requirement shall be effective at the beginning of October of the calendar year in which a capital plan was submitted and will remain effect until superseded.¹⁰⁷⁶ The SCB requirement and any adjustments of planned capital distributions as well as the supervisory stress test results, and other relevant information, are subject to public disclosure.¹⁰⁷⁷

Given that the supervisory stress test results are integrated into the SCB requirement to the effect that planned capital distributions must be consistent with effective capital

¹⁰⁷¹ 12 CFR § 225.8(e)(2)(i)(C); Part IV of the Capital Planning and Stress Capital Buffer Final Rule notes that for the purpose of harmonisation of the Capital Plan Rule and the CCAR, a BHC is no longer required to seek prior approval before distributing capital if planned capital distributions are in excess of those contained in the capital plan, as it was the case under the CCAR, so long as a BHC complies with the automatic restrictions on its distributions. However, a BHC must notify the Federal Reserve and the relevant Reserve Bank within 15 days after making capital distributions in excess of those stipulated in the capital plan. Further, a BHC must seek prior approval before distributing capital when it has received a qualitative objection or if it has been ordered to resubmit a capital plan.

¹⁰⁷² 12 CFR § 225.8(h)(2)(ii)(A)(1).

¹⁰⁷³ 12 CFR § 225.8(h)(2)(ii)(A)(2).

¹⁰⁷⁴ 12 CFR § 225.8(h)(2)(ii)(B).

¹⁰⁷⁵ 12 CFR § 225.8(h)(4)(i) states that this stress capital buffer will not be considered final such that it may be subject to judicial review pending the reconsideration of the request lodged by the BHC concerned.

¹⁰⁷⁶ 12 CFR § 225.8(h)(4)(ii).

¹⁰⁷⁷ 12 CFR § 225.8(h)(5).

distributions limitations, the *Capital Planning and Stress Capital Buffer Final Rule* eliminates the quantitative objection of the CCAR, which imposed capital distributions restrictions upon the violation of minimum capital ratios requirements.¹⁰⁷⁸

3.8.5.2 Risk-management and risk committee requirements

As part of its prudential compliance, a BHC with 100 billion USD in total consolidated assets must establish and maintain a “risk committee”. Such risk committee is responsible for the approval and periodic review of the risk-management policies of the bank’s global operations, and the oversight of its global risk-management framework as well as its liquidity risk-management framework discussed below,¹⁰⁷⁹ in line with section 265(h) of the Dodd-Frank Act, as amended by section 401 of the EGRRCPA.¹⁰⁸⁰ The board of directors is responsible for the general oversight function over a BHC’s operations.¹⁰⁸¹

Senior management of a BHC are required to establish a risk-management framework for a BHC that is commensurate with its structure, size, activities, complexity, and risk profile.¹⁰⁸² At a minimum, the risk-management framework must establish the policies and procedures for risk-management governance; a risk-control infrastructure; systems and controls for monitoring and compliance; processes for the identification of risk-management deficiencies and the timely implementation of remedial actions on emerging risks; as well as processes and systems for ensuring the independence of the risk-management independent function.¹⁰⁸³ As indicated by the Federal Reserve, sound enterprise-wide risk-management supports the safety and the sound operation of banking organisations and reduces the likelihood that they will encounter material financial distress or failure and thus also promotes financial stability.¹⁰⁸⁴

¹⁰⁷⁸ Part I of the Capital Planning and Stress Capital Buffer Final Rule.

¹⁰⁷⁹ See paragraph 3.8.5.3 below.

¹⁰⁸⁰ 12 CFR § 252.33(a)(1) and (2).

¹⁰⁸¹ *Ibid.*

¹⁰⁸² 12 CFR § 252.33(a)(2)(i).

¹⁰⁸³ 12 CFR § 252.33(a)(2)(ii); See further, Alampalli S (2013) “Information infrastructure for systemic regulation” 21 *Journal of Financial Regulation and Compliance* 204 at 207; Mertzanis C (2013) “Risk management challenges after the financial crisis” 42 *Review of Banking, Finance and Monetary Economics* 285 at 286-287.

¹⁰⁸⁴ Part V of the Stringent Prudential Standards Categories Final Rule.

In terms of applicable corporate governance principles, the risk committee must have a formal written charter that is approved by the BHC's board of directors. It must be constituted of an independent board of directors that has the sole and exclusive responsibility for the risk-management policies of a BHC's global operations and oversight of the operation of its global risk-management framework and reporting directly to the board of directors of the BHC.¹⁰⁸⁵

Further, the risk committee reviews regular reports by a BHC's chief risk officer on not less than a quarterly basis.¹⁰⁸⁶ The chief risk officer and at least one member of the risk committee must be experienced in identifying, assessing and managing the risk exposure of large and complex financial firms.¹⁰⁸⁷ The chief risk officer has the duty of setting of risk limits on an enterprise-wide basis, and monitoring compliance by the BHC concerned with risk-management requirements¹⁰⁸⁸ and established risk limits. The chief risk officer is also responsible for the management of risks and risk controls within the parameters of the BHC's framework and monitoring and testing of risk controls.¹⁰⁸⁹ The chief risk officer is further tasked with reporting risk-management deficiencies and emerging risks to the risk committee and resolving risk-management deficiencies in a timely fashion.¹⁰⁹⁰

3.8.5.3 Liquidity risk-management and liquidity stress-testing and buffer requirements

Liquidity risk is defined as the inability of a BHC, or the market perception of a BHC's inability, to meet its cash and collateral obligations as they become due.¹⁰⁹¹ Liquidity risk which is not properly monitored and managed can be the catalyst for a BHC's liquidity crisis. Consequently, the board of directors of a BHC is charged with approving the extent of liquidity risk that a BHC may assume in connection to its

¹⁰⁸⁵ 12 CFR § 252.33(a)(3)(i), (ii) and (iii); See further, Srivastav A *et al* (2016) "Corporate governance and bank risk-taking" 24 *Corporate governance: An International Review* 334- at 341.

¹⁰⁸⁶ 12 CFR § 252.33(iv).

¹⁰⁸⁷ 12 CFR § 252.33(a)(4); 12 CFR § 252.33(b)(3) provides that the compensation structure of the risk officer must reflect the objective assessment of a bank's risk profile and discourage unwarranted risk-taking. See further, Bai G *et al* (2013) "Bank stability and managerial compensation" 37 *Journal of Banking & Finance* 799 at 801.

¹⁰⁸⁸ 12 CFR § 252.33(b)(2)(i).

¹⁰⁸⁹ 12 CFR § 252.33(b)(2)(A).

¹⁰⁹⁰ 12 CFR § 252.33(b)(2)(ii).

¹⁰⁹¹ 12 CFR § 252.34 (c).

operating strategy, at least annually, having regard to the BHC's size, complexity, capital structure, risk profile and activities (the so-called "liquidity risk tolerance").¹⁰⁹² A BHC is subject to semi-annual review by the board of directors to determine whether it is operating in accordance with its liquidity risk tolerance.¹⁰⁹³ Further, the board of directors is responsible for approving and periodically reviewing the liquidity risk-management strategies, policies, and procedures that are established by senior management for effective management of liquidity risk.¹⁰⁹⁴

Senior management of a BHC is tasked with establishing strategies, policies, and procedures designed to effectively manage liquidity risk of the BHC.¹⁰⁹⁵ Senior management is also responsible for overseeing the development and implementation of liquidity risk measurement and reporting systems including the systems for liquidity stress-testing and buffer requirements, discussed in the following paragraphs.¹⁰⁹⁶ To that end, senior management must determine at least quarterly whether the BHC is operating in accordance with such policies and procedures and evaluate, more often than on a quarterly basis, whether the BHC complies with liquidity stress-testing and buffer requirements if there are any changes in the market conditions or liquidity risk profile or financial condition of such BHC.¹⁰⁹⁷ Senior management is tasked to approve and evaluate new financial products and business lines of a BHC to determine their impact on its liquidity risk profile.¹⁰⁹⁸

A BHC is further required to establish methodologies for formulating a cash-flow projection that projects cash arising from assets, liabilities and off-balance sheet exposures.¹⁰⁹⁹ The fair market value of assets that are used as cash-flow to offset projected liquidity needs during a planning horizon must be discounted to reflect any credit risk and market volatility and such assets must be diversified by collateral, counterparty and other factors associated with their liquidity risk.¹¹⁰⁰ Senior

¹⁰⁹² 12 CFR § 252.34(a)(1)(i).

¹⁰⁹³ 12 CFR § 252.34(a)(ii).

¹⁰⁹⁴ 12 CFR § 252.34(a)(2).

¹⁰⁹⁵ 12 CFR § 252.34(a)(1)(i).

¹⁰⁹⁶ 12 CFR § 252.34(a)(1)(ii).

¹⁰⁹⁷ 12 CFR § 252.34(a)(1)(iii).

¹⁰⁹⁸ 12 CFR § 252.34 (3).

¹⁰⁹⁹ 12 CFR § 252.34(e).

¹¹⁰⁰ 12 CFR § 252.35(5).

management are required to review this cash-flow projection at least quarterly to ensure that the BHC is operating within its liquidity risk tolerance.¹¹⁰¹

Further, BHCs are also required to maintain a contingency funding plan. The contingency funding plan has to be approved and reviewed by the risk committee and must set out strategies for addressing liquidity needs during stress events, which strategies must be commensurate with the BHC's liquidity risk profile.¹¹⁰² The contingency plan must identify stress events that could significantly impact on the BHC's liquidity; assess available funding sources during liquidity stress events; establish processes for managing liquidity stress events; set out an action plan for responding to liquidity shortfalls; and specify the process for triggering the contingency plan as well as the process for monitoring liquidity stress events.¹¹⁰³

Further, a BHC is required to establish liquidity risk limits that are commensurate with its liquidity risk profile. This entails setting limits on concentrations in funding tenor, funding type, single counterparty and counterparty type, including off-balance sheet exposures and other exposures that create funding needs during liquidity stress events.¹¹⁰⁴ A BHC must also monitor assets that are pledged as collateral; establish procedures for monitoring and controlling intraday liquidity risk¹¹⁰⁵ and liquidity risk exposures and funding within significant legal entities, currencies and business lines.¹¹⁰⁶ It is further required that a BHC must establish and maintain a review function (that is independent of the management function) to evaluate the BHC's liquidity risk-management.¹¹⁰⁷

In addition, BHCs are required to conduct liquidity stress-testing designed to enhance their liquidity positions so that they can withstand a period of liquidity stress during adverse market conditions; idiosyncratic stress events; or combined stress scenarios based on their size, complexity, risk profile and scope of operations, or any additional

¹¹⁰¹ 12 CFR § 252.34(c)(4).

¹¹⁰² 12 CFR § 252.34(b) and (f).

¹¹⁰³ 12 CFR § 252.34 (f).

¹¹⁰⁴ 12 CFR § 252.34 (g).

¹¹⁰⁵ See paragraph 2.4.5, subparagraph 2.4.5.1, of Chapter Two, for the definition of intraday liquidity.

¹¹⁰⁶ 12 CFR § 252.34 (h)(1), (2) and (3).

¹¹⁰⁷ 12 CFR § 252.34(d).

appropriate stress scenario.¹¹⁰⁸ Liquidity stress-testing must be carried out over a planning horizon that may be: overnight, thirty days, ninety days, one year and any other planning horizon that is relevant to a particular BHC's liquidity risk profile.¹¹⁰⁹

Further, BHCs are obliged to develop a system of controls and oversight designed to ensure that liquidity stress-testing processes are effective,¹¹¹⁰ as well as policies for the governance of liquidity stress-testing practices; methodologies; and assumptions that provide for the incorporation of future stress-testing and enhancement of stress-testing practices over time.¹¹¹¹ If the stress-testing results indicate liquidity shortfalls, the Federal Reserve will order the BHC concerned to improve its liquidity management practices.¹¹¹² In addition, BHCs must maintain management information systems and data processes sufficient to ensure effective and reliable data collection.¹¹¹³

Liquidity buffer requirements entail a requirement for the composition of unencumbered HQLA¹¹¹⁴ that are sufficient to meet the projected net stressed cash-flow need of a BHC over the thirty-day planning horizon of a liquidity stress test.¹¹¹⁵ The qualifying liquidity criteria are substantially similar to that of HQLA under the LCR discussed above.¹¹¹⁶ Finally, the liquidity buffer must contain diversified highly liquid assets categorized by issuer, business sector, region and any other factor related to a BHC's risk profile, except with respect to cash and securities issued or guaranteed

¹¹⁰⁸ 12 CFR § 252.35 (a)(1) and (3); 12 CFR § 252.35(a)(2).

¹¹⁰⁹ 12 CFR § 252.35 (a)(4); 12 CFR § 252,35 (4) defines a planning horizon as a period over which the relevant liquidity stressed projections extend.

¹¹¹⁰ 12 CFR § 252.35(7)(ii).

¹¹¹¹ 12 CFR § 252.35(7)(i).

¹¹¹² *Ibid.*

¹¹¹³ 12 CFR § 252.35(7)(iii).

¹¹¹⁴ HQLA are fully discussed in subparagraph 3.8.4.1 above, under the *US LCR framework*.

¹¹¹⁵ 12 CFR § 252.35(b)(1); 12 CFR § 252.35(b)(2) defines net stressed cash flow need as the difference between the amount of a BHC's cash-flow need and the amount of its cash flow sources over 30-day planning horizon. See also, *Board of Governors of the Federal Reserve System Interagency policy statement on funding and liquidity risk management* (March 2010) available at <https://www.federalreserve.gov/boarddocs/srletters/2010/sr1006.pdf>

(accessed 7 October 2017). This policy statement is based on BCBS "Principles for sound liquidity risk management and supervision", which are discussed in paragraph 2.4.5 of Chapter Two. The policy statement mentions that Comprehensive Liquidity Analysis and Review (CLAR), which is similar to CCAR, complements the liquidity buffer requirements by gauging the liquidity adequacy of US BHCs under different stress scenarios to enhance their liquidity risk profile. See further, Eisenbeis R (2012) "How to manage and help to avoid systemic liquidity risk" 24 *Journal of Applied Corporate Finance* 20 at 62.

¹¹¹⁶ See paragraph 3.8.4.1.

by the United States, a US government agency, or a US government-sponsored enterprise (US GSE).¹¹¹⁷

US G-SIBs, Category II and Category III US BHCs are subject to the most stringent liquidity standards. These standards include liquidity risk-management, monthly internal liquidity stress-testing and liquidity buffer requirements and liquidity data reporting for each business day under FR 2052a.¹¹¹⁸ The Federal Reserve justifies the stringency of these requirements for Category II and Category III US BHCs, that is similar to those of US G-SIBs, based on their heightened liquidity risks and risk-management challenges occasioned by their big size, and wider global reach relative to banking organisations with a limited global footprint.¹¹¹⁹ These stringent prudential standards are also warranted in light of greater liquidity runs that might be occasioned by these US BHCs arising from asset fire sales with the potential for a contagion effect that could compromise financial stability.¹¹²⁰

Category IV US BHCs are subject to quarterly liquidity stress-testing and liquidity buffer requirements and monthly reporting of FR 2052a liquidity data.¹¹²¹ These reduced liquidity requirements reflect the decreased liquidity risk profile of Category IV US BHCs mainly as a result of their insignificant engagement in wholesale funding and their lesser operational complexity due to low cross-jurisdictional activity, non-bank assets and off-balance sheet exposure.¹¹²²

3.8.6 Resolution plans for US G-SIBs, Category II and Category III US BHCs

To facilitate a better understanding of the following discussions, Table 3.8.6 below demonstrates the Federal Reserve's resolution planning regime discussed below.

Categories of BHCs	Resolution planning requirements
US G-SIBs	<ul style="list-style-type: none"> • Biennial filers (file resolution plans every other year.

¹¹¹⁷ 12 CFR § 252.35(b)(v).

¹¹¹⁸ Part IV of the Stringent Prudential Standards Categories Final Rule.

¹¹¹⁹ *Ibid.*

¹¹²⁰ *Ibid.*

¹¹²¹ *Ibid.*

¹¹²² *Ibid.*

	<ul style="list-style-type: none"> • Biennial filers are not entitled to a waiver of informational content.
Categories II and III BHCs	<ul style="list-style-type: none"> • Triennial full filers (file resolution plans every three years). • Triennial full filers are entitled to a waiver of informational content.

As part of the US implementation of the *FSB Key Attributes*,¹¹²³ section 165(d) of the Dodd-Frank Act, as amended by section 401 of the EGRRCPA, requires BHCs to periodically submit resolution plans, otherwise known as “living wills”, to the Federal Reserve and the FDIC.¹¹²⁴ Resolution plans must outline a BHC’s strategy for orderly and rapid resolution in the event of material financial distress or failure, without resort to bail-out through the use of taxpayers’ money.¹¹²⁵ The Federal Reserve may require a BHC, when filing its resolution plans, to also file a credit exposure report showing the nature and extent to which such BHC has credit exposures to other significant BHCs and vice versa.¹¹²⁶

The Federal Reserve adopted a Final Rule titled *Resolution Plans Required* in November 2011¹¹²⁷ and updated it in November 2019 to give effect to the EGRRCPA revised asset-size threshold.¹¹²⁸ This Final Rule is implemented through Regulation

¹¹²³ The *FSB Key Attributes* are highlighted in paragraph 1.3 of Chapter One and discussed in detail in paragraph 2.4, subparagraph 2.4.7, of Chapter Two.

¹¹²⁴ Section 165(d)(8) directs the Federal Reserve to issue Final Rules implementing this section.

¹¹²⁵ 12 USC § 5365(d)(1); See further, Avgouleas E *et al* (2013) “Bank resolution plans as a catalyst for global financial reform” 9 *Journal of Financial Stability* 210; Carmassi J *et al* (2013) “Living wills and cross-border resolution of systemically important banks” 5 *Journal of Financial Economic Policy* 361 at 366; Avery A *et al* (2010) “New resolution process created for systemically significant institutions” 127 *Banking Law Journal* 784; McDermott MA *et al* (2011) “Restructuring large, systemically –important, financial institutions, financial companies: An analysis of the orderly liquidation authority, Title II of Dodd-Frank Wall Street Reform and Consumer Protection Act” 19 *American Bankruptcy Institutional Law Review* 401.

¹¹²⁶ 12 USC § 5365(d)(2).

¹¹²⁷ Resolution Plans Required (November 2011) available at <https://www.gpo.gov/fdsys/pkg/FR-2011-11-01/pdf/2011-27377.pdf> (accessed 27 September 2019).

¹¹²⁸ Resolution Plans Required Final Rule (November 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-11-01/pdf/2019-23967.pdf> (accessed 29 November 2019); Section 165(d)(8) of the Dodd-Frank Act requires the Federal Reserve to issue a final rule to implement a requirement for resolution planning.

QQ.¹¹²⁹ The scope of application of resolution planning covers US G-SIBs, Category II and Category III US BHCs (referred to as “covered companies”) and the stringency of this requirement is tailored in terms of the frequency of submission and required informational content of a resolution plan.¹¹³⁰

US G-SIBs are so-called “biennial filers”,¹¹³¹ meaning that they submit resolution plans every other year.¹¹³² Category II and Category III US BHCs are called “triennial full filers”, meaning that they file resolution plans every three years, given that they pose lesser financial stability threats.¹¹³³ Both “biennial filers” and “triennial full filers” are required to alternate between filing a full resolution plan and a targeted resolution plan, as discussed below.¹¹³⁴ While a “triennial full filer” may request the Federal Reserve to waive one or more informational content requirements, discussed below, if such information is contained in a previously submitted full resolution plan, a “biennial filer” is not entitled to such a waiver.¹¹³⁵

US G-SIBs, Category II and Category III US BHCs (covered companies) are required to submit a “full resolution plan”.¹¹³⁶ In particular, a full resolution plan encompasses an executive summary capturing the key elements of a strategic plan for the company’s rapid and orderly resolution in the event of material financial distress or failure: any material changes impacting upon the company since the filing of a previous

¹¹²⁹ Title 12 CFR Part 243 – Resolution Plans (Regulation QQ) available at <https://ecfr.io/Title-12/Part-243> (accessed 1 October 2020).

¹¹³⁰ 12 CFR § 243.4.

¹¹³¹ 12 CFR § 243.4(b)(1)(i) and (ii); 12 CFR § 243.4(b)(2).

¹¹³² 12 CFR § 243.4 (a)(1)(i) and (3). Part IV of Resolution Plans Required Final Rule (November 2019) states that the Federal Reserve changed the timeframe for the submission of resolution plans, which used to be annually, in order to allow BHCs to submit detailed resolution plans and enable the Federal Reserve to provide comprehensive feedback on submitted resolution plans.

¹¹³³ Part III of the Resolutions Required Final Rule (November 2019).

¹¹³⁴ In terms of 12 CFR § 243.4(c)(1), (2) and (4), “Biennial filers” and triennial full filers” are distinct from “triennial reduced filers” (which are outside the scope of this study), which are certain foreign banking organisations that are required to submit reduced resolution plans every three years given their limited scope of operation and less complex activities. 12 CFR § 243.7 12 CFR § 243.4(a)(5); 12 CFR § 243.4(b)(4); 12 CFR § 243.4(d)(6)(i) stipulates that the Federal Reserve and the FDIC may jointly waive one or more of the requirements of a full resolution plan and a targeted resolution plan. Part III of Resolution Plans Required Final Rule (November 2019) states that the Federal Reserve retains the authority to request for key information before the time for a submission of a resolution plan is due, including requiring interim updates during extra-ordinary events to remain informed of the material developments impacting on resolvability of BHCs, and these will also include requiring full resolution plans instead of a targeted resolution plan.

¹¹³⁵ 12 CFR § 243.4(d)(6)(ii).

¹¹³⁶ 12 CFR § 243.5(a)(1).

resolution plan; changes to the previously submitted resolution plan resulting from changes in the law or guidance or feedback from the Federal Reserve; and the steps that the covered company has taken to improve the effectiveness of the resolution plan or remedy or mitigate any material weakness or impediments to the effective and timely execution of the resolution plan.¹¹³⁷

Further, a full resolution plan must contain a strategic analysis describing a covered company's plan for rapid and orderly resolution in the event of material financial distress or failure. This must include a detailed description of: key assumptions supporting analysis underlying a resolution plan; actions that will be taken to facilitate an orderly resolution of the covered company; the material entities of the covered company and its identified critical operations and core business lines; the covered company's funding, liquidity and capital needs and available resources that will be mapped to its identified critical operations and core business lines; as well as the strategy for maintaining such operations; a strategy that will be employed in the event of a failure or discontinuation of a material entity, core business lines or identified critical operation; as well as a strategy for ensuring the protection of a depository institution subsidiary against risks arising from the activities of non-bank subsidiaries.¹¹³⁸

Covered companies are enjoined to establish and implement a process designed to identify their critical operations and they are required to periodically review such process and update it to ensure its efficacy.¹¹³⁹ The Federal Reserve and the FDIC must jointly review the operations of covered companies, not less frequently than every six years, to determine whether to identify critical operations or to rescind the identification thereof.¹¹⁴⁰ The Federal Reserve and the FDIC must also jointly notify a BHC if its operation is identified as a critical operation. However, a BHC is not required to furnish informational content relating to such critical operation in any resolution plan

¹¹³⁷ 12 CFR § 243.5(b)(1).

¹¹³⁸ 12 CFR § 243.5(c); 12 CFR § 243.2 defines critical operations as those operations of the covered company, including associated services, functions and support, the failure or discontinuance of which would pose a threat to US financial stability. The Final Rule defines critical operations as any activity that is significant to the US financial system in which a US BHC is a significant provider or participant including payment, clearing and settlement, deposit-taking, wholesale funding, capital markets, and investment activities.

¹¹³⁹ 12 CFR § 243.3(a)(1).

¹¹⁴⁰ 12 CFR § 243.3(b)(1).

that it has to file within twelve months after being notified of such identification.¹¹⁴¹ A joint identification of a critical operation may be rescinded¹¹⁴² or a BHC may request for a reconsideration of such joint identification.¹¹⁴³

Further, a full resolution plan must contain a detailed description on how resolution planning is integrated into a covered company's corporate structure and processes.¹¹⁴⁴ Specifically, it must include policies, procedures and internal controls governing the preparation and approval of a resolution plan; information regarding senior management responsible for developing, overseeing, maintaining, implementing and filing a resolution plan; and a description of risk measures used to report credit risk exposures to senior management and the board of directors.¹¹⁴⁵ In addition, a full resolution plan has to incorporate a description of the covered company's organisational structure, including its material entities as well as jurisdictions within which these entities operate.¹¹⁴⁶ A full resolution plan must further identify and map the interconnections and interdependences among the covered company and its material entities and the identified critical operations and core business lines – the disruption of which will affect the funding or operations of such company or such identified critical operations and core business lines.¹¹⁴⁷ Such interconnections include common or shared personnel, facilities, or systems; capital, funding or liquidity arrangements; existing or contingent credit exposure; and cross-guarantee arrangements.¹¹⁴⁸

¹¹⁴¹ 12 CFR § 243.3(b)(2).

¹¹⁴² 12 CFR § 243.3(b)(3).

¹¹⁴³ 12 CFR § 243.3(c).

¹¹⁴⁴ 12 CFR § 243.5(d)(1)(i).

¹¹⁴⁵ 12 CFR § 243.5(d)(1).

¹¹⁴⁶ 12 CFR § 243.5(e); See further, Massman SP (2015) "Developing a new resolution regime for failed systemically important financial institutions: An assessment of the orderly liquidation authority" 89 *American Bankruptcy Law Journal* 625 at 627; Carpenter DH "Living wills: The legal regime for constructing resolution plans for certain financial institutions" Congressional Research Service Report (December 2014) available at

<https://fas.org/sgp/crs/misc/R43801.pdf> (accessed 27 September 2017); Hart O *et al* (2011) "A new capital regulation for large financial institutions" 13 *American Law and Economics Review* 453-490; Rozansky GI *et al* (2012) "Living will requirements for financial institutions" available at

https://www.shearman.com/~/media/files/newsinsights/publications/2012/05/living-will-requirements-for-financial-instituti_/files/view-full-article-living-will-requirements-for-f_/fileattachment/livingwillrequirementsforfinancialinstitutionsfi_.pdf (accessed 27 September 2017); Gnanarajah R *et al* (2018) *The Orderly Liquidation Authority: Reform Proposals* (fas.org). (accessed 27 September 2017); Kupiec P *et al* (2015) "Can the "single point of entry" strategy be used to recapitalize a systemically important failing bank" 20 *Journal of Financial Stability* 184.

¹¹⁴⁷ 12 CFR § 243.5(g).

¹¹⁴⁸ *Ibid.*

Other features that constitute an integral part of a full resolution plan include: a description of the key management information systems for risk-management of a covered company and a mapping of this information to its material entities, identified critical operations and core business lines; and a description and analysis of the BHC's capability to collect and report information in a timely fashion to the management of a BHC; and identification of any gaps or weakness in such capabilities.¹¹⁴⁹

Lastly, a full resolution plan must specify the supervisory and regulatory authorities responsible for ensuring the safety and soundness of the covered company as well as its material entities, identified critical operations and core business lines. In this regard, it must also include the authorities of other jurisdictions with significant supervisory authority over the covered company's subsidiaries.¹¹⁵⁰

The revised updated *Resolution Plans Required-Final Rule*¹¹⁵¹ introduced the requirement of a "targeted resolution plan", which is a subset of a full resolution plan.¹¹⁵² The content of a targeted resolution plan captures the following specific core elements of a full resolution plan: a covered company's strategic analysis; the integration of a resolution plan into the company's corporate governance structure; the company's organisational structure entailing its material entities and the mapping of these material entities to identified critical operations and core business lines; the interdependence of a covered company and its material entities regarding capital, liquidity and a plan for executing any re-capitalisation; and the company's data collection and reporting capabilities under management information systems.¹¹⁵³

Similarly, a targeted resolution plan contains a description of material changes experienced by a covered company since the previously submitted resolution plan and any changes resulting from law or the Federal Reserve's and the FDIC's guidance and feedback.¹¹⁵⁴ Such changes relate to the manner and extent to which insured

¹¹⁴⁹ 12 CFR § 243.5(f).

¹¹⁵⁰ 12 CFR § 243.5(h).

¹¹⁵¹ Resolution Plans Required Final Rule (November 2019) available at <https://www.govinfo.gov/content/pkg/FR-2019-11-01/pdf/2019-23967.pdf> (accessed 29 November 2019).

¹¹⁵² 12 CFR § 243.6(a).

¹¹⁵³ 12 CFR § 243.2.

¹¹⁵⁴ 12 CFR § 243.6(b).

depository institutions affiliated with a covered company are protected from risks arising from its non-bank subsidiaries; a full description of the ownership structure; assets, liabilities and contractual obligations of the company as well as the identification of cross-guarantees tied to different securities; identification of major counterparties, and the counterparties to which collateral is pledged.¹¹⁵⁵

If a targeted resolution plan excludes a description of the specified changes, or any changes since a covered company's previously submitted resolution plan, they will be incorporated by reference to a previously submitted resolution plan.¹¹⁵⁶ The "incorporation by reference"-provision is intended to strike a balance between providing updated information that could have an impact on the resolvability of a covered company while eliminating the submission of information that is substantially similar to that which is contained in the company's most recent submitted resolution plans.¹¹⁵⁷

The Federal Reserve and the FDIC are jointly responsible for reviewing resolution plans.¹¹⁵⁸ If a resolution plan is not credible or has deficiencies or shortcomings undermining its feasibility, a covered company will be ordered to resubmit a revised resolution plan that addresses such deficiencies.¹¹⁵⁹ The Federal Reserve will provide covered companies with notices of deficiencies in a resolution plan and any firm-specific feedback, in addition to general guidance, no later than twelve months after submission of their resolution plans to enable these companies to consider such feedback in preparation for future resolution planning.¹¹⁶⁰ Important to note is that the Dodd-Frank Act empowers the Federal Reserve and the FDIC to restrict the financial activities of a covered company whose resolution plan is not credible until a revised

¹¹⁵⁵ 12 USC § 5365(d)(1)(A), (B) and (C).

¹¹⁵⁶ 12 CFR § 243.6(d).

¹¹⁵⁷ Part III of Resolution Plans Required Final Rule (November 2019).

¹¹⁵⁸ 12 CFR § 243.8(a).

¹¹⁵⁹ 12 CFR § 243.8(b), (c) and (e).

¹¹⁶⁰ 12 CFR § 243.8(f); Part III of Resolution Plans Required Final Rule (November 2019) notes that firm-specific feedback includes letters sent to specific firms expressing views on that particular firm while general guidance entails expectations or priorities and general non-binding views of the Federal Reserve and the FDIC. The agencies retain the authority to require a firm to submit revised resolution plans within a shorter period than one year addressing deficiencies or to provide an interim update.

and acceptable resolution plan is submitted, failing which the assets of the company concerned will be divested.¹¹⁶¹

Notably, resolution plans differ from recovery plans provided for in section 166 of the Dodd-Frank Act which sets out remedial actions to be taken by BHCs experiencing material financial distress in order to restore their financial health and thereby minimising their probability of becoming insolvent. Recovery plans are thus triggered during the early intervention-phase to prevent bank insolvency. Evidently, a resolution plan is prepared and implemented once a BHC encounters a distress or failure to facilitate the orderly resolution of such BHC.

3.8.7 Single counterparty credit limits for US G-SIBs, Category II and Category III BHCs

To facilitate a better understanding of the discussion below, Table 3.8.7 below demonstrates the Federal Reserve’s single counterparty credit limit framework.

Categories of BHCs	SCCL
US G-SIBs	<ul style="list-style-type: none"> • 15% of CET1 SCCL to major counterparties.
US G-SIBs, Categories II and III BHCs	<ul style="list-style-type: none"> • 25% of Tier 1 capital SCCL to counterparties.

Section 165(e) of the Dodd-Frank Act prohibits a BHC from having credit exposure to any unaffiliated company that is in excess of 25 per cent of such BHC’s capital stock

¹¹⁶¹ 12 CFR § 243(9); See further, Joint Press Release: Agencies denounce determinants and provide feedback on resolution plans of eight systemically important, domestic banking institutions (April 2016) available at

<https://www.federalreserve.gov/newsevents/pressreleases/bcreg20160413a.htm>

(accessed 17 October 2017). The Federal Reserve and the FDIC ordered five US G-SIBs, namely, JP Morgan Chase, Bank of America, Wells Fargo, Bank of New York Mellon and State Street to rectify their resolution plans prepared back in 2015 and eventually restricted the activities of Wells Fargo for failing to remedy the inefficiencies in its resolution plan. See further, Board of Governors of the Federal Reserve System Resolution plan assessment framework and firm determinations (April 2016) available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20160413a2.pdf>

(accessed 27 September 2017); Federal Deposit Insurance Corporation and Board of Governors of the Federal Reserve System Guidance for 2017 §165(d) annual resolution plan submissions by domestic covered companies that submitted resolution plans in (July 2015) available at

<https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20160413a1.pdf>

(accesses 27 September 2017).

and surplus. This cap on large exposures serves to minimise the risk of contagion arising from failure or financial distress among interconnected financial institutions. The Federal Reserve may however, by regulation, prescribe a more restrictive credit exposure limit than the limit specified above if it determines such limit to be necessary to mitigate financial stability risks.¹¹⁶²

“Credit exposure” is defined as all forms of credit extension including loans, deposits, and lines of credit,¹¹⁶³ repurchase agreements, reverse repurchase agreements,¹¹⁶⁴ securities lending or securities borrowing transactions with a counterparty, guarantees, acceptances, letters of credit, and credit exposure in connection with a derivative transaction.¹¹⁶⁵ The Dodd-Frank Act authorises the Federal Reserve to employ credit mitigation techniques by regulation or order, to exempt certain transactions, in whole or in part, from the definition of “credit exposure” if it is in the public interest, or if it is consistent with the purpose of the Act.¹¹⁶⁶

To implement section 165(e) of the Dodd-Frank Act, the Federal Reserve issued a notice of proposed rulemaking in respect of *Single Counterparty Credit Limits (SCCL)* in May 2011 to regulate credit concentration among single counterparties consistent with the Dodd-Frank Act asset-size threshold.¹¹⁶⁷ In May 2016, the Federal Reserve re-proposed the *SCCL Proposed Rule*¹¹⁶⁸ to accommodate the *Basel supervisory framework for measuring and controlling large exposures*, which was published in April

¹¹⁶² Section 165(e)(2) of the Dodd-Frank Act.

¹¹⁶³ 12 USC 53659(e)(3)(A); 12 USC 5365(e)(4) states that the proceeds of the credit extension are used to benefit the party to whom credit is extended to.

¹¹⁶⁴ Section 210(c)(v)(I) of the Dodd-Frank Act defines repurchase agreement, also applicable in reverse repurchase agreements, as an agreement that provides for the transfer of one or more certificates of deposit, mortgage-related securities, mortgage loans, interest in mortgage-related securities or mortgage loans, eligible banker’s acceptances; and qualified foreign government securities or securities that are direct obligations of, or that are guaranteed by the US or any agency of the US against transfer of funds by transferee of such certificates of deposit, eligible banker’s acceptances, securities, mortgage loans or interest with a simultaneous agreement by such transferee to transfer to the transferor thereof certificates of deposit, certificate of deposits of deposit, eligible bankers’ acceptances, securities, mortgage loans, or interests as described above, at a certain date not later than one year after such transfers or demand against the transfer of funds, or any other similar agreement.

¹¹⁶⁵ 12 USC § 53659(e)(3); See paragraph 2.2, subparagraph 2.2.1.1, of Chapter Two, for the definition of standby letters of credit and acceptances.

¹¹⁶⁶ Section 165(e)(6) of the Dodd-Frank Act.

¹¹⁶⁷ Enhanced Prudential Standards and Early Remediation Requirements for Covered Companies (January 2012) available at <https://www.gpo.gov/fdsys/pkg/FR-2012-01-05/pdf/2011-33364.pdf> (accessed 3 October 2016).

¹¹⁶⁸ Single-Counterparty Credit Limits for Large Banking Organizations (March 2016) available at <https://www.gpo.gov/fdsys/pkg/FR-2016-03-16/pdf/2016-05386.pdf> (accessed 27 August 2017).

2014.¹¹⁶⁹ In June 2018, the Federal Reserve eventually adopted the *Single-counterparty credit limits for bank holding companies and foreign banking organisations Final Rule (SCCL Final Rule)*, which became the first Final Rule that implemented the EGRRCPA revised asset-size threshold.¹¹⁷⁰

The scope of application of the *SCCL Final Rule* covers US G-SIBs, Category II and Category III US BHCs.¹¹⁷¹ These institutions are prohibited from having an aggregate net credit exposure to any counterparty that exceeds 25 per cent of Tier 1 capital.¹¹⁷² In this context a “counterparty” refers to the following: a natural person, and if the credit exposure of a US G-SIB to that natural person exceeds 5 per cent of Tier 1 capital, such natural person and the immediate family members of such a natural person collectively; a company and its affiliates; the State and all of its agencies, instrumentalities and political divisions; and a foreign sovereign that is not assigned a zero per cent risk weight under Regulation Q and all its agencies and instrumentalities.¹¹⁷³ An “affiliate” is defined as any subsidiary of a company or any other company that is consolidated with it under applicable accounting standards.¹¹⁷⁴

The extension of the *SCCL Final Rule* to natural persons, states, and non-financial sector entities reflects the Federal Reserve’s view that these categories can potentially present systemic concerns just like financial institutions, resulting in devastating repercussions to the US financial system and economy.¹¹⁷⁵ This approach is also consistent with the Dodd-Frank Act’s requirement regarding the authority of the Federal Reserve to establish “any other” stringent prudential standards, as it may deem appropriate, to regulate systemic risk.¹¹⁷⁶ Additionally, the Federal Reserve is of the view that this wide scope of the *SCCL Final Rule* is aligned to the objective of

¹¹⁶⁹ See paragraph 2.4, subparagraph 2.4.6, of Chapter Two, for a discussion of the *Basel framework for measuring and controlling large exposures*.

¹¹⁷⁰ Single-Counterparty Credit Limits for Bank Holding Companies and Foreign Banking Organisations (August 2018) available at <https://www.gpo.gov/fdsys/pkg/FR-2018-08-06/pdf/2018-16133.pdf> (assessed 20 September 2018).

¹¹⁷¹ 12 CFR § 252.70(a).

¹¹⁷² 12 CFR § 252.72(a).

¹¹⁷³ 12 CFR § 252.71(e).

¹¹⁷⁴ 12 CFR § 252.71(b).

¹¹⁷⁵ Part II of the SCCL Final Rule.

¹¹⁷⁶ 12 USC § 5365(b)(1)(B)(iv).

establishing prudential standards to address the safety and soundness risks of BHCs as well as financial stability risks under the Bank Holding Company Act.¹¹⁷⁷

Notably, US G-SIBs are subject to a more stringent SCCL under the Final Rule. A G-SIB's aggregate net credit exposure, on a consolidated basis including any subsidiaries, is restricted to 15 per cent of CET1 capital to any major counterparty.¹¹⁷⁸ A "subsidiary" is defined to mean any company that is consolidated on the financial statements of such a G-SIB prepared in accordance with the US accepted accounting standards¹¹⁷⁹ such as the *Generally Accepted Accounting Principles*¹¹⁸⁰ or the *International Financial Reporting Standards*.¹¹⁸¹ These financial consolidation standards are intended to reduce the complexity and mitigate the compliance costs of the Final Rule.¹¹⁸² A "major counterparty" is defined as a systemically important BHC and a US non-bank SIFI that is subject to the supervision of the Federal Reserve.¹¹⁸³

The Federal Reserve justifies the 15 per cent credit exposure limit for US G-SIBs to any major counterparty on the basis that the Dodd-Frank Act vests it with the authority to establish a restrictive credit limit necessary to prevent or mitigate systemic risk in the US financial system.¹¹⁸⁴ According to the Federal Reserve, the 15 per cent credit exposure limit is intended to address the gravest financial stability threats pertaining to credit extensions among SIFIs. It also seeks to combat the risk of contagion that could trigger simultaneous failures of SIFIs through the default of one SIFI owing to their engagement in common business lines, counterparties and funding types and sources.¹¹⁸⁵ This is opposed to the 25 per cent credit exposure limit, as discussed above, that applies to other counterparties that do not pose as great financial stability risks as SIFIs.¹¹⁸⁶ Further, the Federal Reserve acted on the authority to establish "any

¹¹⁷⁷ 12 USC § 1844(c)(2); See paragraph 3.2 above on the consolidated supervision of the Federal Reserve in line with the Bank Holding Company Act.

¹¹⁷⁸ 12 CFR § 252.72(b).

¹¹⁷⁹ 12 CFR § 252.71; Part I of the SCCL Final Rule.

¹¹⁸⁰ The *Generally Accepted Accounting Principles* are issued by the Financial Accounting Standards Board and they are available at its website <https://www.fasb.org/> (accessed 16 June 2016).

¹¹⁸¹ The *International Financial Reporting Standards* available at <https://www.ifrs.org/> (accessed 16 June 2016).

¹¹⁸² 12 CFR § 252.71.

¹¹⁸³ 12 CFR § 252.71; 12 CFR § 252.153(b)(6).

¹¹⁸⁴ Part I of the SCCL Final Rule.

¹¹⁸⁵ *Ibid.*

¹¹⁸⁶ Board of Governors of the Federal Reserve System Calibrating single-counterparty credit limit between systemically important financial institutions (March 2016) available at

other” stringent prudential standards to deploy CET1 capital, in contrast to the capital stock and surplus, as stipulated in the Dodd-Frank Act, for effective and maximum loss-absorption of elevated risks posed by major counterparties relative to any other counterparties.¹¹⁸⁷

Notably, the SCCL applies to the aggregate net credit exposure of a BHC, which is defined as “the sum of all net credit exposures of an individual institution and all its subsidiaries to a single counterparty”.¹¹⁸⁸ The net credit exposure¹¹⁸⁹ is the difference between the aggregate gross credit exposure and the credit risk mitigants, such as eligible collateral,¹¹⁹⁰ eligible guarantees,¹¹⁹¹ and other credit mitigation techniques including eligible credit and equity derivatives.¹¹⁹² In other words, the gross credit exposure takes account of the total sum of credit exposures before the credit risk mitigation is applied as per the above specified requirement in the Dodd-Frank Act.¹¹⁹³

The *SCCL Final Rule* outlines several qualifying exemptions from the SCCL. First, credit transactions that are direct claims on, or directly and fully guaranteed by Fannie

<https://www.federalreserve.gov/aboutthefed/boardmeetings/sccl-paper-20160304.pdf>
(accessed 25 August 2017).

¹¹⁸⁷ 12 USC 5365(a)(1)(B); 12 USC 5365(a)(2)(A).

¹¹⁸⁸ 12 CFR 252.71(c).

¹¹⁸⁹ 12 CFR § 252.74.

¹¹⁹⁰ 12 CFR § 252.71 (k) states that eligible collateral is collateral in which a BHC has first priority security interest and can be in the form of debt securities (other than asset-backed mortgages or mortgage-backed securities) that are bank-eligible and investment grade, equity securities that are publicly traded, convertible securities, convertible bonds and gold bullion. A covered BHC must recognise credit exposure to the collateral issuer in an amount equal to the adjusted market value of the collateral to monitor the direct and indirect credit exposure. A credit exposure to the collateral issuer is to be limited to the credit exposure to the original counterparty. The SCCL Final Rule notes that if a BHC had 100 billion USD in gross credit exposure to a counterparty with respect to a particular credit transaction, and the latter pledged collateral with an adjusted market value of 50 billion USD the full amount of which qualified as eligible collateral, a BHC’s net credit exposure to the counterparty on the transaction would be 50 billion USD. With respect to eligible collateral, a risk-shifting approach is applied to the net credit exposure of 50 billion USD to the issuer of collateral and the counterparty.

¹¹⁹¹ 12 CFR § 217.2 defines eligible guarantee as a guarantee that is written, and it is either unconditional or a contingent obligation of the US government or its agencies the enforceability of which is dependent upon some affirmative action on the part of the beneficiary or a third party. Eligible guarantor includes sovereign entities, BIS, IMF, European Commission, Federal Home Loan Bank, Federal Agriculture Mortgage Corporation, multilateral development banks.

¹¹⁹² 12 CFR § 252.71(l) defines an eligible credit derivative as a single-name credit derivative or a standard, non-tranched index credit derivative that meets the requirements of an eligible guarantee and has been confirmed by the protection purchaser and the protection provider and any assignment has been confirmed by relevant parties; 12 CFR § 252.71(m) defines an eligible equity derivative as an equity derivative contract confirmed by all relevant parties and any assignment thereto.

¹¹⁹³ 12 CFR § 252.73 stipulates that aggregate net credit exposure is the sum of all net exposures of a covered company and all its subsidiaries to a single counterparty and all its affiliates.

Mae and Freddie Mac¹¹⁹⁴ while operating under conservatorship or receivership of FHFA – consistent with the policy that such government-sponsored enterprises (GSEs) should not be subject to a regulatory limit while they are under conservatorship or receivership.¹¹⁹⁵ Second, intraday credit exposure to a counterparty¹¹⁹⁶ that is intended to minimise the impact of the *SCCL Final Rule* on the payment and settlement of financial transactions.¹¹⁹⁷ Third, any trade exposures to a qualifying central counterparty related to a G-SIB’s clearing activity, including potential future transaction cleared by the qualifying central party.¹¹⁹⁸ Fourth, any credit transaction with the BIS, the IMF, or institutions that are members of the World Bank.¹¹⁹⁹ Fifth, any credit transaction with the European Commission or European Central Bank.¹²⁰⁰ Finally, any transactions that the Federal Reserve exempts upon making a finding that it would be in the public interest or consistent with the purpose of the *SCCL Final Rule*.¹²⁰¹

The *SCCL Final Rule* also incorporates a “look-through” approach¹²⁰² in terms of which institutions must recognise the exposure of at least 0.25 per cent of Tier 1 capital to the issuer of an underlying asset that is held by a special purpose vehicle (SPV).¹²⁰³ Further, the *SCCL Final Rule* requires institutions having net credit exposures to any single counterparty that is in excess of 5 per cent to aggregate exposures to such counterparty with all other counterparties that are “economically interdependent” or connected by a control relationship with the said single counterparty.¹²⁰⁴ Two counterparties are economically interdependent if the financial distress or failure of one counterparty would cause the financial distress or failure of another

¹¹⁹⁴ See paragraph 1.5 of Chapter One for the description of the role of Fannie Mae and Freddie Mac.

¹¹⁹⁵ 12 CFR § 252.77(a)(1); As discussed above in paragraph 3.1, the FHFA acts as a conservator or receiver of these government-sponsored enterprises as well as the regulated entities in the oversight of the US mortgage industry. As a conservator, the FHFA is responsible for ensuring continued operations of the regulated entities as well as rehabilitating such entities for a safe, sound and solvent condition. As a receiver, the FHFA ensures the resolution and liquidation of the regulated entities. For this explanation, see *Conservatorship and Receivership Final Rule* (June 2011) available at <https://www.govinfo.gov/content/pkg/FR-2011-06-20/pdf/2011-15098.pdf> (accessed 20 January 2020).

¹¹⁹⁶ 12 CFR § 252.77(a)(1).

¹¹⁹⁷ 12 CFR § 252.77(a)(2).

¹¹⁹⁸ 12 CFR § 252.77(a)(3).

¹¹⁹⁹ 12 CFR § 252.77(a)(4).

¹²⁰⁰ 12 CFR § 252.77(a)(5).

¹²⁰¹ 12 CFR § 252.77(a)(6).

¹²⁰² See paragraph 2.4, subparagraph 2.4.6, of Chapter Two, for the look-through approach principle under the Basel single counterparty exposure limit framework.

¹²⁰³ 12 CFR § 252.75.

¹²⁰⁴ 12 CFR § 252.76(a).

counterparty.¹²⁰⁵ This could be the case in instances where: 50 per cent of the other counterparty's gross revenue is derived from, or gross expenditures are directed to, transactions with the distressed counterparty; the distressed counterparty had fully or partly guaranteed the credit exposure of the other counterparty; or 25 per cent production or output of the other counterparty is sold to the distressed counterparty, which cannot be easily replaced by other customers.¹²⁰⁶ The exception may be granted when the counterparty reduces its reliance from the other, for instance.¹²⁰⁷

A "control relationship" is assessed based on the following factors: counterparty A owns, controls or holds with the power to vote 25 per cent or more of any class of securities of counterparty B or controls in any manner the election of a majority of the directors, trustees or general partners.¹²⁰⁸ Similarly, relief can be granted when the counterparty proves that a control relationship does not exist.¹²⁰⁹ The rationale of the "economically interdependent" and "control relationship"-tests is to curtail credit extension among single parties as it may potentially exacerbate contagion risk.¹²¹⁰

The SCCL-reporting form (FR 2590) is an electronic form collecting information every quarter from various counterparties to monitor compliance with credit exposure limits.¹²¹¹ Non-compliance with the SCCL leads to enforcement action such as the

¹²⁰⁵ 12 CFR § 252.76(b); Part II of the SCCL Final Rule.

¹²⁰⁶ 12 CFR § 252.76(b)(2).

¹²⁰⁷ 12 CFR § 252.76(b)(3).

¹²⁰⁸ 12 CFR § 252.76(c).

¹²⁰⁹ 12 CFR § 252.76(c)(2).

¹²¹⁰ Part I of the SCCL Final Rule.

¹²¹¹ Single-Counterparty Credit Limits Reporting Form (Reporting Form FR 2590) available at https://www.federalreserve.gov/reportforms/formsreview/FR2590_20180620_i_draft.pdf (accessed 20 September 2018). Generally, the FR 2590 gathers information on the legal name and entity type, plus the consolidated assets, Tier 1 capital, capital stock and surplus, and the status of a bank. The FR 2590 further aggregates data for the calculation of credit exposure reported on nine schedules, five (schedule G-1 to G-5) of which gathers information related to the gross exposures of the BHC and two collecting information relating to economic independence (schedule A-1) and control relationships (schedule A-2), as well as Schedule M-1 and Schedule M-2. Schedule G-1 contains gross credit exposures categories of deposits, loans and leases, debt securities or investments, equity securities or investments, committed credit lines, guarantees and letters of credit, and securitization arising from the look-through approach. Schedule G-2 records repurchase agreements and reverse repurchase agreements while Schedule G-3 reports securities lending exposures and borrowing transactions. Schedule G-4 measures the notional amount of the derivatives transactions and Schedule G-5 collects the information on gross credit exposure affected by the risk-shifting employing types of credit risk mitigants - such as eligible collateral, eligible guarantee, eligible derivatives, other eligible hedges, and credit transactions involving exempt entities. Schedule M-1 deducts the value of eligible collateral from gross credit exposure, and Schedule M-2 collects information that is related to other credit risk mitigation techniques other than eligible collateral. As discussed above, Schedule A-1 and Schedule A-2 collect data on economic independence and control relationships of BHC, respectively.

prohibition of any additional credit transactions with the relevant counterparty, except for financial stability reasons.¹²¹²

3.8.8 Total Loss Absorbing Capacity requirements for US G-SIBs

To facilitate a better understanding of the discussions hereinafter, Table 3.8.8 illustrates the Federal Reserve’s Total Loss Absorbing Capacity requirements for US G-SIBs.

Total Loss Absorbing requirements for US G-SIBs	Long-term debt requirements for US G-SIBs	The “clean holding company”- requirements for US G-SIBs
<ul style="list-style-type: none"> • An external TLAC in an amount not less than an amount equal to the greater of 18 per cent of RWAs and; • 7.5 per cent of the total leverage exposure under the leverage exposure framework • An external TLAC buffer for risk-weighted assets (external TLAC risk-weighted buffer) that is equal to the sum of 2.5 per cent composed solely of CET1 capital plus the applicable G-SIB 	<ul style="list-style-type: none"> • An outstanding external LTD amount not less than an amount equal to the greater o • 6 per cent of total RWAs plus the applicable G-SIB surcharge and; • 4 per cent of the total leverage exposure under the leverage exposure framework 	<ul style="list-style-type: none"> • Prohibit US G-SIBs from issuing debt instruments having a maturity of less than one year to third parties • limit the engagement of US G-SIBs in qualified financial contracts (QFCs) with third parties other than

¹²¹² *Ibid.*

<p>surcharge and any applicable CCyB</p> <ul style="list-style-type: none"> • an external TLAC buffer for the total exposure component of the external TLAC requirement (external TLAC leverage buffer) that equals 2 per cent solely composed of Tier 1 capital 		<p>with their subsidiaries and affiliates</p> <ul style="list-style-type: none"> • prohibit US G-SIBs from guaranteeing liabilities of their subsidiaries in the event that they enter insolvency or resolution proceedings or creating default rights for a counterparty of a subsidiary • prohibit liabilities guaranteed by subsidiaries of a G-SIB (“upstream guarantees”) • prohibit a right that would allow third parties
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		to offset its debt to a subsidiary upon a G-SIB's default on an obligation owed to the third party
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To give effect to the FSB TLAC principles highlighted in Chapter Two,¹²¹³ the Federal Reserve and the OCC jointly published a Final Rule in December 2016, titled *Total Loss-absorbing Capacity, Long-Term Debt, and Clean Holding Company Requirements for Systemically Important U.S. Bank Holding Companies and Intermediate Holding Companies of Systemically Important Foreign Banking Organizations (TLAC Final Rule)*, which became fully effective by January 2019.¹²¹⁴ The *TLAC Final Rule* lays down minimum requirements regarding the TLAC and Long-term debt (LTD) instruments for US G-SIBs.¹²¹⁵ The two overarching objectives of the *TLAC Final Rule* are to enhance the resilience of US G-SIBs in times of material financial distress and to improve their resolvability in the event of their material financial distress or failure to eliminate the bail-out conundrum.¹²¹⁶ Accordingly, these objectives seek to safeguard the US financial system.¹²¹⁷

The TLAC and the LTD requirements are intended to supplement the minimum regulatory capital requirements stipulated in Regulation Q,¹²¹⁸ which ensure that a banking organisation maintains sufficient capital to remain a “going concern”.¹²¹⁹ To

¹²¹³ See paragraph 2.2.

¹²¹⁴ Total Loss-Absorbing Capacity, Long-Term Debt and Clean Holding Company Requirements for Systemically Important U.S. Bank Holding companies and Intermediate Holding Companies of Systemically Important Foreign Banking Organisations (December 2016) available at <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20161215a1.pdf> (accessed 29 July 2017).

¹²¹⁵ 12 CFR § 252.60.

¹²¹⁶ Part I of the TLAC Final Rule.

¹²¹⁷ *Ibid.*

¹²¹⁸ See subparagraph 3.8.1 for the discussion of Regulation Q.

¹²¹⁹ See subparagraph 3.8.1.3 above on the analysis of the G-SIB surcharge. See further, paragraph 2.2 of Chapter Two, for the concept of a “going concern”.

attain this complementary objective, the TLAC and the LTD requirements are designed to raise the loss-absorbing capacity of US G-SIBs on both a “going concern” and “gone concern” basis.¹²²⁰ In this regard, a company’s “gone concern” loss absorbing capacity focuses on its re-capitalisation as the “going concern” loss absorbing capacity may be significantly depleted during and post the resolution stage.¹²²¹

US G-SIBs are required to maintain an outstanding external TLAC in an amount not less than an amount equal to the greater of 18 per cent of RWAs and 7.5 per cent of total leverage exposure under the leverage exposure framework.¹²²² The core features of eligible external TLAC is the sum of CET1 capital, additional Tier 1 (AT1) capital and an eligible external LTD, as defined below.¹²²³ In addition, US G-SIBs must hold an external TLAC buffer for risk-weighted assets (external TLAC risk-weighted buffer) that is equal to the sum of 2.5 per cent composed solely of CET1 capital plus the applicable G-SIB surcharge discussed above,¹²²⁴ and any applicable CCyB discussed above.¹²²⁵ Specifically, the TLAC risk-weighted buffer is analogous to the CCvB, save that it ranges above the TLAC requirement rather than the minimum risk-based capital requirements and incorporates only the G-SIB surcharge, and breach whereof similarly results in constraints on capital distributions and discretionary bonus payments.¹²²⁶

Besides the TLAC risk-weighted buffer, the *TLAC Final Rule* establishes an external TLAC buffer for the total exposure component of the external TLAC requirement (external TLAC leverage buffer) that equals 2 per cent solely composed of Tier 1 capital.¹²²⁷ The external TLAC leverage buffer operates similar to the enhanced supplementary leverage ratio discussed above,¹²²⁸ except that the former applies in

¹²²⁰ Part I of the TLAC Final Rule; See paragraph 2.2 of Chapter Two, for the description of a “gone concern”.

¹²²¹ *Ibid.*

¹²²² 12 CFR § 252.63(a) (1) and (2).

¹²²³ 12 CFR § 252.63(b).

¹²²⁴ See paragraph 3.8.1.3.

¹²²⁵ 12 CFR § 252.63(c); See paragraph 3.8.1.2.

¹²²⁶ 12 CFR § 252.63 (c)(1), (2), (3) and (4); 12 CFR § 252.63 (c)(4) (iv) confers the Federal Reserve with the discretion to permit a G-SIB to make capital distributions upon request if it determines that such distributions will not contradict the purpose of this requirement or pose risk to its safety and soundness. In making such determination, the Federal Reserve will consider the nature and extent of the request and the particular circumstances giving rise to the request.

¹²²⁷ Part I of the TLAC Final Rule.

¹²²⁸ See paragraph 3.8.2.

addition to the external TLAC requirement, meaning that a deficit thereof results in limits on capital distributions and discretionary bonus payments.¹²²⁹ According to the Federal Reserve, the external TLAC buffers are intended to lessen the risk of insolvency of a US G-SIB by limiting its ability to distribute capital and pay discretionary bonuses when its capital levels decline similar to the rules of capital buffers in the regulatory capital framework.¹²³⁰ Further, any restrictions on distributions and discretionary payments would be based on the most restrictive of the TLAC risk-weighted buffer and TLAC leverage buffer.¹²³¹

In addition to the TLAC requirement, US G-SIBs must, at all times, hold an outstanding external LTD amount not less than an amount equal to the greater of 6 per cent of total RWAs plus the applicable G-SIB surcharge, and 4 per cent of the total leverage exposure under the leverage exposure framework.¹²³² The *TLAC Final Rule* defines an eligible external LTD as an unsecured debt that is issued directly by a US G-SIB, having no features that interfere with resolution proceedings. Popularly referred to as “plain vanilla”, such debt securities are excluded from an eligible external LTD to the extent that they would impede a G-SIB’s loss-absorbing capacity.¹²³³ A G-SIB is prohibited from redeeming or repurchasing its eligible external LTD prior to its dated maturity date without the Federal Reserve’s approval if such redemption or repurchase would result in a deficit of the eligible LTD and the external TLAC requirement.¹²³⁴ US G-SIBs having outstanding eligible external debt securities must publicly disclose to unsecured debtholders, on a website, or in public reports or public regulatory reports, that those debtholders will be subject to loss ahead of other creditors during resolution (thus that they will be “bailed-in” during resolution).¹²³⁵

In order to be eligible, an external LTD must fulfil certain criteria. First, it must be directly issued by a US G-SIB and held by an unaffiliated person. Eligible external LTD is directly issued by the US G-SIB itself, and not its subsidiaries, to absorb losses

¹²²⁹ 12 CFR 12 CFR § 252.63 (5); See Part I of the TLAC Final Rule.

¹²³⁰ Part I of the TLAC Final Rule.

¹²³¹ 12 CFR 252.63(c)(5).

¹²³² 12 CFR § 252.62(a).

¹²³³ 12 CFR § 252.62(b).

¹²³⁴ 12 CFR § 252.62(c).

¹²³⁵ See 12 CFR § 217.65.

throughout the entire banking organisation during a single-point-of-entry (SPoE)¹²³⁶ resolution in order to avoid a disorderly resolution process.¹²³⁷ This requirement seeks to enable the re-capitalisation of the parent bank at the consolidated level, together with that of its subsidiaries on a stand-alone basis, to guarantee the uninterrupted operation of critical economic functions and the continuous provision of financial services to customers during the resolution of a US G-SIB.¹²³⁸

Further, the eligible external LTD must be unsecured debt, not guaranteed by a US G-SIB or its subsidiary, and not subject to any arrangement that legally or economically enhances the seniority of the instrument, such as credit enhancement provided by an affiliate.¹²³⁹ The rationale for this requirement is for the external LTD to achieve the primary purpose of maximum loss-absorption of a US G-SIB in resolution. This purpose is achieved by preventing losses arising from the collateral in secured credit and ensuring that losses are imposed on unsecured debt in accordance with the standard creditor-hierarchy in bankruptcy under which secured creditors are paid ahead of unsecured creditors.¹²⁴⁰

The *TLAC Final Rule* further states that an eligible external LTD must be an unsecured debt with a maturity of greater than one year from the date it was issued.¹²⁴¹ In this instance, the amount of eligible external LTD that is due to be paid in one year would be subject to a 50 per cent haircut. This means that only 50 per cent of the value of the principal debt will count towards this requirement to maintain a G-SIB's additional loss absorbency against protracted periods of stress and incentivises such companies to rather issue LTD due to be paid after a long time.¹²⁴² The amount that is due to be paid in less than one year would not count towards the external LTD requirement as the debt may likely mature between the time when a covered company encounters

¹²³⁶ See paragraph 2.4, subparagraph 2.4.7, of Chapter Two for the definition of a single-point-of-entry.

¹²³⁷ Part II of the TLAC Final Rule states that a debt issued by a subsidiary cannot absorb losses under the SPE resolution strategy, even if it is losses that are incurred at the issuing subsidiary unless it is the subsidiary itself that enters resolution proceedings. See paragraph 2.4, subparagraph 2.4.7, of Chapter Two, for the definition of SPOE.

¹²³⁸ Part II of the TLAC Final Rule.

¹²³⁹ 12 CFR § 252. 61(1)(ii).

¹²⁴⁰ Part II of the TLAC Final Rule.

¹²⁴¹ 12 CFR § 252. 61(1)(iii).

¹²⁴² Part II of the TLAC Final Rule.

stress and enters the resolution stage.¹²⁴³ The amount of eligible external LTD that is due to be paid in more than two years would count at 100 per cent of the unpaid principal amount.¹²⁴⁴ Also, eligible external LTD that could become subject to a “put” right would be treated as though it were due to be paid on the same day on which it became subject to the said right, as a “put” right entitles the holder to demand the issuer to redeem the debt before its maturity date.¹²⁴⁵

Further, as indicated above, eligible external LTD must be “plain vanilla”.¹²⁴⁶ The requirement for eligible external LTD instruments to be “plain vanilla” instruments is designed to ensure that their value can be easily determined and ascertainable during resolution and that they exclude exotic features of which the value is not ascertainable and may lead to complex resolution.¹²⁴⁷

Eligible external LTD must further be subject to the governance of US laws. In particular, they must be governed under the US Bankruptcy Code¹²⁴⁸ or the Orderly Liquidation Authority Title of the Dodd-Frank Act¹²⁴⁹ to guard against the risk of being challenged under laws of foreign jurisdictions that could impede their ability to effectively absorb losses in resolution.¹²⁵⁰

Further, the *TLAC Final Rule* permits an option that the eligible external LTD instrument may be contractually subordinated to impose losses on unsecured creditors of a G-SIB first during the resolution proceedings, or that it may be structurally subordinated so that the secured creditors of a G-SIB absorb losses ahead of the creditors of a G-SIB’s subsidiaries in a SPoE resolution.¹²⁵¹

¹²⁴³ *Ibid.*

¹²⁴⁴ *Ibid.*

¹²⁴⁵ 12 CFR § 252. 61(1)(v) states that this right entitles the external LTD holder to accelerate payment of the debt.

¹²⁴⁶ 12 CFR § 252. 61.

¹²⁴⁷ 12 CFR § 252. 61(1)(vi), (vii), (vi) stipulates that an eligible external LTD instrument must exclude structured notes as they contain features that make their valuation uncertain and volatile and excludes credit-sensitive feature as well as a provision for conversion into equity prior to resolution since such features can reduce the loss-absorbing capacity.

¹²⁴⁸ Title 11 USC – Bankruptcy.

¹²⁴⁹ See paragraph 3.2 above.

¹²⁵⁰ Part II of the TLAC Final Rule.

¹²⁵¹ *Ibid.*

To eliminate the TBTF-conundrum, the external LTD entails a “capital refill” framework in terms of which the objective of an external LTD requirement is to ensure that a US G-SIB maintains a minimum amount of eligible external LTD that can be “bailed-in” when the TLAC “going concern” capital is depleted during and after the resolution process.¹²⁵² This means that an eligible external LTD is designed to simultaneously sufficiently absorb losses post the resolution stage and fully recapitalise a G-SIB and its subsidiaries by replenishing the “going concern” capital.¹²⁵³

In addition to the TLAC and the LTD requirements, the *TLAC Final Rule* enunciates the “clean holding company”-requirements restricting certain financial arrangements that would give rise to a complex resolution.¹²⁵⁴ Specifically, the “clean holding company”-requirements constrain the ability of US G-SIBs to issue debt instruments having a maturity of less than one year to third parties because it is regarded to be the most unstable source of funding that can cause liquidity runs in times of financial stress.¹²⁵⁵ Further, these requirements limit the engagement of US G-SIBs in qualified financial contracts (QFCs) with third parties other than with their subsidiaries and affiliates to simplify the resolution process under the SPoE resolution strategy.¹²⁵⁶ QFCs are defined as any securities contract, commodity contract, forward contract, repurchase agreement, swap agreement, and any similar agreement that the FDIC determines by regulation, resolution, or order, to be a “qualified financial contract”.¹²⁵⁷

The *TLAC Final Rule* further prohibits US G-SIBs from guaranteeing liabilities of their subsidiaries in the event that they enter insolvency or resolution proceedings or creating default rights¹²⁵⁸ for a counterparty of a subsidiary in order to ensure smooth operation during resolution.¹²⁵⁹ Further, it prohibits liabilities guaranteed by subsidiaries of a G-SIB (“upstream guarantees”) to ensure that the losses are

¹²⁵² Part I of the TLAC Final Rule.

¹²⁵³ *Ibid.*

¹²⁵⁴ Part I of the TLAC Final Rule.

¹²⁵⁵ 12 CFR § 252.64(a)(1).

¹²⁵⁶ 12 CFR § 252.64(a)(3).

¹²⁵⁷ Section 210(c)(8)(D) of the Dodd-Frank Act.

¹²⁵⁸ In terms of 12 CFR § 252.6, a default right entitles a party to cancel, liquidate, rescind, terminate or accelerate a contract or transaction or set off or net the amount owing thereof as well as to alter the amount of collateral that must be provided with respect to an exposure thereunder.

¹²⁵⁹ 12 CFR § 252.64(a)(4).

absorbed by a G-SIB's eligible external TLAC holders.¹²⁶⁰ For similar grounds, the Final Rule prohibits a right that would allow third parties to offset its debt to a subsidiary upon a G-SIB's default on an obligation owed to the third party.¹²⁶¹ The Rule also limits the total value of liabilities that are not eligible LTD, that would have ranked *pari passu* with, or be subordinated to, eligible external LTD, to 5 per cent of eligible external TLAC, except that the cap will not apply if all the LTD is contractually subordinated.¹²⁶²

3.9 Additional stringent prudential standards

To facilitate a better understanding of the discussions hereinafter, Table 3.9 below lists the Federal Reserve's additional prudential standards.

Additional prudential standards
<ul style="list-style-type: none"> • A contingent capital
<ul style="list-style-type: none"> • Enhanced public disclosures, including credit exposure reports
<ul style="list-style-type: none"> • Short-term debt limits, expressed as a percentage of capital stock and surplus of a BHC, including off-balance sheet exposures
<ul style="list-style-type: none"> • A "debt-to-equity"-ratio of no more than 15-to-1

As alluded to above, the Federal Reserve may impose other additional stringent prudential standards on BHCs that are subject to its enhanced stringent prudential framework with the objective of mitigating risks to financial stability in the US.¹²⁶³ As such, the Federal Reserve may, upon the recommendation of the Council, require BHCs to hold a minimum amount of contingent capital convertible to equity in times of financial distress.¹²⁶⁴ In prescribing regulations regarding the minimum amount of

¹²⁶⁰ Part II of the TLAC Final Rule.

¹²⁶¹ *Ibid.*

¹²⁶² 12 CFR § 252.64(b)-(c).

¹²⁶³ See paragraph 3.8.

¹²⁶⁴ 12 USC § 5365(b)(1)(B)(i); 12 USC § 5365(1)(c); Calomiris CW (2013) "How to design a contingent convertible debt requirement that helps solve our Too-Big-To-Fail problem" 25 *Journal of Applied Corporate Finance* at 66 asserts that a contingent capital reinforces risk-management and market discipline as the failing banks are still expected to raise equity to continue critical functions post the liquidation stage. Allen L *et al* (2016) "What's the contingency? A proposal for bank contingent capital trigger by systemic risk" 26 *Journal of Financial Stability* 1; Sundaresan S *et al* (2015) "On the design of contingent capital with a market trigger" *LXX The Journal of Finance* 881 at 882; Biljanovska B (2016) "Aligning market discipline and financial stability: A more gradual shift from convertible capital to bail-in measures" 17 *European Business Organisation Law Review* 105 at 107; Bolton P *et al* (2012) "Capital access bonds: Contingent capital with an option to convert" 27 *Economic Policy* 275 at 278.

contingent capital, the Federal Reserve is required to take into consideration the results of a feasibility study that the Council¹²⁶⁵ conducts regarding the benefits, costs, and structure of a contingent capital requirement.¹²⁶⁶ The study includes factors such as the degree to which a contingent capital requirement would enhance the safety and soundness of BHCs; promote financial stability and reduce risks to taxpayers; an analysis of potential prudential standards that should be used to determine whether the contingent capital of a BHC would be converted into equity in times of stress; an evaluation of the costs of such a requirement; the economic effects on the structure and operation of credit and other financial markets; and other economic effects of such a requirement as well as capital requirements applicable to a BHC.¹²⁶⁷

To implement a contingent capital requirement, the Council conducted a study and issued a Report to Congress in July 2012.¹²⁶⁸ According to the Council, there is not a well-established definition of a contingent capital, but for purposes of its study, the Council defined contingent capital as “regulatory capital and other financial instruments that are designed to generate additional common equity during a trigger event such as a systemic crisis”. Although its findings revealed that contingent capital is useful in absorbing losses and thereby enhancing the safety and soundness of financial companies and safeguarding financial stability, the Council observed that contingent capital’s ability for effective loss-absorption may be limited by factors such as the price set for conversion to common shares and uncertainty regarding its timely conversion if it is issued *in lieu* of common stock. Therefore, the Council recommended a continued study on the advantages and setbacks of incorporating contingent capital in the regulatory capital frameworks of the Federal Reserve and other financial regulatory agencies.

¹²⁶⁵ See paragraph 3.3 above for the discussion of the macro-prudential role of the Council to US financial system.

¹²⁶⁶ Section 115(c)(1) of the Dodd-Frank Act.

¹²⁶⁷ 12 USC § 5325 (c).

¹²⁶⁸ Financial Stability Oversight Council Report to Congress on study of a contingent capital requirement for certain nonbank financial companies and bank holding companies – Financial Stability Oversight Council (July 2012) available at [https://www.lexissecuritiesmosaic.com/uploaded/resourcecenter/Dodd-Frank%20Tracker/Co%20co%20study\[2\].pdf](https://www.lexissecuritiesmosaic.com/uploaded/resourcecenter/Dodd-Frank%20Tracker/Co%20co%20study[2].pdf) (accessed 6 September 2018).

Additional prudential standards that the Federal Reserve may impose on BHCs encompasses enhanced public disclosures, including credit exposure reports¹²⁶⁹ in order to support market evaluation of the risk profile, capital adequacy and risk-management capabilities thereof.¹²⁷⁰ Further, the Federal Reserve, acting on the Council's recommendation, may prescribe short-term debt limits, expressed as a percentage of capital stock and surplus of a BHC, including off-balance sheet exposures, to mitigate the risks that an over-accumulation of such debt could pose to BHCs.¹²⁷¹ Additionally, the Federal Reserve may require a BHC that poses a great threat to financial stability in the US to maintain a "debt-to-equity"-ratio of no more than 15-to-1.¹²⁷² In this context, "debt-to-equity"-ratio refers to the ratio of a BHC's total liabilities to its total equity capital less goodwill.¹²⁷³

3.10 The legal remedies under the stringent prudential framework

In terms of section 8 of the Administrative Procedure Act,¹²⁷⁴ any person suffering legal wrong because of the action of any agency, or who gets adversely affected or aggrieved by such action, is entitled to judicial review.¹²⁷⁵ Interim relief may be granted pending judicial review proceedings to preserve the status quo, and this relief postpones the effective date of any action.¹²⁷⁶ The relief that may be granted by the reviewing court includes setting aside the agency action, and to hold such action to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law, or unsupported by substantial evidence, or without observance of due procedure.¹²⁷⁷ In line with these provisions of the Administrative Procedure Act, US G-SIBs, Categories II, III and IV US BHCs may institute review proceedings against the decision to apply stringent prudential standards to them albeit no such proceedings have to date been instituted by these banks.¹²⁷⁸

¹²⁶⁹ See paragraph 3.8.7 above.

¹²⁷⁰ 12 USC § 5365(b)(1)(B)(ii); 12 USC § 5325(f).

¹²⁷¹ 12 USC 5325(g); 12 USC 5365(g)(1) and (2); Section 165(g)(3) defines short-term debt as liabilities with short-dated maturity that the Federal Reserve identifies by regulation excluding insured deposits.

¹²⁷² 12 CFR § 252.220(b).

¹²⁷³ 12 CFR § 252.220(a)(1).

¹²⁷⁴ See paragraph 3.4 above.

¹²⁷⁵ Section 10(2)(a) of the Administrative Procedure Act.

¹²⁷⁶ Section 10(2)(d) of the Administrative Procedure Act.

¹²⁷⁷ Section 10(2)(e) of the Administrative Procedure Act.

¹²⁷⁸ To date, there are no court cases that challenge the identification of US G-SIBs for purposes of applying stringent prudential and US BHCs that are subject to stringent prudential standards. The exception is with regard to the case of MetLife against the Council in which MetLife opposed the Council's decision to designate it as a systemically important non-bank financial company in line with

It is important to note that the Dodd-Frank Act in section 113 provides a designation process that the Council must follow when identifying a non-bank financial company as a SIFI. The Act states that the Council must afford the non-bank financial company concerned a hearing to challenge its designation as a SIFI and the financial institution is further provided a right of review of the Council's decision. Non-bank financial companies that the Council designate as SIFIs will be subject to stringent prudential standards pursuant to section 115 of the Dodd-Frank Act. It is observed that this stringent prudential regime will be similar to stringent prudential standards that are applicable to SIFI-banks under section 165 of the Dodd-Frank Act, as amended.

3.11 Conclusion

The Dodd-Frank Act, as amended by the EGRRCPA, is the post GFC comprehensive legislative framework that overhauls the approach to regulation of the US financial system. Various Acts establish different financial regulatory agencies that are *ex officio* members of the Council constituting the regulatory architecture for the US financial system. The Federal Reserve, the OCC and the FDIC are the Federal banking agencies under the US dual banking system. The Council is responsible for macro-prudential oversight of the US financial system while the Federal Reserve identifies and regulates US G-SIBs and US BHCs that are subject to stringent prudential standards which are then imposed by the Federal Reserve.

Section 165 of the Dodd-Frank Act, as subsequently amended by section 401 of the EGRRCPA, is the primary provision that establishes the criteria for the application of stringent prudential standards to US BHCs that are subject to the Federal Reserve's enhanced prudential regime, based on consolidated assets and risk indicators with fixed size thresholds, to prevent systemic risk emanating from large, complex and highly interconnected financial institutions in the US. Notably, section 401 of the EGRRCPA amended section 165 of the Dodd-Frank Act by increasing the asset-size threshold for the automatic application of stringent prudential standards to US BHCs from 50 billion USD or more to a minimum of 250 billion USD in total consolidated

section 120 of the Dodd-Frank Act and in which the Court rescinded the designation. See *MetLife Inc. v. Financial Stability Oversight Council* (harvard.edu) (30 November 2018). See further, Perkins *et al* Economic Growth, Regulatory Relief, and Consumer Protection Act (P.L. 115-174) and selected policy issues (fas.org) June 2018 (accessed 5 November 2018).

assets. Further, the EGRRCPA confers the Federal Reserve with the discretion to apply stringent prudential standards to US BHCs maintaining 100 billion USD in total consolidated assets but less than 250 billion USD if findings are made that applying such stringent prudential standards are necessary to safeguard financial stability in the US.

To implement the EGRRCPA revised asset-size threshold, the Federal Reserve issued the *Stringent Prudential Standards Categories Final Rule* determining the applicability criteria of stringent prudential standards to US G-SIBs (Category I), Categories II, III and IV US BHCs. Advanced approaches US BHCs are identified as US G-SIBs in accordance with the indicator-based measurement approach methodology, which broadly mirrors the *Basel G-SIB framework*. However, the US G-SIB framework further employs the short-term wholesale funding framework methodology which replaces the category of “substitutability” under the indicator-based measurement approach to identify US G-SIBs. Notably, the US G-SIB framework does not use supervisory judgment to complement the indicator-based measurement approach.

As noted, the US G-SIBs are: JP Morgan Chase, Bank of America, Citigroup, Goldman Sachs, Wells Fargo, Bank of New York Mellon, Morgan Stanley and State Street. Given that the short-term wholesale funding framework, as opposed the indicator-based measurement approach, is employed to calculate the G-SIB surcharge that applies to US G-SIBs and generates elevated G-SIB surcharges, the Federal Reserve opines that it is more stringent than the *Basel G-SIB framework*.

Category II US BHCs maintain 700 hundred billion USD or more in total consolidated assets or 100 billion total assets and 75 billion or more in the cross-jurisdictional activity and these BHCs are not US G-SIBs. The scope of application of Category III stringent prudential standards extends to US BHCs with 250 billion USD or more in total consolidated assets or 100 billion total assets and 75 billion USD or more in any of the risk indicators of weighted short-term wholesale funding, non-bank assets and off-balance sheet exposure. Finally, Category IV US BHCs maintain a minimum of 100 billion USD total consolidated assets.

The Federal Reserve's stringent prudential regime for US G-SIBs, Categories II, III and IV US BHCs is tiered and mandatorily tailored to their risk profile. Category I stringent prudential standards, which apply to US G-SIBs, are the most stringent of all the categories of prudential standards as they are designed to deal with the greatest risks to the US financial system.

Regarding the Federal Reserve's capital framework, the G-SIB surcharge is the most stringent prudential tool applying to US G-SIBs and it increases their "going-concern" loss-absorbency capacity. Further, US G-SIBs, advanced approaches US BHCs or Category II US BHCs and Category III US BHCs are all subject to the CCvB and the CCyB, which augment the G-SIB surcharge in the case of their applicability to G-SIBs. Category IV US BHCs are subject to "generally applicable capital" requirements stipulated in the Collins Amendment.

In relation to the Federal Reserve's supplementary leverage ratio framework, US G-SIBs are subject to a more stringent requirement of the enhanced supplementary leverage ratio relative to advanced approaches US BHCs or Categories II and III US BHCs that are subject to a supplementary leverage ratio. Conversely, Category IV US BHCs are subject to the "US leverage" ratio provided for in the Collins Amendment.

US G-SIBs, advanced approaches US BHCs or Categories II and III US BHCs are subject to a full LCR requirement, which is generally consistent with the *Basel III LCR framework*. However, the Federal Reserve imposes a reduced LCR requirement to Category III US BHCs with average weighted short-term wholesale funding that is less than 75 billion USD and Category IV US BHCs with 50 billion USD or more in average weighted short-term wholesale funding. The Federal Reserve applies a full requirement of the NSFR to US G-SIBs, Categories II, and Category III US BHCs with average weighted short-term wholesale funding of 75 billion USD or more. Category III US BHCs with average weighted short-term wholesale funding that is less than 75 billion USD and Category IV US BHCs with 50 billion USD or more in average weighted short-term wholesale funding are subject to a reduced NSFR requirement calibrated at 85 per cent and 70 per cent of a full NSFR, respectively.

Part of the stringent prudential regime incorporated in Regulation YY, and implemented through the *Enhanced Prudential Standards Final Rule*, as amended, is applicable to US BHCs with minimum total consolidated assets of 100 billion USD. Under this prudential regime, US G-SIBs, Categories II and III US BHCs are subject to capital planning and annual supervisory-run and periodic company-run stress tests whereas Category IV US BHCs are subject to capital planning and supervisory-run stress-testing every other year and are exempt from company-run stress tests. In addition, the Federal Reserve uses supervisory-run stress test results to determine a SCB requirement for these institutions, which substitutes the static 2.5 per cent of the CCvB requirement. Further, US G-SIBs, Categories II and III US BHCs are subject to liquidity risk-management and liquidity risk stress-testing and buffer requirements on a monthly basis and FR 2052a liquidity data daily reporting relative to a quarterly requirement for Category IV US BHCs. Regulation YY subjects all these Categories to risk-management and risk committee requirements.

In addition, the Federal Reserve requires US G-SIBs, so-called “biennial filers”, to submit resolution plans every other year while Categories II and III US BHCs (“triennial full filers”) submit resolution plans every three years. “Triennial full filers” may request a waiver to submit some informational content of a full resolution plan unlike “biennial filers” which are not permitted to waive such requirements.

The Federal Reserve imposes stringent SCCL of 15 per cent of CET1 capital on US G-SIBs that can be extended to a “major counterparty” in order to address their elevated systemic risk. US-G-SIBs, together with Categories II and III US BHCs are also prohibited from extending an aggregate net credit exposure to a single counterparty exceeding 25 per cent of Tier 1 capital, being a less stringent requirement relative to the credit exposure restriction of 15 per cent of CET1 capital that is extended to “major counterparties”.

US G-SIBs are also subject to the TLAC and the LTD requirements, which are complementary to the G-SIB surcharge as they raise the loss-absorbing capacity of G-SIBs both on a “going concern” and “gone concern”-basis. The *TLAC Final Rule* further subjects US-G-SIBs to “clean-holding company” requirements.

Apart from the aforementioned, the Federal Reserve may prescribe additional prudential standards to preserve financial stability in the US, which comprise a contingent capital-requirement, enhanced public disclosures including a credit exposures report requirement, a short-term debt requirement and a “debt-to equity”-ratio requirement.

Overall, the Federal Reserve has developed an extensive and robust enhanced regulatory and supervisory framework that is tailored to the systemic profile of US G-SIBs, and Categories II, III and IV US BHCs. The US has implemented many prudential standards of the BCBS that were introduced post GFC encompassing the enhanced capital buffer regime, supplementary leverage ratio, liquidity standards and the SCCL, in addition to resolution planning as contained in the *FSB Key Attributes* as well as the TLAC and the LTD requirements.

The Federal Reserve’s prudential toolkit incorporated in Regulation YY is also comprehensive and fundamental in strengthening its regulatory and supervisory framework. In particular, the SCB requirement which substitutes the static 2.5 per cent of CCvB requirement is a recent innovation to the Federal Reserve’s capital framework integrating the capital and stress-testing regimes. Further, the liquidity risk-management and liquidity stress-testing and buffer requirements are designed to supplement the Federal Reserve’s LCR and NSFR frameworks. Notably, the risk-management and risk committee requirements constitute another integral part of Regulation YY that guard against risks to financial system stability as well as safety and soundness concerns. The effectiveness of the Federal Reserve’s stringent prudential framework is, however, yet to be tested upon the occurrence of a future financial crisis but it is clear that the enhanced stringent prudential regulation of US G-SIBs, Categories I, II, III and IV US BHCs will increase the resilience of these banks and make it less likely that they would impede or compromise financial stability in future.

US G-SIBs and US BHCs that are subject to stringent prudential standards can seek relief through judicial review proceedings under the Administrative Procedure Act if they are aggrieved by the Federal Reserve’s decision to apply stringent prudential standards.

CHAPTER FOUR

THE DUTCH LEGAL FRAMEWORK FOR IDENTIFICATION AND REGULATION OF DOMESTIC SYSTEMICALLY IMPORTANT BANKS (O-SIIs)

4.1 Introduction

In this Chapter the EU identification and regulatory framework for “other systemically important institutions” (O-SIIs), the equivalent of D-SIBs, in the Netherlands to give effect to the *Basel D-SIB framework*, will be considered. Accordingly, the Chapter highlights the legal and regulatory structure for the financial system of the EU as a whole which underpins the EU financial regulatory architecture within which the O-SII framework functions. Given that the Netherlands is an EU Member State as well as a Eurozone country, an overview of the Eurozone financial regulatory system is vital to provide context in respect of the identification and regulation of O-SIIs.

More specifically, the Chapter examines the regulation of the Dutch financial system and how it operationalises the identification and regulatory framework for O-SIIs consistent with the EU and the Eurozone’s financial regulatory architecture. The focus is on a review of the Dutch O-SII framework in respect of the assessment methodology for the identification of O-SIIs and the application of stringent prudential regulation and enhanced oversight of O-SIIs. The Chapter further briefly interrogates the available legal remedies for challenging the Dutch O-SII identification.

4.2 The legal and regulatory framework of the EU financial system

According to the hierarchy of EU laws, *the Treaty on the European Union* (TEU), and *the Treaty on the Functioning of the European Union* (TFEU), together termed the

Treaties,¹²⁷⁹ are the primary source of EU law.¹²⁸⁰ Article 288 of the TFEU constitutes the legal basis for the EU legal instruments that comprise regulations, directives, decisions, recommendations and opinions. These legal instruments¹²⁸¹ are grouped into a hierarchy consisting of legislative acts,¹²⁸² delegated acts¹²⁸³ and implementing

¹²⁷⁹ The Treaty on the European Union and the Treaty on the Functioning of the European Union (TFEU) were originally called the Maastricht Treaty of 1992 and the Treaty of Rome of 1957 (also formerly referred to as the Treaty Establishing the European Community), respectively. The Treaties were later renamed when they were amended by the Lisbon Treaty, which entered into force on 1 December 2009, which established the powers of the Union. For this, refer to the Treaty on European Union, signed at Maastricht on 7 February 1992 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:1992:191:FULL&from=EN> (accessed 30 May 2018); Treaty on European Union (92/C 191 /01) available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:11992M/TXT&from=EN> (accessed 30 May 2018); Consolidated Version of the Treaty Establishing the European Community (97/C 340 /03) available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:11997E/TXT&rid=1> (accessed 30 May 2018). Consolidated Version of the Treaty on the Functioning of the European Union available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN> (accessed 30 May 2018); Treaty of Lisbon (2007/C306/01) available at http://publications.europa.eu/resource/cellar/688a7a98-3110-4ffe-a6b3-8972d8445325.0007.01/DOC_19 (accessed 30 May 2018).

¹²⁸⁰ Consolidated Versions of the Treaty on European Union and the Treaty on the Functioning of the European Union Official Journal of the European Union (2012/C 326/01) available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2012.326.01.0001.01.ENG&toc=OJ:C:2012:326:TOC (accessed 30 May 2018). In terms of Article 1 of the TEU and Article 1 of the TFEU, the EU was originally founded through a union of twenty-eight Member States and conferred with the authority to ensure the proper functioning of the Union as a whole and to attain the common objectives of its Member States. Currently, the Union is constituted of twenty-seven Member States following the vote of the UK to exit the EU in a referendum of June 2016, commonly known as Brexit, which took effect from 31 January 2020. For this, see European Union (Withdrawal Agreement) Act 2020 available at <http://www.legislation.gov.uk/ukpga/2020/1/contents/enacted> (accessed 28 May 2020). Article 335 of the TFEU stipulates that the Union shall enjoy the most extensive legal capacity accorded to legal persons under the laws of the Member States. Article 47 of the TEU provides that the Union has the legal personality. Article 13 of the TEU states that the EU institutional framework is constituted of the European Parliament, the European Council, the Council, the European Commission, the Court of Justice of the European Union, the European Central Bank and the Court of Auditors. It further provides that this institutional framework is intended to advance the objectives of the Union and ensure the consistency of its policies. Article 13(2) of TEU provides that each institution shall act within the limits of the powers conferred on it in the Treaties and shall practise mutual sincere cooperation.

¹²⁸¹ These legal instruments include legislative and non-legislative acts referred to in Articles 290 and 291 of the TFEU. In terms of Article 2 of the TFEU, whenever exclusive competence is conferred on the Union, the legislative authority for the adoption of the legally binding instruments lies at the supranational level. As such, the EU Member States may only legislate for purposes of implementing the binding instruments, or when empowered to do so by the Union.

¹²⁸² Article 289(3) of TFEU provides that the legal acts adopted by the legislative procedure are legislative acts, and are published in the Official Journal of the European Union. These legislative acts are adopted by the European Parliament and the European Council in accordance with the ordinary legislative procedure that is stipulated in Article 294 of the TFEU, upon the proposal from the European Commission based on Article 289 (1) and (2) of the TFEU. Further, the legislative acts may be adopted by a special legislative procedure adopted either by the European Parliament with the participation of the European Council or vice versa. As per Article 10 of the TEU, the European Parliament represents citizens while Member States are represented in the European Council by their Heads of State or Government and in the Council by their governments.

¹²⁸³ Article 290 of the TFEU states that delegated acts are non-legislative acts of general application supplementing or amending certain non-essential elements of the legislative act. The European

acts.¹²⁸⁴ The regulations and directives are legally binding instruments of the Union.¹²⁸⁵ While a decision of an EU institution is binding on the addressees or is of general application if it is not specifically addressed, recommendations and opinions have no binding force of law.¹²⁸⁶ In principle, EU Member States are responsible for the implementation and enforcement of EU laws at national level.¹²⁸⁷

The regulation and supervision of banks established in the EU as a whole occur at Union level pursuant to *the Capital Requirements Regulation (CRR)* and *the Capital Requirements Directive IV (CRD IV)* that were issued in 2013, collectively referred to as the “CRD IV package”.¹²⁸⁸ The CRD IV package was revised by *the Capital Requirements Directive V (CRD V)* and had to be transposed to EU Member States¹²⁸⁹ and started applying from December 2020.¹²⁹⁰ The CRR was amended by *the Capital Requirements Regulation II (CCR II)*,¹²⁹¹ which effectively applied from June 2021.¹²⁹²

Parliament or the European Council may delegate the power for the adoption of non-legislative acts to the European Commission.

¹²⁸⁴ As per Article 291 of the TFEU, where uniform conditions for implementing legally binding acts of the Union are needed, the European Commission is conferred with implementing powers. This provision further states that in implementing legally binding acts in such justifiable cases, the European Commission may not act *ultra vires*.

¹²⁸⁵ Article 288 of the TFEU.

¹²⁸⁶ *Ibid.*

¹²⁸⁷ Article 291(1) of the TFEU; In terms of Article 4(3) of TEU, EU Member States shall observe the principle of sincere cooperation mandating full mutual respect in carrying out tasks that flow out of the Treaties and shall take every measure to fulfil the obligations thereto while refraining from taking any measure that could jeopardise the attainment of the objectives of the Treaties.

¹²⁸⁸ Regulation (EU) No 575/2013 of the European Union and of the Council of 26 of June 2013 on prudential requirements for credit institutions and investment firms available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0575&from=EN> (accessed 1 February 2018); Directive 2013/13/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and prudential supervision of credit institutions and investments available at

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0338:0436:En:PDF> (accessed 1 February 2018).

¹²⁸⁹ Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0878> (accessed 5 June 2020). Article 2 thereof stipulates that EU Member States shall adopt and generally start applying the measures of this Directive from December 2020 and specifies that some specific provisions will take effect from June 2021 and January 2022.

¹²⁹⁰ As noted in paragraph 1.7 of Chapter One.

¹²⁹¹ Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012 available at

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0876> (assessed 5 June 2020).

¹²⁹² As pointed out in paragraph 1.7 of Chapter One.

The CRD IV package derives its legal basis from the provisions of the Treaties that establish the single internal market for EU Member States to safeguard the financial stability of the Union at large.¹²⁹³ As such, the CRD IV package lays down uniform rules for prudential regulation and supervision of EU credit institutions and investment firms.¹²⁹⁴ Article 4 of the CRR refers to credit institutions and investment firms as “institutions”, and banks fall within the definition of a “credit institution.”¹²⁹⁵

The CRR is directly applicable and generally binding across EU Member States to ensure maximum harmonisation of prudential regulations for purposes of legal certainty, a levelled playing field, and the prevention of regulatory arbitrage.¹²⁹⁶ The CRD IV is transposed into the national laws of EU Member States to permit a certain degree of flexibility in the implementation of applicable prudential requirements and thereby accommodating the specificities of the different financial systems and domestic specificities.¹²⁹⁷ Notably, Article 458 of the CRR authorises the application

¹²⁹³ Article 26 of the TFEU, read with Article 3(3) of the TEU, states that the Union shall adopt measures to establish and ensure the functioning of the internal market guaranteeing the free movement of goods and services throughout EU Member States. Article 114 of the TFEU requires the European Parliament and the European Council to adopt measures in accordance with the ordinary legislative procedure for the approximation of laws of EU Member States with the objective of the establishment and functioning of the internal market. Recital 7 of the CRR states that the CRR establishes the prudential regulation of the EU banking and financial markets to promote financial stability and contribute to the smooth functioning of the internal market based on Article 114 of the TFEU. Recitals 5 and 6 of the CRD IV provide that the CRD IV package is instrumental to the achievement of the access to the internal market and the authorisation for the establishment and provision of financial services. See further, Hofmann C (2017) “Global systemically important banks (GSIBs): operate globally, regulated nationally?” 2 *Journal of Business Law* 155 at 164. Hofmann notes that Article 114 of TFEU relates to “Single European Pass” which allows EU Member States’ banks that are authorised in the home countries the access to operate throughout the EU by opening branches and providing cross-border financial services without prior authorisation by host Member States. Article 4 of the CRR defines a home Member State as the EU Member State that grants an institution the authorisation and a host Member State as the EU Member State in which institutions establish branches and cross-border services. Article 16(1) of the CRD IV states that subsidiaries are locally incorporated by the host country in consultation with the home country supervisors. See further, De la Mata Munoz M (2010) “The future of cross-border banking after crisis: Facing the challenges through regulation and supervision” 11 *European Business Organization Law Review* 575 at 581; Simonova A (2015) “EU banking law: Developments and challenges” 26 *International Company and Commercial Law Review* 51.

¹²⁹⁴ Recital 5 of the CRR; Recital 2 of the CRD IV.

¹²⁹⁵ Article 4 of the CRR defines a credit institution in terms of the business of a bank, which is to take deposits from the public and provide credit.

¹²⁹⁶ Article 288 of the TFEU states that a regulation has a general application, a binding effect and is directly applicable to all EU Member States and the EU banking sector. See further, Recitals 9, 11, and 12 of the CRR.

¹²⁹⁷ Recital 3 of the CRD IV states that uniform prudential rules contained in the CRR are supplemented in the CRD IV by EU Member States’ supervisory frameworks for the convergence of supervisory practices in respect of the governance of the internal market.

of national flexibility measures that are outside the CRD IV package to adequately address risks in the financial systems of individual Member States.¹²⁹⁸

The CRD IV package establishes a harmonised set of financial regulations advocated for in the 2009 Report of *the High-Level Group on Financial Supervision in the EU* chaired by Jacques De Larosière (De Larosière Report).¹²⁹⁹ The De Larosière Report was the impetus for the establishment in 2010 of the *European System of Financial Supervision* (ESFS) underpinning the EU financial regulatory and supervisory architecture that is based on the *Single Rulebook*, which was issued in 2009. The *Single Rulebook* comprises a set of uniform financial regulations aimed at facilitating the smooth functioning of the internal market aimed at the attainment of financial stability.¹³⁰⁰

The ESFS is constituted of the European Systemic Risk Board (ESRB),¹³⁰¹ three European Supervisory Authorities (ESAs), namely, the European Banking Authority

¹²⁹⁸ As abovementioned, the CRD IV package regulatory and supervisory framework ensures the consistent implementation of prudential rules across the banking sector and financial markets of the entire Union. However, Recital 16 of the CRR specifies that the relevant national authorities may address the intensity of macro-prudential risks at national level of Member States with certain national flexibility measures to the permissible extent. Before adopting such measures, these authorities must prove that the macro-prudential toolkit contained in the CRD IV package framework is insufficient to address the intensifying risks in the relevant Member States. The national flexibility measures are discussed in detail in paragraph 4.5, subparagraph 4.5.6 below.

¹²⁹⁹ The High-Level Group on Financial Supervision in the EU chaired by Jacques de Larosière of 25 February 2009 available at

https://ec.europa.eu/economy_finance/publications/pages/publication14527_en.pdf (accessed 23 February 2018). The Commission welcomed the recommendations of the De Larosière Report in a document called Commission of the European Communities – Driving European recovery March 4, 2009 available at

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0114&from=EN> (accessed 23 February 2018) and requested for the European Council's endorsement in another communication entitled Commission of the European Communities – European Financial Supervision issued on 27 May 2009 available at

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0252&from=EN> available at (accessed 23 February 2018). See further, Snowdon P *et al* (2011) "The new European supervisory structure" 83 *Compliance Offer Bulletin* 1 at 7; Athanassiou P (2009) "The role of regulation and supervision in crisis prevention and management: A critique of recent European reflections" 24 *Journal of International Banking Law and Regulation* 501 at 502.

¹³⁰⁰ Recitals 2 and 14 of the CRR; See further, Arora A (2010) "The global financial crisis: A new global regulatory order" 8 *Journal of Business Law* 670 at 622-685; Andenas M *et al* (2013) "Financial stability and legal integration in the financial regulation" 38 *European Law Review* 335 at 339.

¹³⁰¹ Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board available at

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R1092&from=EN> (accessed 1 February 2018). This Regulation outlines the following composition of the ESRB in Article 4 thereof: the General Board, a Steering Committee, a Secretariat, an Advisory Scientific Committee and Advisory

(EBA),¹³⁰² the European Insurance and the Occupational Pensions Authority (EIOPA),¹³⁰³ and the European Securities and Markets Authority (ESMA).¹³⁰⁴ In addition, the ESFS is composed of the Joint Committee of European Supervisory Authorities (Joint Committee)¹³⁰⁵ and the national competent authorities.¹³⁰⁶

Technical Committee. Article 6 thereof states that the General Board comprises the President and the Vice-President of the European Central Bank (ECB), the governors of national central banks, a member of the European Commission, the Chairperson of the EBA and the Chairpersons of the EIOPA and the ESMA, the Chairperson and two Vice-Chairpersons of the Advisory Scientific Committee and the Chairperson of the Advisory Technical Committee. Article 11 thereof provides for the composition of the Steering Committee, namely; the Chairperson and the Vice-Chairperson of the ESRB, the Vice-Chairperson of the ECB, four members of the General Board who are also members of the General Council of the ECB, a member of the European Commission, the Chairperson of the EBA and the Chairpersons of the EIOPA and the ESMA, the President of Economic and Financial Committee, the Chairperson of the Advisory Scientific Committee and the Chairperson of the Advisory Technical Committee. Article 12 thereof provides that the Advisory Scientific Committee is constituted of the Chairperson of the Advisory Technical Committee and 15 experts representing a wide range of skills proposed by the Steering Committee and approved by the General Board. Article 13 thereof states that the Advisory Technical Committee comprises a representative of each national central bank and a representative of the ECB, one representative of the competent authorities, and representatives of the EBA and other ESAs, two representatives of the European Commission, a representative of the Economic and Financial Committee, and that of the Advisory Scientific Committee. See further that, this Regulation was amended by Regulation (EU) 2019//2176 of the European Parliament and of the Council of 18 December amending Regulation (EU) No 1092/2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board available at https://www.esrb.europa.eu/shared/pdf/esrb.regulation20191218_2176.en.pdf?09300365cf08c838bf29b2da7483548c (accessed 30 November 2020).

¹³⁰² Regulation (EU) 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R1093> (accessed 23 February 2018). In terms of Article 5 thereof, the EBA has a legal personality. Article 6 thereof sets out the following composition of the EBA; a Board of Supervisors, a Management Board, a Chairperson, an Executive Director and a Board of Appeal.

¹³⁰³ Regulation (EU) No 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/79/EC available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R1094&from=EN> (accessed 23 February 2018).

¹³⁰⁴ Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R1095&from=EN> (accessed 23 February 2018).

¹³⁰⁵ In terms of Article 54 of the EBA Regulation of 2010, the Joint Committee serves as a forum in which the EBA, the EIOPA and the ESMA regularly cooperate to ensure consistency on matters of their supervisory tasks.

¹³⁰⁶ Article 4 of the CRD IV stipulates that the national competent authorities carry out the prudential regulation of financial institutions of respective financial systems in EU Member States. Article 5 thereof recognises multiple national competent authorities within a Member State and it reads: "Where Member States have more than one competent authority for the prudential supervision of credit institutions, investment firms and financial institutions, EU Member States shall take the requisite measures to organise the coordination between such authorities".

Article 6 of the CRD IV provides that cooperation of the national competent authorities with the ESRB, the EBA, the EIOPA and the ESMA is fundamental to the effective operation of the ESFS.¹³⁰⁷ The ESRB is responsible for the macro-prudential oversight of the EU financial system and the prevention or mitigation of systemic risks in the EU to guarantee the smooth functioning of the single internal market.¹³⁰⁸ The EBA, the EIOPA and the ESMA respectively, promote effective and consistent regulation and supervision across the EU in the banking sector, securities sector and insurance and pensions industry chiefly through regulatory technical standards, guidelines and recommendations.¹³⁰⁹

4.2.1 The macro-prudential supervision by the ESRB under the ESFS

The macro-prudential oversight of the financial systems of each EU Member State is entrusted to the national competent authorities.¹³¹⁰ National central banks customarily perform this role owing to their expertise in systemic regulation.¹³¹¹ *Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board (ESRB Regulation of 2010)* sets out measures for effective macro-prudential oversight of the whole EU financial system based on the principle of subsidiarity.¹³¹² The principle of subsidiarity entails that the Union exercises competence in areas that do not fall within its exclusive competence insofar as common objectives cannot be sufficiently attained by the individual Member States but can be better achieved at Union level.¹³¹³

¹³⁰⁷ The parties of the ESFS should ensure mutual cooperation and information exchange in line with Article 4(3) of TEU.

¹³⁰⁸ Article 3(1) of the ESRB Regulation of 2010.

¹³⁰⁹ Articles 1 and 8 of the EBA Regulation of 2010; Articles 1 and 8 of the EIOPA Regulation of 2010; Articles 1 and 8 the ESMA Regulation of 2010.

¹³¹⁰ Article 4 of the CRD IV.

¹³¹¹ Recital 24 of the ESRB Regulation of 2010; For the discussion of macro-prudential function of some EU national central banks, see also, Gluch D *et al* "Central bank involvement in macro-prudential oversight" (January 2013) ECB Legal Working Paper Series available at <https://www.ecb.europa.eu/pub/pdf/scplps/ecblwp14.pdf?66c8267b9b34346544bda2555bfeca83> (accessed 3 May 2018).

¹³¹² Recital 33 of the ESRB Regulation of 2010.

¹³¹³ Article 5(3) of the TEU. In line with Article 5(4) of the TEU regarding the principle of proportionality, the adopted measures must only be necessary to achieve the objective of macro-prudential regulation of the Union financial system, as set out in the ESRB Regulation of 2010.

The ESRB coordinates the macro-prudential function of the national competent authorities in accordance with the principle of subsidiarity. In addition, Article 7 of the CRD IV recognises the Union dimension of the regulation of the EU financial system to the extent that it mandates national competent authorities to consider the implications of their regulatory decisions on the financial systems in other EU Member States.

The ESRB executes its macro-prudential oversight role of the EU financial system through data collection, and identification and prioritisation of systemic risks principally through the issuing of warnings and recommendations.¹³¹⁴ Whenever significant systemic risks are detected, the ESRB issues early warnings and flags the detected risks.¹³¹⁵ When it becomes necessary to address the identified risks, the ESRB issues recommendations regarding the required remedial action, such as the adoption of legislation.¹³¹⁶

Warnings and recommendations of a general or specific nature, specifying a timeframe for a policy response, may be addressed either to the entire Union, or to one or more of the following: the ESAs, the European Central Bank (ECB) established in 1998,¹³¹⁷ the EU Member States, or the national competent authorities.¹³¹⁸ A recommendation for the promulgation of EU legislation is addressed to the European Commission,¹³¹⁹ being the supranational authority responsible for proposing Union

¹³¹⁴ Article 3(2)(a), (b) (c) and (d) of the ESRB Regulation of 2010.

¹³¹⁵ Article 16(1) of the ESRB Regulation of 2010. For instance, refer to a Warning issued by the ESRB regarding credit expansion in the real estate sector entitled *Vulnerabilities in the EU residential real estate sector* (November 2016) available at https://www.esrb.europa.eu/pub/pdf/reports/161128_vulnerabilities_eu_residential_real_estate_sector.en.pdf (accessed 23 February 2018); Warning of the European Systemic Risk Board of 22 September 2016 on medium-term vulnerabilities in the residential real estate sector of the Netherlands (ESRB/2016/10) available at https://www.esrb.europa.eu/pub/pdf/warnings/161128_ESRB_NL_warning.en.pdf?0f773bfcdc244e819f1645cb7c98bb26 (accessed 2 March 2018).

¹³¹⁶ Article 16 (1) of the ESRB Regulation of 2010; See for example, the ESRB issued a recommendation for the implementation of a framework for monitoring systemic risks emanating from the mortgage industry in Recommendation of the European Systemic Risk Board of 31 October 2016 on closing real estate data gaps available at https://www.esrb.europa.eu/pub/pdf/recommendations/ESRB_2016_14.en.pdf?230e5c27078803424f6cc2d7e6584dad (accessed 2 March 2018).

¹³¹⁷ The interplay of the role of the ECB and the ESRB is highlighted in subparagraph 4.2.1 below. See subparagraph 4.2.3 below for the detailed elaboration of the role of the ECB.

¹³¹⁸ Article 16(2) of the ESRB Regulation of 2010.

¹³¹⁹ *Ibid.*

legislative policy. The ESRB further monitors compliance with warnings and recommendations.¹³²⁰ Although recommendations by the ESRB are not legally binding, they are issued on a “comply or explain” basis, meaning that the ESRB monitors compliance therewith, or requires justification for non-compliance.¹³²¹ If the ESRB’s recommendation has not been followed or an insufficient justification has been provided for inaction, the ESRB must, subject to strict rules of confidentiality, inform the addressees, the European Council and, where relevant, the ESA concerned.¹³²² If the ESRB has decided to publicise its recommendation that has not been complied with or where justification has not been provided for inaction, the European Parliament may invite the Chair of the ESRB to present that decision and the addressees may request to participate in an exchange of views.¹³²³ According to Zanardo, this ESRB response exerts pressure on the addressee concerned to strive for compliance or adequate explanation for failure to comply.¹³²⁴ Additionally, Article 6(c) of the CRD IV fosters compliance by national competent authorities by requiring EU Member States to ensure that their competent authorities make every effort to respond to the ESRB’s warnings and recommendations.

The issue of whether warnings or recommendations by the ESRB are made public or kept confidential is determined on a case-by-case basis,¹³²⁵ striking a balance between potential financial markets’ panic that can be triggered by disclosure that may cause systemic instability, and the need to foster compliance with such recommendations. Typically, the ESRB may issue a confidential warning to the European Council signalling any anticipated emergency situation which is likely to jeopardise financial stability in the EU to enable the Council to adopt a decision to be addressed to the ESAs.¹³²⁶ The effective and efficient collaboration and coordination of the ESRB with the EBA, the EIOPA, the ESMA and the national competent

¹³²⁰ Article 3(2)(f) of the ESRB Regulation of 2010.

¹³²¹ Article 17(1) of the ESRB Regulation of 2010.

¹³²² Article 17(2) of the ESRB Regulation of 2010.

¹³²³ Article 17(3) of the ESRB Regulation of 2010.

¹³²⁴ Zanardo G (2021) Are the instruments used by the European Systemic Risk Board effective? available at

https://www.unive.it/pag/fileadmin/user_upload/dipartimenti/economia/doc-eng/eudifin/wp/WP17.pdf (accessed 17 January 2022).

¹³²⁵ Article 18 of the ESRB Regulation of 2010.

¹³²⁶ Article 3(2)(e) of the ESRB Regulation of 2010; For purposes of accountability, the ESRB submits a report of the macro-prudential examination to the European Parliament and the European Council at least annually in terms of Article 19 of the ESRB Regulation of 2010.

authorities, especially relating to information exchange, is imperative for the effective execution of the ESRB's macro-prudential oversight role of the EU financial system.¹³²⁷

The national competent authorities of the EU Member States formulate macro-prudential policy frameworks in line with the *Recommendation of the European Systemic Risk Board on the macro-prudential mandate of national authorities* (Recommendation ESRB/2011/3). The aforementioned Recommendation calls on the national competent authorities to lay down macro-prudential regimes at national level that are consistent across Member States while at the same time having regard to their respective financial systems specificities, to assist the ESRB to effectively oversee the macro-prudential framework at Union level.¹³²⁸ As part of coordinating the macro-prudential mandate of the various national competent authorities, the ESRB issued a macro-prudential policy framework pursuant to its *Recommendation of the European Systemic Risk Board on intermediate objectives and instruments of macro-prudential policy* (Recommendation ESRB/2013/1).¹³²⁹ The ESRB annually reviews the consistency and comparability of the macro-prudential frameworks of the respective Member States and also reviews the supervisory practices in Member

¹³²⁷ Articles 3(2)(f) and 15 of the ESRB Regulation of 2010; Decision of the ESRB of 21 July 2015 on the provision and collection of information for macro-prudential oversight of the financial system within the Union available at

[http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015Y1127\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015Y1127(01)&from=EN) (accessed 25 February 2018).

¹³²⁸ Recommendation of the European Systemic Risk Board of 22 December 2011 on the macro-prudential mandate of national authorities available at

http://www.esrb.europa.eu/pub/pdf/ESRB_Recommendation_on_National_Macroprudential_Mandates.pdf?87d545ebc9fe76b76b6c545b6bad218c (accessed 25 February 2018).

¹³²⁹ Recommendation of the European System Risk Board of 4 April 2013 on intermediate objectives and instruments of macro-prudential policy available at

https://www.esrb.europa.eu/pub/pdf/recommendations/2013/ESRB_2013_1.en.pdf (accessed 25 February 2018). Regulation ESRB 2013/1 also applies to EU banking sector. For this, see the ESRB Flagship Report on the macro-prudential policy in the banking sector (the Flagship report) (March 2014) available at

https://www.esrb.europa.eu/pub/pdf/other/140303_flagship_report.pdf (assessed 23 February 2018); The ESRB handbook on operationalising macroprudential policy in the banking sector (the Handbook) 2018 available at

https://www.esrb.europa.eu/pub/pdf/other/esrb.handbook_mp180115.en.pdf (accessed 23 February 2018); Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

States.¹³³⁰ To achieve this, the ESRB evaluates the notifications that are submitted by the national competent authorities indicating how they have implemented macro-prudential frameworks in their respective Member States.¹³³¹

Notably, the ESRB's macro-prudential policy framework outlines five macro-prudential intermediate objectives, as discussed in more detail below, that are directly linked to specific macro-prudential instruments for the prevention or mitigation of systemic risks in the EU financial system.¹³³² These five macro-prudential intermediate objectives are

¹³³⁰ Since the enactment of the CRD IV package, the ESRB undertook the first macro-prudential review in June 2015 entitled *A review of macroprudential policy in the EU one year after the introduction of CRD/CRR* (June 2015)

available

at

https://www.esrb.europa.eu/pub/pdf/reports/150625_review_macroprudential_policy_one_year_after_intro_crdcrr.en.pdf?2710e579380f20d40af9394f88b8ee74 (accessed 25 February 2018). This review was subsequently followed by a number of reviews: *A review of macroprudential policy in 2015* (May 2016) available at

https://www.esrb.europa.eu/pub/pdf/reports/20160513_esrb_review_of_macroprudential_policy.en.pdf?2ab671c218ff09f875512bae97b817c5 (accessed 25 February 2018); *A review of macroprudential policy in the EU in 2016* (April 2017) available at

https://www.esrb.europa.eu/pub/pdf/reports/20170413_esrb_review_of_macroprudential_policy.en.pdf?9e1c0cbdefbc5fca7f120ef4475ae5da (accessed 25 February 2018); *A review of macroprudential policy in the EU in 2017* (April 2018) available at

https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180425_review_of_macroprudential_policy.en.pdf?a46dda84af956ff7fbc10fbfbf8491c8 (accessed 25 November 2018); *A review of macroprudential policy in the EU in 2018* (April 2019) available at

https://www.esrb.europa.eu/pub/pdf/reports/esrb~32aae4bd95.report190430_reviewofmacroprudentialpolicy.pdf?0322fe343d14c890e72de11ee1f68af4 (accessed 25 October 2019); *A review of macroprudential policy in the EU in 2019* (April 2020) available at

https://www.esrb.europa.eu/pub/pdf/reports/review_macroprudential_policy/esrb.report200429_reviewofmacroprudentialpolicy~13aab65584.en.pdf (accessed 19 May 2020); *A review of macroprudential policy in the EU in 2020* (July 2021) available at

https://www.esrb.europa.eu/pub/pdf/reports/review_macroprudential_policy/esrb.report.20210701_review_macroprudential_policy_2020~ac542128f9.en.pdf?ab5fc916647bd630364f87caaafaeedd (accessed 4 September 2021). See further, *Review of macroprudential framework for the banking sector* (March 2022) available

at

<https://www.esrb.europa.eu/pub/pdf/reports/esrb.reviewmacropruframework.220331~65e86a81aa.en.pdf> (accessed 8 May 2022); Posch M *et al* "The macro-prudential mandate of national authorities" *Macro-prudential Commentaries* (March 2012) available at

https://www.esrb.europa.eu/pub/pdf/commentaries/ESRB_commentary_1203.pdf?e0d16823655e7387f287b49644252477 (accessed 3 March 2018).

¹³³¹ Decision of the European Systemic Risk Board of 16 December 2015 on a coordination framework for the notification of national macroprudential policy measures by relevant authorities, the issuing of opinions and recommendations by the ESRB, and repealing Decision ESRB/2014/2 available at

https://www.esrb.europa.eu/pub/pdf/other/Decision_ESRB_2015_4.pdf (accessed 25 February 2018).

¹³³² Section 1 of Recommendation ESRB/2013/1; See further, Galati G *et al* "What do we know about the effects of macroprudential policy" DNB Working Paper September 2014 available at

https://www.dnb.nl/en/binaries/Working%20Paper%20440_tcm47-312518.pdf (accessed 1 May 2018);

Houben A *et al* "Putting macroprudential policy to work" DNB Occasional Studies available at

https://www.dnb.nl/media/nifovret/201410_nr-7_-2014-_putting_macroprudential_policy_to_work.pdf (accessed 3 April 2018). The publications in this series are as from January 2003.

described as the operational specifications of the ultimate objective of safeguarding the stability of the financial system and economy of the EU at large and include: the mitigation of credit expansion, the limitation of excessive maturity mismatch, the restraint of large exposures, the strengthening of a financial system and the regulation of systemic risk.¹³³³ The macro-prudential instruments that are used to achieve these macro-prudential intermediate objectives are aimed at strengthening the resilience of the EU financial system and decreasing the build-up of systemic risks.¹³³⁴ As indicated in Chapter Two,¹³³⁵ macro-prudential instruments designed to enhance the resilience of a financial system address structural systemic risk while those that dampen the time-varying dimension of risk seek to resolve cyclical systemic risk.¹³³⁶

First, the macro-prudential intermediate objective of prevention or mitigation of excessive credit growth and leverage¹³³⁷ is addressed with macro-prudential tools that include the countercyclical capital buffer (CCyB), Loan-to-Value (LTV) ratio and Loan-to-Income (LTI) ratio, leverage ratio, and sectoral capital requirements.¹³³⁸ Second, the limitation of excessive maturity mismatch and market illiquidity is addressed through measures such as the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR).¹³³⁹ Third, the constraint of large exposure concentrations is dealt with by large exposures restrictions.¹³⁴⁰ Fourth, the intermediate macro-prudential objective of enhancing the resilience of the financial system is achieved through the systemic risk buffer (SyRB).¹³⁴¹ Fifth, and most pertinent for this study, is the macro-prudential intermediate objective that seeks to limit the systemic impact of misaligned

¹³³³ Section 1 of Recommendation ESRB/2013/1.

¹³³⁴ *Ibid.*

¹³³⁵ See paragraph 2.4 thereof.

¹³³⁶ Keller A (2016) “The mandate of the European Systemic Risk Board and resilience as an essential component: Part 1” 31 *Journal of International Banking Law and Regulation* 13 at 22; Keller A (2016) “The mandate of the European Systemic Risk Board and resilience as an essential component: Part 2” 31 *Journal of International Banking Law and Regulation* 65 at 71.

¹³³⁷ See paragraph 1.7 of Chapter One for the definition of a term “leverage”.

¹³³⁸ Subparagraph 4.5.1.2 below discusses the implementation of the EU CCyB in the Dutch banking sector. Paragraph 4.5.2 below discusses the implementation of the EU supplementary leverage ratio in the Netherlands. The CCyB and supplementary leverage ratio requirements of the BCBS are respectively analysed in paragraph 2.4, subparagraphs 2.4.2 and 2.4.4, of Chapter Two. Subparagraph 4.5.6 below elaborates on LTV and LTI requirements.

¹³³⁹ Subparagraph 4.5.3 below examines the implementation of the EU LCR framework and the NSFR framework in the Netherlands. The *Basel III LCR framework* and the *Basel III NSFR framework* are discussed in paragraph 2.3.5 of Chapter Two.

¹³⁴⁰ See paragraph 2.4, subparagraph 2.4.6, of Chapter Two for a discussion of the Basel large exposure limits. Subparagraph 4.5.5 below discusses the large exposure limit for EU institutions.

¹³⁴¹ Subparagraph 4.5.1.4 below analyses the SyRB.

incentives with a view to reducing the moral hazard of TBTF financial institutions that constitute SIFIs.¹³⁴² The O-SII buffer that is levied against O-SIIs is the specific macro-prudential instrument that is deployed to raise the loss absorbency capacity of EU O-SIIs.¹³⁴³

Part of the ESRB's duty is to evaluate the appropriateness of macro-prudential instruments before they are adopted in EU Member States.¹³⁴⁴ Further, the ESRB makes recommendations for the voluntary reciprocation of macro-prudential instruments.¹³⁴⁵ "Voluntary reciprocation" in this context refers to the recognition of macro-prudential measures adopted by the national authorities of a foreign jurisdiction and the application of such measures to banks located in a reciprocating country that have financial exposures in that foreign jurisdiction.¹³⁴⁶ The reciprocation of macro-prudential instruments is intended to ensure the application of similar measures throughout EU Member States in order to prevent regulatory arbitrage and cross-border spill-over effects arising from branches of foreign banks operating in EU Member States.¹³⁴⁷ Jurisdictional reciprocity of macro-prudential measures may be carried out either as a matter of principle or because of the materiality of risk exposures.¹³⁴⁸

In terms of *Council Regulation (EU) No 1096/2010 of 17 November 2010 conferring specific tasks upon the European Central Bank concerning the functioning of the European Systemic Risk Board* (Council Regulation (EU) No 1096/2010), the ECB significantly contributes to the effective macro-prudential oversight role of the ESRB

¹³⁴² Section 1 of Recommendation ESRB/2013/1.

¹³⁴³ Section 1 of Recommendation ESRB/2013/1; See subparagraph 4.5.1.3 below for the discussion of the implementation of the EU higher loss absorbency requirement for Dutch banks; See paragraph 2.4, subparagraph 2.4.3, of Chapter Two for the analysis of the Basel domestic systemically important bank buffer (D-SIB) regime.

¹³⁴⁴ Decision of the European Systemic Risk Board of 16 December 2015 on a coordination framework for the notification of national macroprudential policy measures by relevant authorities, the issuing of opinions and recommendations by the ESRB (Decision ESRB 2015/4) available at https://www.esrb.europa.eu/pub/pdf/other/Decision_ESRB_2015_4.pdf (accessed 12 April 2018).

¹³⁴⁵ Recommendation of the European Systemic Risk Board of 15 December 2015 on the assessment of cross-border effects of and voluntary reciprocation for macroprudential policy measures (ESRB 2015/2) available at https://www.esrb.europa.eu/pub/pdf/recommendations/ESRB_2015_2.en.pdf?cf95619117e7635a030b4387aeb2ead8 (accessed 12 April 2018).

¹³⁴⁶ *Ibid.*

¹³⁴⁷ *Ibid.*; See paragraph 1.1 of Chapter One for the definition of spill-over effects.

¹³⁴⁸ See Recommendation ESRB/2015/2.

given its expertise on macro-prudential issues.¹³⁴⁹ In particular, the ECB as overarching central bank of the Eurozone countries, acts as the secretariat of the ESRB by providing analytical and administrative support including the collection of macro-prudential information,¹³⁵⁰ and availing the results of the macro-prudential analysis by the ESRB to the ESAs for the discharge of their duties.¹³⁵¹ Further, the ECB identifies and assesses the sources of systemic risk in the Single Supervisory Mechanism (SSM) area and publishes a *Financial Stability Review* every six months.¹³⁵²

4.2.2 The role of the EBA under the ESFS

As alluded to above,¹³⁵³ the EBA promotes effective and consistent prudential regulation and supervision across the EU banking sector to safeguard the integrity and orderly functioning of financial markets as well as the internal market and to maintain financial stability in the EU and its broader economy.¹³⁵⁴ In particular, the EBA contributes to the development of uniform prudential rules contained in the *Single Rulebook*. It does so by developing regulatory technical standards and implementing technical standards, guidelines, recommendations as well as providing opinions to

¹³⁴⁹ Council Regulation (EU) No 1096/2010 of 17 November 2010 conferring specific tasks upon the European Central Bank concerning the functioning of a European Systemic Risk Board available at https://www.esrb.europa.eu/shared/pdf/101117_council_regulation.en.pdf?e27372cf6734ccea64cfedb55592f95a9 (accessed 25 February 2018); Article 1 of the Council Regulation EU No 1096/2010 provides that the ECB President and Vice-President of the ECB serve as the members of the General Board of the ESRB. This representation ensures the meaningful participation of the ECB, as well as the reflection of its views, in the decision-making process of the macro-prudential matters by the ESRB.

¹³⁵⁰ Articles 2 and 5(1) of Council Regulation (EU) No 1096/2010; Article 6 of Council Regulation (EU) No 1096/2010 provides that the discharge of the macro-prudential supervision requires the protection of sensitive data for the preservation of the EU financial system. This data is protected by the internal rules, and disclosure in this regard may be made in the summary or aggregated manner without specifying the names of financial institutions.

¹³⁵¹ Article 5(2) of Council Regulation No (EU) 1096/2010.

¹³⁵² The ECB released the first issue of its *Financial Stability Review* in December 2004 available at <https://www.ecb.europa.eu/pub/pdf/fsr/financialstabilityreview200412en.pdf> (accessed 30 November 2019). Since its publication of the first *Financial Stability Review*, the ECB subsequently issues these reviews twice a year. See for instance, *Financial Stability Review* (May 2018) available at <https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr201811.en.pdf> (accessed 30 June 2018); *Financial Stability Review* (May 2019) available at <https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr201905-266e856634.en.pdf> (accessed 30 November 2019); *Financial Stability Review* (November 2019) available at <https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr201911-facad0251f.en.pdf> (accessed 30 November 2019); *Financial Stability Review* (May 2020) available at <https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr202005-1b75555f66.en.pdf> (accessed 24 June 2020).

¹³⁵³ See paragraph 4.2.

¹³⁵⁴ Article 1(5) of the EBA Regulation of 2010.

foster convergence in supervisory standards and practices.¹³⁵⁵ To that end, the EBA is required to take into account systemic risk arising from banks when developing draft regulatory standards and implementing technical standards,¹³⁵⁶ and to possess specialised and ongoing competence to effectively address systemic risk.¹³⁵⁷

Additionally, the task of the EBA is to assess systemic risks across the EU banking sector mainly through stress-testing regimes¹³⁵⁸ as well as to respond to warnings and recommendations issued by the ESRB regarding systemic vulnerabilities¹³⁵⁹ and making a follow-up on warnings that are issued to national competent authorities.¹³⁶⁰ In particular, the EBA must issue warnings to EU Member States' relevant national authorities regarding a financial activity that poses a threat to the proper functioning on the EU financial markets.¹³⁶¹ The EBA is further enjoined to inform the EIOPA, the ESMA and the ESRB about micro-prudential trends and potential systemic vulnerabilities.¹³⁶² The national competent authorities are also required to furnish information that is necessary to enable the EBA to perform its functions and vice versa,¹³⁶³ and the EBA is obliged to closely cooperate with the ESRB on an ongoing basis and promptly notify the ESRB, the EIOPA and the ESMA of the existence of any emergency cases.¹³⁶⁴

¹³⁵⁵ Article 8 of the EBA Regulation of 2010. In terms of Articles 10 and 15 thereof, regulatory and implementing technical standards relating to the harmonisation of certain aspects of the EU legislation are adopted by the European Commission. When developing technical standards and other regulatory tools, the EBA may consult the Banking Stakeholder Group created in terms of Article 37 of the EBA Regulation of 2010. This Group comprises members with a high degree of expertise in the operation of financial markets and these are: thirty members representing credit and investment institutions of the Union, consumers, users of banking services and representatives of small and medium-sized enterprises (SMEs), five members are independent top-ranking academics, ten members are representatives of financial institutions and three members represent cooperatives and savings banks. Articles 16 of the EBA Regulation of 2010 provides for guidelines and recommendations. Article 34 thereof stipulates that the EBA may issue opinions in areas of its competence while Articles 8(e) and 30 thereof, read with Article 20a (b) thereof, state that the EBA evaluates the consistency of supervisory practices in EU Member States by peer reviews.

¹³⁵⁶ Article 22(3) of the EBA Regulation of 2010.

¹³⁵⁷ Article 24(1) of the EBA Regulation of 2010.

¹³⁵⁸ See paragraph 2.5, subparagraph 2.5.4, of Chapter Two, for the elaboration of stress-testing framework.

¹³⁵⁹ Articles 1(5), 22 (1) and 36 of the EBA Regulation of 2010.

¹³⁶⁰ Article 36(5) of the EBA Regulation of 2010.

¹³⁶¹ Article 9(3) of the EBA Regulation of 2010.

¹³⁶² Article 32 of the EBA Regulation of 2010.

¹³⁶³ Article 35 of the EBA Regulation of 2010.

¹³⁶⁴ Article 36 of the EBA Regulation of 2010.

In terms of Article 17 of the EBA Regulation, the EBA has the authority to make decisions to require banks to take necessary action to comply with the Union law in cases where there has been a breach of such law by the national competent authorities. Article 18 of the EBA Regulation of 2010 stipulates that in case of adverse developments that may severely jeopardise the orderly functioning and integrity of financial markets or financial stability, the EBA must facilitate coordinated action and information exchange in order to address such instances in a timely fashion.¹³⁶⁵ In addition, where coordinated action of national competent authorities is required to address such adverse developments, the EBA may adopt decisions addressed to the national competent authorities concerned requiring them to take the necessary action.¹³⁶⁶ If the existence of an “emergency situation” is considered to have arisen, the ESRB or the EBA may issue a confidential recommendation addressed to the Council together with the assessment of such “emergency situation”.¹³⁶⁷ Article 19 of the EBA Regulation enjoins the EBA to resolve conflicts between national competent authorities regarding procedural or substantive law applicable to conduct of competent authorities in cross-border matters. Where such competent authorities fail to reach an agreement, the EBA may require them to take steps or refrain from action in order to settle such disagreements.

Important to note is that Article 38 of the EBA Regulation of 2010 provides that the EBA’s decisions that seek to address adverse developments in a financial system as well as to resolve jurisdictional disputes, pursuant to Articles 18 and 19, respectively, must not have fiscal implications on EU Member States.¹³⁶⁸ In a situation where the EBA maintains a decision that a Member State considers to have an impact upon its fiscus, the European Council has to determine whether to maintain or revoke the EBA’s decision.¹³⁶⁹ Before taking decisions, the EBA must inform the addressees.¹³⁷⁰ The EBA’s decision must be accompanied by reasons, and the addressee is afforded the right of hearing within a specified timeframe¹³⁷¹ and is informed of its available

¹³⁶⁵ Article 18(1) of the EBA Regulation of 2010.

¹³⁶⁶ Article 18(5) of the EBA Regulation of 2010.

¹³⁶⁷ Article 18(2) of the EBA Regulation of 2010.

¹³⁶⁸ Article 38(1) of the EBA Regulation of 2010.

¹³⁶⁹ Articles 38(2) and (3) of the EBA Regulation of 2010.

¹³⁷⁰ Article 39(1) of the EBA Regulation of 2010.

¹³⁷¹ Article 39(2) of the EBA Regulation of 2010; Article 39(5) thereof requires the identity of an institution and the content of decision to be publicised unless that would harm the financial system and the integrity of the financial markets of the Union.

legal remedies.¹³⁷² The EBA is mandated to review its decisions.¹³⁷³ An addressee that is aggrieved by the EBA's decision may appeal to the Board of Appeal of the EBA.¹³⁷⁴ Further, addressees may institute proceedings to the Court of Justice of the European Union (CJEU) to contest the EBA's decisions.¹³⁷⁵

The EBA is further mandated to participate in the development and coordination of effective and consistent recovery and resolution plans and procedures in emergency situations and preventative measures to mitigate the systemic impact of any failure of banks.¹³⁷⁶ Further, the EBA must also contribute to the enhancement of the national deposit guarantee schemes (DGSs) of each EU Member State to ensure the contribution from banks and the protection of depositors in a harmonised framework throughout the Union.¹³⁷⁷

4.2.3 The role of the ECB under the Single Supervisory Mechanism

The ESFS was significantly reshaped with the advent of *the Single Supervisory Mechanism Regulation* (SSM Regulation of 2013), promulgated by the European Council in terms of Article 127(6) of the TFEU, which entered into force in November 2013 and came into operation in November 2014.¹³⁷⁸ The SSM Regulation confers the

¹³⁷² Article 39(3) of the EBA Regulation of 2010.

¹³⁷³ Article 39(4) and (5) of the EBA Regulation of 2010.

¹³⁷⁴ Article 58 of the EBA Regulation of 2010. Article 58(1) thereof states that the Board of Appeal possesses a high level of knowledge in banking and financial markets supervision, as well as sufficient legal expertise to determine the legal validity of EBA's decisions. The Board of Appeal's autonomy and impartiality are established in Article 59 thereof. Article 60 thereof stipulates that an appeal may be lodged against decisions of EBA that are taken to resolve the breach of the provisions of the Union as per Article 17 thereof, a decision on emergency situations in Article 18 thereof, and a decision concerning the resolution of disputes of competent authorities as per Article 19 thereof. Article 60(1) thereof provides that decisions must be of an individual or direct concern to the applications. Article 60(2) and (4) thereof stipulates that the appeal against EBA's decisions is lodged with a statement of grounds, and thereafter its merits are canvassed after the determination of its admissibility, and decision on whether the appeal is well-founded or not is reached within two months after it was lodged.

¹³⁷⁵ Established in 1952 and based in Luxemburg, the CJEU has the jurisdiction to entertain the legal matters of the EU Member States and to interpret the Union laws in accordance with Article 263 of the TFEU. Article 61(4) of the EBA Regulation requires the EBA to take necessary steps to comply with any judgment of the CJEU.

¹³⁷⁶ Article 25 of the EBA Regulation of 2010; Recovery and resolutions measures are discussed in subparagraph 4.5.7 below.

¹³⁷⁷ Article 26 of the EBA Regulation of 2010; The national Deposit Guarantee Scheme is briefly highlighted in subparagraph 4.4.2 below.

¹³⁷⁸ Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (SSM Regulation of 2013) available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1024&from=EN> (accessed 23 February 2018).

ECB with supervisory authority over significant credit institutions of the Eurozone countries and those in EU Member States participating in the Single Supervisory Mechanism (SSM). The purpose of such supervisory function is to contribute to the safety and soundness of credit institutions and financial stability in the EU and the smooth functioning of the internal market.¹³⁷⁹ The SSM is consistent with Article 13 of the TFEU that establishes the ECB within the EU institutional framework.

The ECB was created by the Treaty of Amsterdam in June 1998 for the primary purpose of conducting monetary policy for the Eurozone.¹³⁸⁰ It is accorded legal personality in the EU Member States.¹³⁸¹ The ECB and the national central banks of the Eurozone form the Eurosystem.¹³⁸² Further, the ECB, together with the national central banks of EU Member States, including those of the Eurozone, constitute the European System of Central Banks (ESCB).¹³⁸³ The ESCB was created in 1998 in terms of Article 282(1) of the TFEU and it is governed by *the Statute of the European System of Central Banks and of the European Central Bank* (Statute of the ESCB and of the ECB).¹³⁸⁴

¹³⁷⁹ Article 1 of the SSM Regulation of 2013; Article 6 thereof mandates the cooperation of the ECB and the Eurozone countries within the SSM, whereas Article 7 thereof specifically focuses on the cooperation of the ECB with the Member States opting to participate in the SSM whose currency is not the euro and these Member States may enter into a “close cooperation” agreement with the ECB indicating how they will cooperate on supervisory tasks within the SSM. In terms of Articles 7 and 9 thereof, the ECB should adopt a decision to the effect that non-euro countries have joined the SSM and publish it in the Official Journal of the European Union.

¹³⁸⁰ The Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related Acts 1997

available at <http://www.europarl.europa.eu/topics/treaty/pdf/amst-en.pdf> (accessed 23 February 2018). Article 1 of this Treaty stipulates that the price stability mandate has been transferred from the national authorities to the ECB. The monetary authority of the ECB is re-echoed in Article 127(2) of the TFEU. Article 25 of the SSM Regulation of 2013 expressly separates the ECB’s monetary function from its supervisory responsibilities.

¹³⁸¹ Article 282(3) of the TFEU.

¹³⁸² Article 182(2) of the TFEU; Article 3(4) of the TEU states that the currency denomination for the Eurosystem is the euro.

¹³⁸³ Article 282(2) of the TFEU.

¹³⁸⁴ Protocol (No.4) on the Statute of the European System of Central Banks and of the European Central Bank available at

https://www.ecb.europa.eu/ecb/legal/pdf/oj_c_2016_202_full_en_pro4.pdf (accessed 23 February 2018). This Statute is referred to in Article 129(2) of the TFEU. Article 2 of the Statute of the ESCB and the of the ECB reiterates that the ESCB comprises the ECB and national central banks of all EU Member States while the ECB and national central banks of the Eurozone constitute the Eurosystem. Article 9 thereof states that the ECB shall implement the monetary function laid down in Article 127(2) of the TFEU.

The SSM is the first, and main, of the three pillars of the European banking union.¹³⁸⁵ The rationale for the creation of the European banking union was to integrate the EU internal market and the Eurosystem by addressing cross-border externalities of the Eurozone, which surfaced during the Eurozone Crisis in 2009 that was associated with the use of a single currency.¹³⁸⁶ The Single Resolution Mechanism (SRM), which became effective from January 2016, is the second pillar and provides for the orderly resolution of credit institutions.¹³⁸⁷ As stated in the preamble of the CRD IV package, the strengthened prudential supervision rendered in terms of the SSM is a precondition for effective crisis management under the SRM. The anticipated third pillar that is not yet implemented is the European Deposit Insurance Scheme,¹³⁸⁸ which will form a

¹³⁸⁵ Communication from the Commission to the European Parliament and the Council – European Commission A Roadmap towards a Banking Union (September 2012) available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0510&from=EN> (accessed 23 February 2018); Report from the Commission to the European Parliament and the Council on the Single Supervisory Mechanism established pursuant to Regulation (EU) No 1024/2013 (October 2017) available at <https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/vkifpb1ev5wk> (accessed 12 April 2018); See further, Weismann P (2013) “The single supervisory mechanism (SSM): The Commission proposals on reforming EU banking supervision” 28 *Journal of International Banking Law and Regulation* 325; Ferran E *et al* (2013) “The European Single Supervisory Mechanism” 13 *Journal of Corporate Law Studies* 255; Commission proposes new ECB powers for banking supervision as part of a banking union September 2010 available at https://ec.europa.eu/commission/presscorner/detail/en/IP_12_953 (accessed 3 May 2018).

¹³⁸⁶ Troger TH (2014) “The single supervisory mechanism – panacea or quack banking regulation? Preliminary assessment of the new regime for the prudential supervision of banks with ECB involvement” 15 *European Business Organisation Law Review* 450. Note should be taken that the European Stability Mechanism (ESM) was established to provide financial assistance to euro countries experiencing financing problems during the GFC to safeguard the stability of the euro area as a whole and of its Member States. For this, see Treaty Establishing the European Stability Mechanism 2012 available at https://www.esm.europa.eu/sites/default/files/20150203_-_esm_treaty_-_en.pdf (accessed 10 November 2019). See further, Seyad SM (2013) “The impact of the proposed banking union on the unity and integrity of the European Union’s single market” 28 *Journal of International Banking Law and Regulation* 99. Seyad observes that the EU financial market was severely affected by the GFC coupled with the Eurozone crisis, that is, the “twin crises”, which proved the inadequacy of the legal regulation of the EU single market.

¹³⁸⁷ Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0806&from=EN> (accessed 25 July 2018). The orderly resolution regime was highlighted in paragraph 1.7 of Chapter One.

¹³⁸⁸ Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 806/2014 in order to establish a European Deposit Insurance Scheme (November 2015) available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015PC0586&from=EN> (accessed 23 February 2018). In the 2016 and 2017 annual reports on the banking union, the European Parliament emphasised the importance of the completion of the missing link of the third pillar, that is, EDIS, for the effective operation of the banking union. For this, refer to European Parliament Report on Banking Union – Annual Report 2016 available at <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2017-0019+0+DOC+PDF+V0//EN> (accessed 7 March 2018); European Parliament Report on Banking Union – Annual Report 2017 available at

building block for national Deposit Guarantee Schemes that provide depositor protection in EU Member States.¹³⁸⁹

As stated above, the SSM Regulation establishes the ECB as the competent authority or designated authority for purposes of the prudential supervision of credit institutions.¹³⁹⁰ Accordingly, *Regulation (EU) No 1022/2013 of the European Parliament and of the Council of 22 October 2013* (amended EBA Regulation of 2013) further modified the EBA Regulation of 2010 by constituting the ECB as the competent authority under the ESFS.¹³⁹¹ Tröger points out that in its capacity as the competent prudential authority, the ECB is entitled to receive warnings and recommendations from the ESRB in accordance with the ESRB Regulation of 2010.¹³⁹² However, the ECB's capacity as the competent authority is only in respect of the supervision of significant credit institutions in accordance with the SSM Regulation.¹³⁹³

Regulation (EU) No 468/2014 of the European Central Bank of 16 April 2014 (SSM Framework Regulation of 2014)¹³⁹⁴ establishes the framework for cooperation within

<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2018-0019+0+DOC+PDF+V0//EN> (accessed 7 March 2018). Equally, the European Commission stressed the significance of completing the banking union. For this, refer to Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the regions on completing the Banking Union (October 2017) available at http://ec.europa.eu/finance/docs/law/171011-communication-banking-union_en.pdf (accessed 7 March 2018). Some authors are of the opinion that the delay in implementing the EDIS is inordinate considering the significance of this pillar. For this, see Kuznichenko P *et al* (2021) "European Deposit Insurance Scheme implementation: Pros and cons" 16 *Banka and Bank Systems* 116 at 117; Fernandez-Aguado PG *et al* (2022) "Evaluation of European Deposit Insurance Scheme funding based on risk analysis" 78 *International Review of Economics and Finance* 234.

¹³⁸⁹ Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (recast) available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0049&from=EN> (accessed 23 February 2018).

¹³⁹⁰ Article 9(1) of the SSM Regulation of 2013.

¹³⁹¹ Regulation (EU) No 1022/2013 of the European Parliament and of Council of 22 October 2013 amending Regulation (EU) No 1093/2010 establishing a European Supervisory Authority (European Banking Authority) as regards the conferral of specific tasks on the European Central Bank pursuant to Council Regulation (EU) No 1024/2013 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1022> (accessed 23 February 2018).

¹³⁹² Troger TH (2015) "Regulatory influence on market conditions in the Banking Union: The cases of macro-prudential instruments and the bail-in tool" 16 *European Business Organization Law Review* 575 at 584-585.

¹³⁹³ *Ibid.*

¹³⁹⁴ Regulation (EU) No 468/2014 of the European Central Bank of 16 April 2014 establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities (SSM Framework Regulation of 2014) available at

the SSM between the ECB and the national competent authorities as required in terms of Article 6 of the SSM Regulation of 2013. Such cooperation is necessary because under the SSM, the prudential supervision of the less significant credit institutions vests in the national competent authorities subject to the ECB's direct supervision in some instances.¹³⁹⁵

Article 5(1) of the SSM Regulation further stipulates that the national competent authorities are responsible for applying capital buffers to credit institutions as well as any other measures to combat systemic or macro-prudential risks consistent with the CRD IV package. The national competent authorities thus take the lead role in the application of macro-prudential measures in line with Article 4 of the CRD IV,¹³⁹⁶ which is the macro-prudential supervisory approach that the ESRB Advisory Scientific Committee terms the “decentralised model”.¹³⁹⁷

Important to note is also Article 5(2) of the SSM Regulation that empowers the ECB to invoke the so-called “topping up power”, in terms of which it can impose higher capital buffers and more stringent macro-prudential standards on significant credit

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0468&from=EN> (accessed 23 February 2018). The SSM Framework Regulation was published in line with Article 33(1) of the SSM Regulation mandating the ECB to publish a framework regarding the cooperation on the functions of the ECB and the national competent authorities under the SSM.

¹³⁹⁵ Article 3 of the SSM Framework Regulation of 2013; Article 4 of the SSM Regulation stipulates that the ECB is exclusively competent for the prudential supervision of significant credit institutions. Thus, the SSM Regulation establishes a shared competence between the ECB and the national competent authorities regarding the supervision of credit institutions. Article 2(2) of the TFEU provides that in the case of shared competence, Member States shall exercise competence to the extent that the Union has not exercised its competence. See also, Lackhoff K (2015) “The framework regulation for the Single Supervisory Mechanism” 26 *International Company and Commercial Law Review* 18; Lackhoff K (2014) “The framework Regulation for the Single Supervisory Mechanism – an overview” 29 *Journal of International Banking Law and Regulation* 498; Lackhoff K (2013) “Which credit institutions will be supervised by the single supervisory mechanism?” 28 *Journal of International Banking Law and Regulation* 463; Lackhoff K (2014) “How will the single supervisory mechanism (SSM) function? A brief overview” 29 *Journal of International Banking Law and Regulation* 13; Pizzolla A (2018) “The role of the European Central Bank in the Single Supervisory Mechanism: A new paradigm for the EU governance” 43 *European Law Review* 3; Gortsos CV (2015) “Competence sharing between the ECB and the National Competent Supervisory Authorities within the Single Supervisory Mechanism” 16 *European Business Organization Law Review* 401-420; Schammo P (2017) “The European Central Bank’s duty of care for the unity and integrity of the internal market” 42 *European Law Review* 3.

¹³⁹⁶ Article 5(1) of the SSM Regulation of 2013.

¹³⁹⁷ Reports of the Advisory Scientific Committee of the ESRB “The consequences of the single supervisory mechanism for Europe’s macro-prudential policy framework” Reports of the Advisory Scientific Committee of the European Systemic Risk Board (September 2013) available at

https://www.esrb.europa.eu/pub/pdf/asc/Reports_ASC_3_1309.pdf?4eaef1068e871b79b6597b0cd7ed4042 (accessed 25 February 2018).

institutions, over and above those already applied by national competent authorities pursuant to Article 5(1) of the Regulation. In terms of Article 5(3) of the SSM Regulation, national competent authorities may propose to the ECB to “top-up” higher macro-prudential standards to address a specific situation in the financial system. According to the ESRB Advisory Scientific Committee, this “centralised model” of macro-prudential supervisory approach which entails the “topping up” powers by the ECB, is more preferable as it facilitates the harmonious application of macro-prudential measures at Union level.¹³⁹⁸ However, Moloney contends that the efficacy of this approach is restrained by the limited macro-prudential powers conferred on the ECB over significant credit institutions under Article 5(2) of the SSM Regulation.¹³⁹⁹ Therefore, Joosen recommends that the ECB should be vested with the authority to apply macro-prudential measures to the full extent for the effective uniform prudential supervision of banks in the EU Member States.¹⁴⁰⁰ It remains to be seen whether this recommendation will be considered.

The ECB has a legal obligation to notify the national competent authorities, orally or in writing, within a timeframe of 10 working days, of the intention to increase the stringency of applicable higher capital buffers in respect of credit institutions.¹⁴⁰¹ The rationale for this notification is to provide an opportunity for objections by the national competent authorities within 5 working days and to then incorporate the reasons for such objections in the final decision regarding the topping up of macro-prudential measures.¹⁴⁰² These objections are raised during a hearing that is afforded before a final decision is reached.¹⁴⁰³ In topping up the macro-prudential measures, the ECB must take the specific financial system, economic situation, and the economic cycle of the respective EU Member States, into consideration.¹⁴⁰⁴

The SSM Framework Regulation stipulates that the macro-prudential tools that the national competent authorities apply in accordance with Article 5(1) of the SSM

¹³⁹⁸ *Ibid.*

¹³⁹⁹ Moloney N (2014) “European Banking Union: Assessing its risks and resilience” 51 *Common Market Law Review* 1609 at 1630-1638.

¹⁴⁰⁰ Joosen BPM “Balancing macro – and micro – prudential powers in the SSM during the COVID-19 crisis” – Chapter 10 – In Gortos CV *et al* (2020) *Pandemic crisis and financial stability* 359.

¹⁴⁰¹ Article 5 (4) of the SSM Regulation of 2013.

¹⁴⁰² *Ibid.*

¹⁴⁰³ Articles 31 of the SSM Framework Regulation of 2013.

¹⁴⁰⁴ Article 5(5) of the SSM Regulation of 2013.

Regulation (which the ECB can make more stringent on its own initiative as per Article 5(2) of the SSM Regulation or upon the recommendation of the national competent authorities in terms of Article 5(3) thereof) consist of the following:¹⁴⁰⁵

- (a) the capital buffers within the meaning of Articles 130 to 142 of the CRD IV;¹⁴⁰⁶
- (b) the measures for domestically authorised credit institutions, or a subset of those credit institutions pursuant to Article 458 of the CRR;¹⁴⁰⁷ and
- (c) other measures to be adopted by the national competent authorities or the national designated authorities that are aimed at addressing systemic or macro-prudential risks provided for, and subject to the procedures set out in the CRR and the CRD IV, in the cases specifically set out in the relevant Union law.

The ECB is tasked to ensure the effective and consistent functioning of the SSM.¹⁴⁰⁸ As pointed out in the SSM Regulation, the effective operation of the SSM depends on strong cooperation and coordination between the ECB, the ESRB, the EBA, the EIOPA, the ESMA and the national competent authorities.¹⁴⁰⁹ The ECB and the national competent authorities have a legal obligation to act independently in the interest of the Union during the execution of the SSM.¹⁴¹⁰ Consistent with the principle of conferral, the ECB further exercises all the powers that are conferred under the national laws of Member States, except for when those powers are specifically reserved for the national competent authorities, and in which instance the ECB is duly kept apprised of the exercise of such powers by the national competent authorities.¹⁴¹¹

¹⁴⁰⁵ Articles 101 and 102 of the SSM Framework Regulation of 2014.

¹⁴⁰⁶ This capital framework is discussed in subparagraph 4.5.1 below.

¹⁴⁰⁷ These measures form part of the national flexibility measures alluded to in paragraph 4.2 above and fully discussed in subparagraph 4.5.6 below, and they are outside the CRD IV/CRR framework as stipulated in Article 458 of the CRD IV.

¹⁴⁰⁸ Article 6 of the SSM Regulation of 2013; Carbó- Valverde S *et al* (2017) “Regulatory response to the financial crisis in Europe: Recent developments (2010-2013)” 7 *Journal of Financial Economic Policy* 29 at 47 asserts that an in-depth knowledge of the supervision of big banking institutions is a required competence for the ECB to effectively execute tasks entailed in the SSM Regulation.

¹⁴⁰⁹ Article 3 of the SSM Regulation of 2013.

¹⁴¹⁰ Article 19 of the SSM Regulation of 2013.

¹⁴¹¹ Article 1(2) of the SSM Regulation of 2013; Article 5(2) of TEU regarding the principle of conferral circumscribes the exercise of the powers of the Union within its conferred competence in order to prevent usurping the powers that are vested in Member States. Article 13(2) of TFEU obliges the ECB, as one of the institutions of the Union, to act within the limits of the powers conferred on it by the Treaties. See further, Alexander K (2015) “European Banking Union: A legal and institutional analysis of the Single Supervisory Mechanism and the Single Resolution Mechanism” 40 *European Law Review* 154 at 167-168.

In discharging its duties under the SSM, Article 4(3) of the SSM Regulation directs the ECB to apply the existing EU banking regulations and the EU Member States' laws transposing the applicable directives.¹⁴¹² Additionally, the ECB is subject to the regulatory technical standards and implementing technical standards of the EBA.¹⁴¹³ The ECB is empowered to issue guidelines, recommendations, and decisions subject to Union laws¹⁴¹⁴ and can also issue opinions.¹⁴¹⁵ Notably, the ECB may issue regulations only to the extent that is necessary to carry out the tasks conferred by the SSM Regulation.¹⁴¹⁶

The decisions that the ECB makes when exercising its powers under the SSM Regulation are subject to review by the Administrative Board of Review.¹⁴¹⁷ An applicant is entitled to file an application for review within one month of the receipt of the notification of the ECB decision, or as soon as the decision is brought to its

¹⁴¹² Article 4(3) and Recital 32 of the SSM Regulation of 2013.

¹⁴¹³ As discussed in paragraph 4.2, subparagraph 4.2.2 above, the regulatory and implementing technical standards are adopted by the European Commission in accordance with Articles 10 to 15 of the EBA Regulation of 2010. The ECB only participates in the drafting of these standards or advises the EBA to submit drafts standards amending the existing prudential requirements. See further, Lefterov A "The Single Rulebook: Legal issues and relevance in the SSM context" ECB Legal Working Paper Series October 2015 available at <https://www.ecb.europa.eu/pub/pdf/scplps/ecblwp15.en.pdf> (accessed 12 April 2018).

¹⁴¹⁴ Article 4(3) of the SSM Regulation of 2013.

¹⁴¹⁵ The ECB issues opinions in an advisory capacity particularly on the proposed banking legislation of the Union pursuant to Article 127(4) of the TFEU, read with Articles 4 and 25 of the Statute of the ECB and of the ESCB. Recently, the Council of the European Union requested the ECB's opinion relating to the macro-prudential regulation of the Union in the opinion entitled Opinion of the European Central Bank of 2 March 2018 on a proposal for a regulation of the European Parliament and of the Council amending Regulation (EU) No 1092/2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board (ECB CON/2018/12) available at http://www.ecb.europa.eu/ecb/legal/pdf/celex_52018ab0012_en_txt.pdf (accessed 12 June 2018). Article 25 of the Statute of the ESCB and of the ECB stipulates that the ECB offers advice on the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions.

¹⁴¹⁶ Article 4(3) of the SSM Regulation of 2013. Article 3(3.3) of the Statute of the ESCB and of the ECB provides that part of the tasks conferred upon the ECB relate to contributing to the smooth conduct of policies pursued by the national competent authorities relating to the prudential supervision of credit institutions. Kerjean S (2018) "The Single Supervisory Mechanism and the oversight function of the ECB" 32 *Journal of International Banking Law and Regulation* 37 at 44 notes that the ECB's regulations are usually adopted where the ECB exercises its powers directly vis-à-vis the credit institutions as addressees and can issue the legal instruments in terms of Article 6(5) of the SSM Regulation when exercising the oversight function.

¹⁴¹⁷ Article 24 of the SSM Regulation of 2013; Decision of the European Central Bank of 14 April 2014 concerning the establishment of the Administrative Board of Review and its Operating Rules (ECB/2014/16) (ABoR Operating Rules) available at [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02014D0016\(01\)-20190917&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02014D0016(01)-20190917&from=EN) (accessed 11 November 2019). See further, Lackhoff K et al (2015) "Contesting decisions in the Single Supervisory Mechanism: What banks must observe for a proceeding at the Administrative Board of Review" 20 *Journal of International Banking Law and Regulation* 285 at 289.

attention.¹⁴¹⁸ In principle, a notice of review has no suspensive effect, however, the Governing Council,¹⁴¹⁹ acting upon a proposal by the Administrative Board of Review, may grant suspension of the ECB's decision upon the admissibility of the review application.¹⁴²⁰

The review application may be admissible provided that a prima facie case has been established, and upon furnishing evidence that an interim judgment will be issued pending the review of the ECB's decision to prevent an irreparable harm to the applicant.¹⁴²¹ During the review, it is determined whether the ECB observed the substantive and procedural laws of the Union in the exercise of its discretion in the decision-making process.¹⁴²² The Administrative Board of Review may remit the case to the Supervisory Board of the ECB, which may take a new decision abrogating that of the ECB, or replacing it with a decision of identical content or with an amended decision, and it will be adopted within two months after the application is lodged.¹⁴²³ The ECB's decisions may be appealed before the Appeal Board of the ECB.¹⁴²⁴ Proceedings may be instituted before the CJEU contesting the decisions of the Appeal Board of the ECB in cases where there is no right of appeal before the Appeal Board.¹⁴²⁵ Member States may institute proceedings before the CJEU to challenge the decisions of the ECB.¹⁴²⁶ The ECB is obliged to take necessary steps to comply with the judgment of the Court.¹⁴²⁷ For instance, a case had been brought before the CJEU in the matter between *Landeskreditbank Baden – Württemberg – Förderbank v ECB*,

¹⁴¹⁸ Article 24(6) of the SSM Regulation; Article 7(3) of the ABoR Operating Rules; Articles 7(4) and 9, 15(1) and (2) of the ABoR Operating Rules state that a copy of the contested decision is annexed to the notice of review, together with a summary of an outline of the argument, the supporting grounds, together with the applicable legal provisions on the basis of which the decision must be struck down, pursuant to Article 5(3) of the ABoR Operating Rules.

¹⁴¹⁹ The Governing Council is the main decision-making body of the ECB. See the website of the ECB available at <https://www.ecb.europa.eu/ecb/orga/decisions/govc/html/index.en.html> (accessed 11 November 2019).

¹⁴²⁰ Article 24(8) of the SSM Regulation of 2013; Articles 8 and 9 of the ABoR Operating Rules.

¹⁴²¹ Articles 8 and 9 of the ABoR Operating Rules.

¹⁴²² *Ibid.*

¹⁴²³ Article 24(7) of the SSM Regulation of 2013.

¹⁴²⁴ Article 60 of the EBA Regulation of 2010.

¹⁴²⁵ Article 61(1) of the EBA Regulation, read in conjunction with Article 263 of the TFEU.

¹⁴²⁶ Article 61(2) of the EBA Regulation of 2010, read with Article 263 of the TFEU; Article 263 of the TFEU states that the eligible applicant is the natural person or the legal person that is the addressee of a decision adopted by the ECB in the exercise of its powers under the SSM Regulation. The decision must be of direct and individual concern, meaning that it must be directed to a credit institution or be generic, in accordance with the standards that are laid down in Article 263(4) of the TFEU.

¹⁴²⁷ Article 61(4) of the EBA Regulation.

wherein the Court, in a judgment delivered in May 2019, upheld the decision of the ECB to identify the bank as a significant credit institution.¹⁴²⁸

4.3 The legal and regulatory framework of the Dutch financial system

The Netherlands adopted a sectoral approach to financial system regulation¹⁴²⁹ in the pre-Twin peaks era. In particular, the Insurance Chamber was created under *the 1923 Act on the Life Insurance to Business* to supervise life insurance transactions, and its scope of supervision was further extended to pension and savings funds and the whole pension and insurance industry by *the 1952 Pension and Savings Fund Act*, and *the 1961 Act on the Non-Life Insurance Business*, respectively.¹⁴³⁰ On the other hand, *the 1985 Act on Securities Trading* regulated the securities markets and in 1988 the Foundation for supervision of securities transactions was established as the securities supervisor.¹⁴³¹

The Dutch central bank, namely, *De Nederlandsche Bank NV*, (DNB) was created in 1814 and it commenced the establishment of nation-wide branches and agencies based on *the Bank Act 1863* and was authorised to issue banknotes under *the Bank Act 1903*.¹⁴³² *The Bank Act 1948* established the monetary function of DNB, and its prudential supervision over credit institutions inclusive of banks that was subsequently incorporated under *the 1978 Act on the Supervision of Credit System*.¹⁴³³ Given that the Netherlands is a Eurozone country, DNB's monetary policy was transferred to the ECB under *the Statute of the ESCB and of the ECB of 1998* which became effective from January 1999.¹⁴³⁴ The Netherlands adopted *the Bankwet* of 1998 (hereinafter the Bank Act of 1998)¹⁴³⁵ which gave legal effect to the transfer of the monetary policy to

¹⁴²⁸ *Landeskreditbank Baden – Württemberg – Forderbank v ECB* available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:62017CJ0450&from=EN> (accessed 11 November 2019).

¹⁴²⁹ Mooij J *et al* (2002) "A brief history of the institutional design of banking supervision in the Netherlands" available at https://ideas.repec.org/h/elg/eechap/3013_2.html (accessed 27 May 2016).

¹⁴³⁰ *Ibid.*

¹⁴³¹ *Ibid.*

¹⁴³² *Ibid.*

¹⁴³³ *Ibid.*

¹⁴³⁴ See paragraph 4.2, subparagraph 4.2.3 above.

¹⁴³⁵ Law of 26 March 1998, containing new provisions regarding De Nederlandsche Bank NV in connection with the Treaty establishing the European Community (Bank Act of 1998) available at <http://wetten.overheid.nl/BWBR0009508/2015-11-26> (accessed 9 April 2018).

the ECB and further established DNB's supervisory authority over the financial system and banking sector.

Notably, the Netherlands transitioned to a Twin Peaks model of financial regulation by objective shortly before the GFC and as pointed out, the framework for the Dutch Twin Peaks model was introduced by the *Wet op het financieel toezicht*, of 2006¹⁴³⁶ (hereinafter the Financial Supervision Act), which is the core legislation for the regulation of the Dutch financial system, that entered into force in 2007. Given that the Financial Supervision Act is an enabling framework through which secondary legislation is enacted, more detailed prudential requirements with regard to its provisions are predominantly laid down in *Besluit prudentiële regels Wft* (hereinafter the Decree on Prudential Rules under the Financial Supervision Act of 2006).¹⁴³⁷

The Financial Supervision Act was significantly amended by the *Wijzigingswet financiële markten* (hereinafter the Financial Markets Amendment Act of 2014).¹⁴³⁸ *The Decree on Prudential Rules under the Financial Supervision Act* was also subsequently revised by the *Wijzigingsbesluit financiële markten* (hereinafter the Amendment Decree on Financial Markets of 2014).¹⁴³⁹ Subsequently, *the*

¹⁴³⁶ Law of September 2006 containing rules with regard to the financial markets and the supervision thereof (the Financial Supervision Act of 2006) available at <http://wetten.overheid.nl/BWBR0020368/2018-02-09#Titeldeel1>; The Financial Supervision Act is also available at <http://wetten.overheid.nl/BWBR0020368/2018-02-09> (accessed 7 April 2018).

¹⁴³⁷ A Decree of 12 October 2006, laying down prudential rules for financial companies operating in the financial markets available at <http://wetten.overheid.nl/BWBR0020420/2018-01-03#Hoofdstuk10a> (accessed 9 April 2018).

¹⁴³⁸ Law of 25 November 2013 amending the Financial Supervision Act and some other laws available at <https://translate.google.co.za/translate?hl=en&sl=nl&u=https://zoek.officielebekendmakingen.nl/stb-2013-487.html&prev=search> (accessed 24 April 2018). Since its enactment, the Financial Supervision Act has undergone significant amendments following the EU legislative framework overhaul giving effect to the G20 financial stability reforms subsequent to the GFC.

¹⁴³⁹ Decree of 6 December 2013 amending the Decree on Conduct of Supervision of Financial Enterprises under the Financial Supervision Act, the Market Access Decree on Financial Enterprises under the Financial Supervision Act, the Decree on Prudential Rules under the Financial Supervision Act and some other decisions in the field of financial markets available at <https://zoek.officielebekendmakingen.nl/stb-2013-537.html> (accessed 27 April 2018).

*Implementation Act Directive and Capital Requirements Regulation of 2014*¹⁴⁴⁰ modified the Financial Supervision Act to transpose the CRD IV package into the legislative framework of the Dutch financial system. The Dutch “Open Book Supervision” provides guidance on how DNB implements the CRD IV package and the provisions issued in terms of the Financial Supervision Act regarding the prudential supervision of financial institutions.¹⁴⁴¹

The Dutch Twin Peaks model comprises of two main regulatory peaks, namely, DNB and the *Stichting Autoriteit Financiële Markten* (Authority for the Financial Markets - AFM). DNB is the competent authority that is responsible for prudential supervision of financial institutions as well as financial stability of the Dutch financial system.¹⁴⁴² This means in the Dutch Twin Peaks model DNB is both the prudential regulator of financial institutions as well as the overall systemic supervisor of the Dutch financial system. It thus has a prudential as well as an overall financial stability mandate. Specifically, Article II of the Financial Markets Amendment Act of 2014 revised section 4 of the Bank Act of 1998 to explicitly confer the overall financial stability function on DNB and reiterates its prudential responsibility for financial institutions. The AFM regulates the business conduct of financial institutions, aimed at the transparency of financial markets for fair treatment of financial customers and good conduct of market parties.¹⁴⁴³ DNB and the AFM are thus respectively designated as competent

¹⁴⁴⁰ Law of 25 June 2014 amending the Financial Supervision Act and any other laws implementing Directive 2013/36 / EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87 / EC and repealing Directives 2006/48 / EC and 2006/49 / EC (OJ 2013, L 176) and implementing Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (PbEU 2013,L 176) available at <https://zoek.officielebekendmakingen.nl/stb-2014-253.html> (accessed 9 April 2018).

¹⁴⁴¹ DNB Open Book Supervision available at

<https://www.dnb.nl/en/sector-information/open-book-supervision/> (accessed 3 April 2018).

¹⁴⁴² Section 1:24 of the Financial Supervision Act of 2006; In terms of Article 2 of the Bank Act of 1998, DNB was originally charged with the primary objective of monetary policy when it was founded in 1814. This monetary authority was later assumed by the ECB under the Eurosystem, as alluded to in paragraph 4.2, subparagraph 4.2.3 above, under the discussion of the SSM. Refer to History of DNB available at

https://www.dnb.nl/en/binaries/History%20DNB_tcm47-144511.pdf?2018052110 (accessed 3 April 2018). Article 1:25d states that DNB’s governance structure is constituted of the Governing Board and the Supervisory Board. See further, DNB Governance available at

<https://www.dnb.nl/en/about-dnb/organisation/governance/index.jsp> (accessed 9 April 2018). Article 3: 275 of the Financial Supervision Act directs DNB to conduct consolidated supervision of banks in accordance with Article 111 of the CRR.

¹⁴⁴³ Section 1:25 of the Financial Supervision Act of 2006; Articles 1:26 and 1:27 of the Financial Supervision Act state that the AFM is constituted of the Supervisory Board and the Management Board.

authorities entrusted with the establishment and enforcement of regulations pertaining to the prudential and conduct regulation of financial institutions.¹⁴⁴⁴

Article 3:1a of the Financial Supervision Act that establishes DNB and the ECB as the competent authorities for the systemic (financial stability) and prudential regulation of the Dutch financial system, implements the 2013 SSM Regulation in respect of the prudential regulation of the Dutch banking sector. It stipulates that the ECB must substitute prudential supervision by DNB to the extent that it relates to the prudential supervision of significant credit institutions as conferred upon the ECB in terms of the SSM Regulation.¹⁴⁴⁵ Additionally, DNB cooperates with the relevant supervisory authorities of other EU Member States through information sharing and participation in supervisory colleges, especially in guarding against cross-border externalities in the Union's internal market.¹⁴⁴⁶

¹⁴⁴⁴ Decision of 8 November 2012, implementing EU regulations in the field of financial markets and amending the Decree on Administrative Fines in the Financial Sector therewith (Decree on the implementation of EU Financial Markets) available at <http://wetten.overheid.nl/BWBR0032230/2018-01-03#Artikel2> (accessed 9 April 2018); Article 1:24(3) of the Financial Supervision Act entrusts DNB with the enforcement of regulations relating to the oversight of the soundness and safety of the financial institutions and the stability of the financial system, as stipulated in Article 288 of the TFEU. Article 1:24(4) thereto states that further rules for the implementation of regulations regarding prudential supervision of banks by DNB may be laid down by way of the ministerial regulations. Article 3(2) and (3) of the Bank Act 1998 stipulates that DNB has a responsibility to contribute to the policies on banking prudential supervision within the ESCB and request and receive instructions from the ECB and act in accordance with its directives and assist the ECB with the collection of macro-economic data collection. Article 25 of the Statute of the ESCB and of the ECB orders DNB to seek advice from the ECB concerning the scope and implementation of prudential banking legislation and in the performance of its prudential tasks. These requirements are also echoed in Articles 5 and 14 of the Statute of the ESCB and of the ECB and Article 130 of the TFEU. See further, Lambrinoc SE, "The legal duty to consult the European Central Bank – national and EU consultations" Legal Working Papers November 2009 available at

<https://www.ecb.europa.eu/pub/pdf/scplps/ecblwp9.pdf?c1f9b6b0b90446b36a7f76b9ab5e826f> (accessed 3 April 2014). In terms of Article 1:25 (3) of the Financial Supervision Act, the AFM implements regulations relating to market conduct regulation through general administrative orders or regulations pursuant to Article 288 of TFEU. Article 1:25 (4) thereof states that further rules may be laid down through ministerial regulation for the implementation of regulations regarding the conduct regulation of financial institutions. See further, Bierman B *et al* "Netherlands" In Hsu P *et al* (Eds.) (2019) *Banking Regulation* 6th ed. 199 at 200; van Loopkin M *et al* "Netherlands" – Chapter 25 – In Putnis J (Ed.) (2019) *The banking regulation review* 10th ed. 376.

¹⁴⁴⁵ It was noted in paragraph 4.2, subparagraph 4.2.3 above, that in terms of Article 5(1) of the SSM Regulation, the national competent authorities are primarily responsible for imposing the capital standards on credit institutions while the ECB may, where appropriate, apply more stringent prudential standards than those applied by the national competent authorities under Article 5(2) of the SSM Regulation. It was further noted that the ECB is the prudential supervisor of significant credit institutions in the Eurozone. That means the ECB supervises Dutch significant credit institutions while DNB supervises credit institutions that are less significant.

¹⁴⁴⁶ Articles 1:51, 1:52; 1:53, 1:54b and 1:54c of the Financial Supervision Act of 2006.

Regarding the discharge of its financial stability role, DNB performs system-wide monitoring in the Dutch financial system for purposes of detecting vulnerabilities and to prevent or mitigate systemic risks.¹⁴⁴⁷ A financial stability review titled *An Overview of Financial Stability*, that, *inter alia*, considers various aspects relevant to financial stability and records the trends in the Dutch financial system, is released by DNB twice a year.¹⁴⁴⁸ This Overview identifies the perceived as well as the actual macro-prudential risks in the Dutch financial system, which are recorded in a “macro-register” used to broadly list such macro-prudential risks.¹⁴⁴⁹ The macro-prudential risks that are relevant for the banking sector are then transferred to a banking sectoral register for DNB to take supervisory action to deal with such risks.¹⁴⁵⁰

In line with *Recommendation ESRB/2013/1*,¹⁴⁵¹ DNB collaborates with the ESRB, the EBA and the ECB in the analysis of systemic indicators that are related to macro-prudential intermediate objectives and macro-prudential instruments of the ESRB macro-prudential policy framework that are relevant for the banking sector.¹⁴⁵²

¹⁴⁴⁷ DNB’s financial stability task available at https://www.dnb.nl/media/gspdg10h/financial_stability.pdf (accessed 3 May 2018); Towards a more stable financial system: macroprudential supervision at DNB available at

https://www.dnb.nl/en/binaries/Towards%20a%20more%20stable%20financial%20system_tcm47-236522.pdf (accessed 3 April 2018). See further, Houben A *et al* “Putting macroprudential policy to work” DNB Occasional Studies June 2014 available at https://www.dnb.nl/media/nifovret/201410_nr-7_-2014-_putting_macroprudential_policy_to_work.pdf (accessed 3 April 2018). The publications in the DNB Occasional Studies series started as from January 2003.

¹⁴⁴⁸ *An Overview of Financial Stability*, published as from December 2004, is a Dutch Financial Stability Report published by DNB twice a year to assess the strengths and weaknesses of the Dutch financial system and further records how DNB responds to warnings and recommendations of the ESRB to resolve financial stability threats in an effort to safeguard the financial stability. Refer to DNB Financial Stability Report available at

<https://www.dnb.nl/en/news/dnb-publications/financial-stability-report/index.jsp?page=2&sortBy=verschijningsDatum> (accessed 3 April 2018). See also, De Nederlandsche Bank Overview of Financial Stability in the Netherlands (November 2010) available at https://www.dnb.nl/en/binaries/Overview%20of%20Financial%20Stability%20in%20the%20Netherlands%20-%20November%202010_tcm47-242463.pdf (accessed 12 May 2018); DNB Financial Stability Report Autumn 2019 available at <https://www.dnb.nl/en/publications/publications-dnb/fsr/financial-stability-report-autumn-2019/> (accessed 3 May 2019); DNB Overview of Financial Stability Spring 2016 available at <https://www.dnb.nl/en/publications/publications-dnb/fsr/financial-stability-report-spring-2016/> (accessed 3 April 2018); DNB Overview of Financial Stability Spring 2015 available at <https://www.dnb.nl/media/demo53is/fsr-spring-15.pdf> (accessed 3 April 2018).

¹⁴⁴⁹ DNB translates macro risks into micro action (October 2013) available at <https://www.dnb.nl/en/news/dnb-publications/archive/newsletters/nieuwsbrief-banken/nieuwsbrief-banken-oktober-2013/dnb298608.jsp> (accessed 3 April 2018).

¹⁴⁵⁰ *Ibid.*

¹⁴⁵¹ Discussed in subparagraph 4.2.1 above.

¹⁴⁵² FSB Peer Review Report of the Netherlands (November 2014) available at <http://www.fsb.org/wp-content/uploads/Netherlands-peer-review-report.pdf> (accessed 3 April 2018).

Because *Recommendation ESRB/2013/1*¹⁴⁵³ recommends the harmonisation of the macro-prudential frameworks of EU Member States throughout the Union, DNB works in collaboration with the ESRB, the ECB, the EBA, the EIOPA, and the ESMA in respect of the provision of systemic risk data in order to enable these authorities to discharge their respective supervisory functions.¹⁴⁵⁴

In addition, the ESRB macro-prudential framework recommends that the national competent authorities apply macro-prudential instruments, addressing macro-prudential intermediate objectives, to financial institutions to prevent or mitigate systemic risk in order to safeguard the financial system. DNB is the competent authority responsible for reciprocating macro-prudential measures adopted by other national competent authorities in EU Member States, as a matter of principle,¹⁴⁵⁵ in accordance with *Recommendation ESRB/2013/1*.¹⁴⁵⁶

Although DNB has the overall financial stability mandate in the Dutch Twin Peaks model, DNB, the AFM and the Minister of Finance collectively play a crucial role in financial stability oversight in the Netherlands. Therefore, effective and efficient cooperation and coordination, including the exchange of confidential information, between DNB, the AFM, and the Minister of Finance is imperative for the successful exercise of the macro-prudential function under the Dutch Twin Peaks model.¹⁴⁵⁷ In particular, Article 1:50 of the Financial Supervision Act requires cooperation between the AFM and DNB, and as such, a memorandum of understanding has been entered into for the execution of matters pertaining to financial stability.¹⁴⁵⁸ As indicated above,

¹⁴⁵³ Discussed in subparagraph 4.2.1 above.

¹⁴⁵⁴ Article 1:69 (1) and (2) of the Financial Supervision Act.

¹⁴⁵⁵ DNB Reciprocated foreign macroprudential measures (September 2021) available at <https://www.dnb.nl/en/sector-information/supervision-sectors/banks/prudential-supervision/factsheet/reciprocated-foreign-macroprudential-measures/> (accessed 3 April 2022). For instance, DNB reciprocates macro-prudential measures of other EU Member States designed to combat risks emanating from the mortgage industry. Refer to Recommendation of the European Systemic Risk Board of 8 January 2018 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macro-prudential policy (ESRB/2018/1) available at https://www.esrb.europa.eu/pub/pdf/recommendations/2018/esrb.amendment20180213_2018_01.en.pdf (accessed 16 Mays 2018).

¹⁴⁵⁶ Discussed in subparagraph 4.2.1 above.

¹⁴⁵⁷ Article 1:90(5) of the Financial Supervision Act.

¹⁴⁵⁸ DNB and the AFM entered into an agreement on 2 July 2007 regarding their respective statutory responsibility for the prudential and conduct supervision of financial institutions as well as the supervisory cooperation and information sharing to avoid overlap and promote efficacy in the

the AFM assists DNB in financial stability matters by ensuring that the stability of the Dutch financial system is not undermined by the conduct of financial institutions that may threaten such stability and the AFM also upholds the interests of financial customers insofar as the market conduct of financial institutions are concerned.¹⁴⁵⁹

The Minister of Finance has a crucial role in the Dutch Twin Peaks model as it takes the lead in the formulation of policy rules for prudential and market conduct regulation of financial institutions¹⁴⁶⁰ and ensures the smooth functioning of the Dutch financial system. The Minister of Finance, in consultation with DNB, must take immediate measures to stabilise the financial system if it is threatened by the situation of a specific financial institution.¹⁴⁶¹ In the event of changes in the intensity of macro-prudential or systemic risk that may potentially jeopardise the proper functioning of the financial system and the economy, DNB, in consultation with the Minister of Finance, is directed to establish temporary measures in accordance with Article 458 of the CRR – so-called “national flexibility measures”.¹⁴⁶² The obligation to consult the Minister of Finance does not apply if the ECB is imposing the aforesaid measures,¹⁴⁶³ because the ECB as supranational authority is not subject to the jurisdiction of the national authorities.

A significant intervention that occurred in the Netherlands post-GFC was the establishment of the Financial Stability Committee (FSC) by Ministerial Decree in

supervisory tasks. See, AFM, DNB – Covenant between Stichting Autoriteit Financiële Marketen and De Nederlandsche Bank N.V. unofficial translation (September 2010) available <https://www.dnb.nl/media/b4ajjbq2/covenant-between-afm-and-dnb.pdf> (accessed 26 June 2018). This covenant replaced the previous covenant that was last entered into in November 2004 following the entry into force of the Financial Supervision Act. Refer to DNB Eurostysteem – Cooperation between DNB and AFM (January 2007) available at <https://www.dnb.nl/en/sector-information/supervision-laws-and-regulations/other/cooperation-between-dnb-and-afm/> (accessed 3 April 2018). DNB and the Minister of Finance entered into a MOU regarding crisis management measures in 2002. For this, see IMF Kingdom of the Netherlands Financial Stability Assessment Program: Technical note – financial safety nets – managing problem banks and systemic banking crises (April 2017) available at <https://www.imf.org/en/Publications/CR/Issues/2017/04/13/Kingdom-of-the-Netherlands-Netherlands-Financial-Sector-Assessment-Program-Technical-Note-44815> (accessed April 2018).

¹⁴⁵⁹ Article 1:25 of the Financial Supervision Act.

¹⁴⁶⁰ Article 1:25b (2) of the Financial Supervision Act; The information regarding the role of the Minister of Finance is detailed on the website of the Ministry of Finance available at <https://www.government.nl/ministries/ministry-of-finance> (accessed 3 April 2018).

¹⁴⁶¹ Article 6:1 of the Financial Supervision Act; Article 6:2 of the Financial Supervision Act further authorises the Minister of Finance to expropriate a company’s assets as part of measures to preserve financial stability.

¹⁴⁶² In terms of Article 3:66(1) of the Financial Supervision Act, these national flexibility measures may be temporarily implemented for a maximum of two years, and may be extended with one year. See subparagraph 4.5.6 below for the discussion of national flexibility measures.

¹⁴⁶³ Article 3:66(2) of the Financial Supervision Act.

November 2012.¹⁴⁶⁴ The FSC is a macro-prudential institution serving as a coordination forum between DNB, the AFM and the Minister of Finance on macro-prudential matters. One of its key duties is to make recommendations for the prevention and management of systemic risks and to advise on suitable crisis management arrangements.¹⁴⁶⁵ The FSC further coordinates responses by the Dutch authorities to warnings and recommendations that are issued by the ESRB.¹⁴⁶⁶

4.4 The EBA Guidelines on O-SIIs assessment

To facilitate a better understanding of the discussions below, Table 4.4 below shows the *EBA Guidelines on O-SIIs assessment* (indicator-based measurement approach as supplemented by supervisory judgment).¹⁴⁶⁷

Indicator-based measurement approach		
Criterion	Systemic indicators	Weighting
Size	<ul style="list-style-type: none"> Total assets 	25%
Importance (including substitutability/financial system infrastructure)	<ul style="list-style-type: none"> Value of domestic payment transactions 	8.33%

¹⁴⁶⁴ Decree establishing the Financial Stability Committee - Order of the Minister of Finance of 2 November 2012 establishing the Financial Stability Committee reference: FM2012/1193M available at https://www.financieelstabiliteitscomite.nl/media/36/02/469931/16/decree_establishing_the_financial_stability_committee.pdf (accessed 26 June 2018); The Financial Stability Committee is composed of seven representatives (three from DNB and the President as chair of the Financial Stability Committee, two each from the AFM and the Minister of Finance). This Committee was founded as a result of the recommendations of the De Wit Committee. The De Wit Committee is a Dutch parliamentary group that was set up in 2009 to examine developments and problems in the global financial system in general and in the Dutch financial system in particular and its findings were published on 10 May 2010. For this, see Report of the Parliamentary Committee Inquiry Financial System (House of representatives, Netherlands Parliament) (May 2010) available at https://www.europarl.europa.eu/cmsdata/62297/att_20101027ATT90643-7958668059034427695.pdf (accessed 3 April 2018); IMF Kingdom of the Netherlands Financial Stability Assessment Program Technical Note – Macroprudential policy framework (April 2017) available at <https://www.imf.org/en/Publications/CR/Issues/2017/04/13/Kingdom-of-the-Netherlands-Netherlands-Financial-Sector-Assessment-Program-Technical-Note-44818> (accessed 26 June 2018). Detailed duties of the Financial Stability Committee are outlined on its website available at <https://www.financieelstabiliteitscomite.nl/en> (accessed 26 June 2018).

¹⁴⁶⁵ FSB Peer Review Report of the Netherlands (November 2014) available at <https://www.fsb.org/wp-content/uploads/Netherlands-peer-review-report.pdf> (accessed 3 April 2018).

¹⁴⁶⁶ *Ibid.*

¹⁴⁶⁷ See subparagraphs 4.4.1 and 4.4.2 below.

	<ul style="list-style-type: none"> • Private sector deposits from depositors in the EU • Private sector loans to recipients in the EU 	8.33%
Complexity/cross border activity	<ul style="list-style-type: none"> • Value of OTC derivatives • Cross-jurisdictional claims • Cross-jurisdictional liabilities 	8.33%
Interconnectedness	<ul style="list-style-type: none"> • Intra-financial system assets • Intra-financial system liabilities • Debt securities outstanding 	8.33%
Supervisory overlay optional indicators include:		
<ul style="list-style-type: none"> • The number of retail customers; • The number of retail deposits accounts; • Deposits guaranteed under Deposit Guarantee Scheme; • Retail loans; • Business loans; • Mortgage loans; • Private sector loans; • Corporate deposits; 		

- Share in clearing and settlement system;
- Payment services provided to market participants or others, types of customers;
- Payment services provided;
- Potential contagion through entities in a conglomerate;
- Potential contagion through shareholders; potential reputational contagion;
- the number of foreign subsidiaries.

Article 131(1) of the CRD IV requires EU Member States to designate the domestic authority in charge of identifying “other systemically important institutions” (O-SIIs) in their jurisdictions. In the EU, O-SIIs is a general term for systemically important credit institutions and investment firms.¹⁴⁶⁸ As pointed out above,¹⁴⁶⁹ the CRR defines a bank as a credit institution. Therefore, an EU bank that is an O-SII is the equivalent of what the BCBS classifies as a D-SIB.¹⁴⁷⁰ The designated authority responsible for identifying O-SIIs must either be the national competent authority or the national designated authority, collectively referred to as the “relevant authorities”.¹⁴⁷¹

Article 131(3) of the CRD IV lays down high-level identification criteria for O-SIIs based on the categories of: size; the importance of a bank for the economy of the Union or of the relevant Member States; the significance of cross-border activities; and the interconnectedness of the institution or group of which the institution forms part, within the financial system. This provision further mandated the EBA to develop guidelines on the assessment of O-SIIs taking into account international frameworks for domestic systemically important institutions and Union and national specificities.

¹⁴⁶⁸ BCBS RCAP Assessment of Basel III G-SIB framework and review of D-SIB frameworks – European Union (June 2016) available at <https://www.bis.org/bcbs/publ/d372.pdf> (accessed 1 February 2018).

¹⁴⁶⁹ See paragraph 4.2.

¹⁴⁷⁰ BCBS RCAP Assessment of Basel III G-SIB framework and review of D-SIB frameworks – European Union June 2016 available at <https://www.bis.org/bcbs/publ/d372.pdf> (accessed 1 February 2018).

¹⁴⁷¹ Article 131(1) of the CRD IV states that there may be more than one authority charged with identifying O-SIIs. In terms of Article 131(1) of the CRD IV, G-SIIs are the counterpart for Basel G-SIBs.

To give effect to Article 131(3) of the CRD IV, the EBA published *Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs) (EBA Guidelines on O-SIIs assessment)* in December 2014.¹⁴⁷² The *EBA Guidelines on O-SIIs assessment* are designed to guide the relevant authorities in the annual assessment of the systemic importance of banks,¹⁴⁷³ based on an indicator-based measurement approach,¹⁴⁷⁴ which is complemented by supervisory judgment.¹⁴⁷⁵ These guidelines further implement the *Basel D-SIB framework* across EU Member States to assess the systemic importance of banks and their subsequent identification as O-SIIs in line with Article 131(3) of the CRD IV. The identification of an EU bank as an O-SII enables the relevant authorities to impose an O-SII buffer, being the counterpart of the Basel D-SIB buffer, on EU banks.¹⁴⁷⁶ It is to be noted that the application of the O-SII buffer to O-SIIs is beyond the mandate of the EBA, as this mandate falls within the national competent authorities' remit, and hence the *EBA Guidelines on O-SIIs assessment* do not contain a requirement for O-SIIs to maintain an O-SII buffer.¹⁴⁷⁷

Notably, Article 16(3) of the EBA Regulation of 2010 requires the national competent authorities to endeavour to comply with any guidelines issued by the EBA. Thus, the relevant authorities were required to send the EBA a notice of their intention to comply with the *EBA Guidelines on O-SIIs assessment*, alternatively, provide a statement of reasons for non-compliance by 17 February 2015.¹⁴⁷⁸

¹⁴⁷² Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs) (December 2014) available at

<https://www.eba.europa.eu/documents/10180/930752/EBA-GL-2014-10+%28Guidelines+on+O-SIIs+Assessment%29.pdf> (accessed 1 February 2018). Article 23 of the EBA Regulation of 2010 directs the EBA, in consultation with the ESRB, to develop criteria for the identification and measurement of systemic risk emanating from banks taking into consideration the *Basel D-SIB framework* in the context of the banking sector.

¹⁴⁷³ Paragraph 6 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁷⁴ The EBA indicator-based measurement approach is discussed in subparagraph 4.4.1 below.

¹⁴⁷⁵ The EBA supervisory judgment is discussed in subparagraph 4.4.2 below.

¹⁴⁷⁶ Article 131(5) of the CRD IV of 2013; Paragraph 2.3 of Chapter Two analyses the *Basel D-SIB framework*. The Basel D-SIB buffer is discussed in paragraph 2.4, subparagraph 2.4.3, of Chapter Two.

¹⁴⁷⁷ Part 4 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁷⁸ According to the *EBA Guidelines on O-SIIs assessment*, the notifications are sent through a submission of a form by persons responsible for reporting compliance on behalf of the RAs and are published on the EBA website. In the absence of any notification by the set deadline, which was then, 17 February 2015, the EBA would have considered the RAs to be non-compliant.

4.4.1 The EBA indicator-based measurement approach

The *EBA Guidelines on O-SIIs assessment* specify that the indicator-based measurement approach is an initial mandatory framework that aims to facilitate a comparable, comprehensive, and transparent assessment of O-SIIs across EU Member States.¹⁴⁷⁹ This indicator-based methodology calculates the systemic importance of banks based on various categories indicated in more detail below. Important to note is that each category comprises one or more additional indicators weighted equally at a weight of 25 per cent that further define the substantive components determining the systemic relevance of a bank.¹⁴⁸⁰

In line with Article 131(3) of the CRD IV, the indicator-based measurement approach core set of criteria consist of:¹⁴⁸¹

- (a) Size;
- (b) Importance for the economy of the relevant Member State or the Union, capturing substitutability/financial system infrastructure;
- (c) Complexity – including the additional complexities from cross-border activity;
- (d) Interconnectedness of the institution or (sub-) group within the financial system.

In accordance with the *EBA Guidelines on O-SIIs assessment*,¹⁴⁸² the category of size is calculated with the indicator of the total exposure of a bank consisting of on-balance sheet and off-balance sheet exposures. The category of importance for the economy of the relevant Member State or the Union, capturing substitutability/financial system infrastructure, has the indicators of: the value of domestic payment transactions, private sector deposits from depositors in the EU and private sector loans to recipients in the EU. The category of complexity, including cross border activity, is evaluated with the indicators of: cross-jurisdictional claims, cross-jurisdictional liabilities and OTC

¹⁴⁷⁹ Part 2 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁸⁰ Paragraph 7 of the *EBA Guidelines on O-SIIs assessment*; Van Oordt M *et al* “Systemic risk of European banks: Regulators and markets” DNB Working Paper (July 2015) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2634443 (accessed 12 May 2018). Van Oordt and Zhou note that the EBA publishes the collected data of the indicators of the indicator-based measurement approach on its website.

¹⁴⁸¹ Paragraph 6 of the *EBA Guidelines on O-SIIs assessment*; the EBA is of the view that its guidelines on O-SIIs assessment combine the criteria that is stipulated in the CRD IV (discussed in subparagraph 4.4 above) with the criteria that is set out in the *Basel D-SIB framework* (discussed in paragraph 2.2 of Chapter Two).

¹⁴⁸² Annex 1, Table 1 of the *EBA Guidelines on O-SIIs assessment*.

derivatives. The category of interconnectedness has the indicators of: intra-financial system assets, intra-financial system liabilities and debt securities outstanding.

Given that the DNB indicator-based measurement approach consists of four categories of systemic importance, the systemic score for each O-SII will equal the weighted average of the prescribed ten indicators across these four categories of: size; interconnectedness; substitutability; and complexity (and they are each weighted at 25 per cent).¹⁴⁸³ The total systemic score for each O-SII is then derived by averaging these systemic scores for all these four categories and then converting the resulting value into basis points. Banks that score 350 basis points or beyond are identified as O-SIIs, subject to supervisory discretion in terms of which this score may be reduced to 275 basis points or increased to 450 basis points.¹⁴⁸⁴

The *EBA Guidelines on O-SIIs* assessment automatically identifies banks with a systemic score equal to or higher than 350 (three hundred and fifty) basis points as O-SIIs under the indicator-based measurement approach.¹⁴⁸⁵ This approach contrasts that of the US, which prescribes a systemic score that equals or exceeds 130 basis points.¹⁴⁸⁶ The relevant authorities may raise this systemic score threshold to 425 (four hundred and twenty-five) basis points or lower it to 275 (two hundred and seventy-five) basis points to accommodate the specificities of individual EU Member States' domestic banking sectors and the resulting statistical distribution of the scores, thereby ensuring the homogeneity of the identification of O-SIIs based on their domestic systemic importance.¹⁴⁸⁷

Important to note is that the relevant authorities will increase the systemic score threshold in EU Member States with a highly concentrated banking system to identify a few O-SIIs, but such O-SIIs will necessarily be huge in terms of their size relative to GDP or total market share – although banks of a comparable size may not be regarded as big in other jurisdictions.¹⁴⁸⁸ On the other hand, the relevant authorities will

¹⁴⁸³ Paragraph 8 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁸⁴ Paragraph 9 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁸⁵ Paragraph 9 of the *EBA Guidelines on O-SIIs assessment*. A basis point is defined in paragraph 1.7 of Chapter One.

¹⁴⁸⁶ See paragraph 3.7, subparagraph 3.7.1, of Chapter Three.

¹⁴⁸⁷ Paragraph 9 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁸⁸ *Ibid.*

decrease the systemic score threshold in EU Member States characterized by a diverse, and thus less concentrated, banking sector that is home to many small banks, although not of large size, to capture many O-SIIs.¹⁴⁸⁹ Thus in concentrated banking systems the result will be that only a small number of banks will be identified as O-SIIs whereas in banking systems that are not concentrated there will be more banks that will be systemically important in the domestic economy that can be identified as O-SIIs.

Although the EBA notes that the indicator-based measurement approach ideally identifies big banks, it recommends the adjustment of the systemic score threshold as “systemic risk is not binary by nature”, given that macro-prudential risks vary according to the structure of different banks or size of a banking system relative to the economy.¹⁴⁹⁰ In other words, the *EBA Guidelines on O-SIIs assessment* are designed to capture banks that are evidently systemically relevant and also those whose systemic profile may be less obvious.

The CRD IV sets the unit of analysis for assessing the systemic importance of O-SIIs on an individual, sub-consolidated or consolidated basis, as applicable.¹⁴⁹¹ As regards the assessment methodology, the EBA proposes that, as a starting point, the relevant authorities should compute the systemic scores for banks under the indicator-based measurement approach at the highest level of consolidation of a group that falls under its jurisdiction,¹⁴⁹² including subsidiaries in other Member States and third countries.¹⁴⁹³ The rationale for setting the unit of analysis at the highest level of consolidation is to attain the most comprehensive assessment of the systemic profile of banks under the scoring methodology of the indicator-based measurement

¹⁴⁸⁹ *Ibid.*

¹⁴⁹⁰ Part 2 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁹¹ Article 131(1) of the CRD IV of 2013.

¹⁴⁹² Part 3 of the *EBA Guidelines on O-SIIs assessment* describes this highest level of consolidation as the level that is not the subsidiary of another entity authorised or domiciled in the same Member State.

¹⁴⁹³ The EBA Final Peer Review Report on the Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs) (November 2017) available at <https://eba.europa.eu/sites/default/documents/files/documents/10180/1720738/02279f7d-7dc1-414a-9fa9-7376776e9288/Final%20Peer%20review%20Report%20on%20EBA%20O-SIIs%20Guidelines.pdf?retry=1> (accessed 3 April 2018). This Peer Review Report is in line with paragraph 22 of the *EBA Guidelines on O-SIIs assessment*, which required the EBA to have reviewed the guidelines by April 2016 to incorporate developments in the international standards and approaches in the methodologies for identifying O-SIIs.

approach.¹⁴⁹⁴ Additionally, the relevant authorities may, where applicable, assess the systemic relevance of banks on a sub-consolidated or individual basis for informing their decision on how the O-SII buffer should be calibrated as well as the consolidation level at which it should apply.¹⁴⁹⁵

Where a Member State has a large number of small banks, the relevant authorities may opt to exclude a bank from the identification process if its size measured by its total assets does not exceed 0.02 per cent of the Member State's total banking sector to reduce the reporting burden for non-systemic banks whose failure or distress is unlikely to damage the financial system.¹⁴⁹⁶ However, the *guidelines* suggest that exempted banks should be reviewed each time when the identification process for O-SIIs is conducted to monitor whether they have possibly in the meantime assumed a systemic profile that justifies their inclusion in the O-SIIs identification process.¹⁴⁹⁷

4.4.2 The EBA supervisory judgment assessment methodology

The assessment methodology that complements the EBA indicator-based measurement approach is the application of supervisory judgment (supervisory overlay) which reflects the specificities of national banking sectors given their divergence across EU Member States.¹⁴⁹⁸ Under the supervisory overlay-approach, the relevant authorities exercise the discretion to assess whether banks whose systemic importance may have otherwise been underestimated by the scoring methodology of the EBA indicator-based measurement approach are actually so systemically relevant that they should be identified as O-SIIs.¹⁴⁹⁹ As with the indicator-based measurement approach, the relevant authorities may assess the systemic importance of banks at a consolidated or sub-consolidated or individual basis under the supervisory overlay approach and should not identify banks as O-SIIs that have obtained a systemic score not exceeding 4.5 basis points,¹⁵⁰⁰ as they are unlikely to pose systemic risk.

¹⁴⁹⁴ Paragraph 5 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁹⁵ *Ibid.*

¹⁴⁹⁶ Paragraph 10 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁹⁷ *Ibid.*

¹⁴⁹⁸ Paragraph 13 of the *EBA Guidelines on O-SIIs assessment*.

¹⁴⁹⁹ Part 1 of the *EBA Guidelines on O-SIIs assessment*. See further paragraph 2.2, subparagraph 2.2.3, of Chapter Two, for a discussion of the Basel supervisory judgment methodology.

¹⁵⁰⁰ Paragraph 13 of the *EBA Guidelines on O-SIIs assessment*.

The *EBA Guidelines on O-SIIs assessment* sets out a number of optional indicators of the systemic relevance of banks, to be used in the supervisory judgment assessment methodology which indicators are not adequately captured in the indicator-based measurement approach.¹⁵⁰¹ These optional indicators include, but are not limited to: the number of retail customers; the number of retail deposits accounts; deposits guaranteed under Deposit Guarantee Scheme; retail loans; business loans; mortgage loans; private sector loans; corporate deposits; share in clearing and settlement system; payment services provided to market participants or others, types of customers; payment services provided; potential contagion through entities in a conglomerate; potential contagion through shareholders; potential reputational contagion; the degree of resolvability according to a financial institution’s resolvability assessment; and the number of foreign subsidiaries.¹⁵⁰²

For the consistent implementation of the supervisory judgment methodology across the Union, the relevant authorities are required to utilise those optional indicators of the supervisory judgment methodology that are relevant in the context of respective EU Member States, thereby accommodating national features such as the unique characteristics of a financial system or the size of a bank.¹⁵⁰³

4.4.3 The implementation of the EBA Guidelines on O-SIIs assessment in the Netherlands

To facilitate a better understanding of the discussions below, Table 4.4.3 illustrates DNB’s implementation of the *EBA Guidelines on O-SIIs assessment* in the Netherlands.¹⁵⁰⁴

Indicator-based measurement approach

Criterion	Systemic indicator (and weighting)
Size	<ul style="list-style-type: none"> Consistent with the <i>EBA Guidelines on O-SIIs assessment</i>

¹⁵⁰¹ Annex 1, Table 2 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵⁰² *Ibid.*

¹⁵⁰³ Paragraph 14 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵⁰⁴ See subparagraphs 4.4.3.1 and 4.4.3.2 below.

Importance – including substitutability/financial infrastructure	<ul style="list-style-type: none"> Consistent with the <i>EBA Guidelines on O-SIIs assessment</i>
Complexity – including the additional complexities for cross border activity	<ul style="list-style-type: none"> Consistent with the <i>EBA Guidelines on O-SIIs assessment</i>
Interconnectedness	<ul style="list-style-type: none"> Consistent with the <i>EBA Guidelines on O-SIIs assessment</i>

Supervisory overlay

Optional indicator	Optional indicator (s) category
<ul style="list-style-type: none"> The total exposure to default 	Size
<ul style="list-style-type: none"> The type of customers of a bank The number of retail deposits accounts 	Importance – including substitutability/financial infrastructure
<ul style="list-style-type: none"> The potential contagion through shareholders Deposits guaranteed under the national Deposit Guarantee Scheme 	Interconnectedness
<ul style="list-style-type: none"> The potential reputational contagion The potential contagion through entities in a conglomerate 	“Behavioural effects” of a bank in the financial markets

Article 105c(1)(b) of *the Decree on Prudential Rules under the Financial Supervision Act*, as amended by Chapter 10A of *the Amendment Decree on Financial Markets*,¹⁵⁰⁵ stipulates that DNB is responsible for assessing the systemic relevance of banks. In line with the Basel D-SIB approach, the purpose of identifying systemic banks is to facilitate the application by DNB of Article 3:62a of *the Financial Supervision Act* that

¹⁵⁰⁵ See paragraph 4.3 above for the discussion of the Dutch legal and regulatory framework.

deals with the O-SII buffer regime and other stringent prudential standards.¹⁵⁰⁶ Thus DNB, being the Dutch central bank and prudential supervisor, is the national competent authority responsible for identifying banks that are Dutch O-SIIs.¹⁵⁰⁷ Given that the Netherlands is a Eurozone country, DNB identifies O-SIIs in consultation with the ECB under the SSM Regulation.¹⁵⁰⁸

DNB formulated a Dutch framework for assessing the systemic importance of banks entitled *Adapted system relevance framework based on EBA guidelines* (DNB O-SII framework), issued in December 2015, which is in line with the *EBA Guidelines on O-SIIs assessment*.¹⁵⁰⁹ Further rules regarding the assessment criteria or additional criteria for the identification of the Dutch O-SIIs may be laid down by ministerial regulation.¹⁵¹⁰ Such rules have not yet been laid down. The *DNB O-SII framework* was phased-in from January 2016 to December 2018, and became fully effective from January 2019,¹⁵¹¹ in line with the transitional period for the implementation of the *Basel D-SIB framework*.¹⁵¹²

The Dutch O-SII identification framework covers all banks (credit institutions) that are registered to conduct the “business of a bank” in the Netherlands.¹⁵¹³ Consistent with the *EBA Guidelines on O-SIIs assessment*, DNB evaluates the systemic relevance of Dutch banks annually.¹⁵¹⁴ Further, DNB may undertake such assessment process at any time at the behest of the Minister of Finance or as frequently as necessary to

¹⁵⁰⁶ The Dutch stringent prudential regime is analysed in paragraph 4.5 below.

¹⁵⁰⁷ Article 105c(1)(b) of the Decree on Prudential Rules under the Financial Supervision Act, as amended by Chapter 10A of the Amendment Decree on Financial Markets of 2014.

¹⁵⁰⁸ BCBS RCAP Assessment of Basel III G-SIB framework and review of D-SIB frameworks – European Union June 2016 available at <https://www.bis.org/bcbs/publ/d372.pdf> (accessed 1 February 2018).

¹⁵⁰⁹ DNB Adapted system relevance framework based on EBA guidelines (DNB O-SII framework) December 2015 available at https://www.dnb.nl/binaries/Aangepast%20systeemrelevantieraamwerk%20op%20basis%20van%20EBA%20richtsnoeren_tcm46-335615.pdf?2020060817 (accessed 10 October 2016).

¹⁵¹⁰ Article VII of the Amendment Decree on Financial Markets of 2014.

¹⁵¹¹ Chapter 10A of the Amendment Decree on Financial Markets; See further, Regulation of the Minister of Finance 11 December 2015, 2015-0000022215, Financial Markets Department, containing rules concerning the systemic relevance of banks and investment banks (Regulation on systemic relevance for banks and investment firms under the Financial Supervision Act) available at <http://wetten.overheid.nl/BWBR0037400/2016-01-01#Opschrijf> (accessed 27 April 2018).

¹⁵¹² For the phase-in arrangements of the Basel D-SIB buffer regime, see paragraph 2.3 of Chapter Two.

¹⁵¹³ Article 1.1 of the Financial Supervision Act.

¹⁵¹⁴ Paragraph 5 of the *EBA Guidelines on O-SIIs assessment*.

address any significant changes affecting the status of O-SIIs or emergency situations that are potentially detrimental to the Dutch financial system.¹⁵¹⁵

4.4.3.1 The DNB indicator-based measurement approach

4.4.3.1.1 Size

As indicated above,¹⁵¹⁶ the category of size, as measured by the total exposure of a bank comprising of on-balance and off-balance sheet items, is key to measuring the systemic importance of EU banks.¹⁵¹⁷ DNB presumes that the severity of systemic damage on the Dutch and Union financial system and real economy would be proportional to the size of a distressed bank.¹⁵¹⁸ Typically, the Dutch banking system is large and highly concentrated,¹⁵¹⁹ with Dutch banks relying heavily on short-term wholesale funding sources to fund long-term assets.¹⁵²⁰

4.4.3.1.2 Importance – including substitutability/financial system infrastructure

As also indicated above,¹⁵²¹ the EBA indicator-based measurement approach assesses the importance of banks in the economy of the relevant Member State and the Union, including their substitutability or financial market infrastructure.¹⁵²² Thus, the relevant authorities should evaluate the systemic impact of the failure of a bank on a domestic economy for purposes of capturing all O-SIIs in EU Member States as well as the impact of such failure on the Union financial system to enable the identification of O-SIIs directly at the Union level.¹⁵²³ Consequently, O-SIIs may be systemically

¹⁵¹⁵ Article VII of the Amendment Decree on Financial Markets of 2014.

¹⁵¹⁶ See subparagraph 4.4.1.

¹⁵¹⁷ Annex 1, Table 1 of the *EBA Guidelines on O-SIIs assessment*; Paragraph 7 thereof recommends that the RAs should use the harmonised definitions of the indicators of the *EBA Guidelines on O-SIIs assessment*.

¹⁵¹⁸ DNB Additional buffer requirement enhances resilience of Dutch systemic banks (April 2014) available at <https://www.dnb.nl/en/news/news-and-archive/dnbulletin-2014/dnb306988.jsp> (accessed 26 June 2018).

¹⁵¹⁹ Annex 1, Table 1 of the *EBA Guidelines on O-SIIs assessment*; IMF Kingdom of the Netherlands – Netherlands Financial System Stability Assessment (April 2017) available at <https://www.imf.org/en/Publications/CR/Issues/2017/04/03/Kingdom-of-the-Netherlands-Netherlands-Financial-System-Stability-Assessment-44790> (accessed 3 May 2018).

¹⁵²⁰ IMF Kingdom of the Netherlands – Netherlands Financial System Stability Assessment (April 2017) available at <https://www.imf.org/en/Publications/CR/Issues/2017/04/03/Kingdom-of-the-Netherlands-Netherlands-Financial-System-Stability-Assessment-44790> (accessed 3 May 2018).

¹⁵²¹ See subparagraph 4.4.1 above.

¹⁵²² Annex 1, Table 1 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵²³ Article 131(3) of the CRD IV of 2013; See further, Regulatory Consistency Assessment Programme (RCAP) – Assessment of Basel III G-SIB framework and review of D-SIB frameworks – European Union (June 2016) available at <https://www.bis.org/bcbs/publ/d372.pdf> (accessed 1 February 2018).

relevant to only the financial system of the affected Member State or to that of the Union also.¹⁵²⁴

The category of substitutability (as an indicator of importance) consists of the indicators of the value of domestic payment transactions, private sector deposits from depositors in the EU and private sector loans to recipients in the EU.¹⁵²⁵ The *Dutch O-SII framework* thus aligns with the *EBA Guidelines on O-SIIs assessment* under this category.¹⁵²⁶

4.4.3.1.3 Complexity – including the additional complexities for cross border activity

As further mentioned above,¹⁵²⁷ the category of complexity evaluates the systemic impact of the failure of a bank on a financial system by applying the indicators of cross-jurisdictional claims, cross-jurisdictional liabilities and OTC derivatives.¹⁵²⁸ The Dutch O-SII framework is thus also consistent with the *EBA Guidelines on O-SIIs assessment* under this category.¹⁵²⁹ The indicators of cross-jurisdictional claims and cross-jurisdictional liabilities are considered to be pertinent in the EU banking sector as Hofmann points out that the cross-border effects of insolvencies of internationally active EU banks were at the pinnacle of the 2008 GFC.¹⁵³⁰

¹⁵²⁴ Part 4 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵²⁵ Annex 1, Table 1 of the *EBA Guidelines on O-SIIs assessment*; The indicator of the value of domestic payment transactions is calculated as the value of a bank's payments sent through all of the main payment systems of which it is a member.

¹⁵²⁶ DNB Adapted system relevance framework based on EBA guidelines (DNB O-SII framework) December 2015 available at https://www.dnb.nl/binaries/Aangepast%20systeemrelevantieraamwerk%20op%20basis%20van%20EBA%20richtsnoeren_tcm46-335615.pdf?2020060817 (accessed 10 October 2016). As pointed out in subparagraph 4.4.3 above, the Dutch O-SII framework is consistent with the *EBA Guidelines on O-SIIs assessment*.

¹⁵²⁷ See subparagraph 4.4.1 above.

¹⁵²⁸ Annex 1, Table 1 of the *EBA Guidelines on O-SIIs assessment*. Cross-jurisdictional claims are the value of all claims of all sectors that are cross-border and the cross-jurisdictional liabilities includes local liabilities in local currency and foreign liabilities.

¹⁵²⁹ DNB Adapted system relevance framework based on EBA guidelines (DNB O-SII framework) December 2015 available at https://www.dnb.nl/binaries/Aangepast%20systeemrelevantieraamwerk%20op%20basis%20van%20EBA%20richtsnoeren_tcm46-335615.pdf?2020060817 (accessed 10 October 2016); Regulation on systemic relevance for banks and investment firms under the Financial Supervision Act available at <https://zoek.officielebekendmakingen.nl/Stcrt-2015-46411.html#n1> (accessed 27 April 2018).

¹⁵³⁰ Hofmann C (2017: 155 at 158). At page 166, Hofmann points out that lack of supervisory cooperation and information sharing regarding the transnational monitoring of banks intensified the EU cross-border instabilities during the crisis.

4.4.3.1.4 Interconnectedness

As explained in Chapter Two,¹⁵³¹ the category of interconnectedness establishes the extent of a bank's interlinkage with other financial institutions.¹⁵³² As also indicated above,¹⁵³³ the indicators of interconnectedness are intra-financial system assets, intra-financial system liabilities, and securities outstanding.¹⁵³⁴ This category is especially relevant in the Dutch financial system in light of the intertwined Dutch banking sector.¹⁵³⁵ The category of interconnectedness is relevant in the EU financial system as a whole, as Bradley further affirms the integration of the financial markets of the EU Member States.¹⁵³⁶

4.4.3.2 The DNB Supervisory assessment methodology

As pointed out above,¹⁵³⁷ the relevant authorities are expected to apply the optional indicators of supervisory judgment that are relevant for their respective financial systems for purposes of ensuring that all O-SIIs are appropriately identified including, for example, small but systemically important banks. Accordingly, DNB applies the

¹⁵³¹ See subparagraph 2.2.1.2 thereof.

¹⁵³² Annex 1, Table 1 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵³³ See subparagraph 4.4.1 above.

¹⁵³⁴ *Ibid.*

¹⁵³⁵ This interconnected banking system further impacts upon sectoral risks associated with financial conglomerates, as indicated in the DNB Notification template for Article 131 CRD – Other Systemically Important Institutions (O-SII) (March 2016) available at

https://www.esrb.europa.eu/pub/pdf/other/esrb.notification190116_osii_srb_nl.en.pdf?615bcceedb1005f26208177ab7a4ffb3 (accessed 3 April 2018). Article 3:289 of the Financial Supervision Act relates to the prudential supervision of financial conglomerates that is incorporated in Decision of 12 October 2006 laying down rules on supplementary prudential supervision of banks, life insurers, non-life insurers and investment firms belonging to a financial group (*Besluit prudentieel toezicht financiële groepen Wft* or Decree on Prudential Supervision of financial groups under the Financial Supervision Act) available at

<https://wetten.overheid.nl/BWBR0020415/2020-01-01> (accessed 3 April 2018). The EU-wide legislation for financial conglomerates Decree implemented Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC, 92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0087&from=en> (accessed 23 February 2018).

¹⁵³⁶ Bradley CM (2014) “Breaking up is hard to do: The interconnection problem in financial markets and financial regulation, a European (Banking) Union perspective” 49 *Texas International Law Journal* 270.

¹⁵³⁷ See paragraph 4.4.2.

below-stated optional indicators that are relevant within the Dutch banking industry and financial system when exercising the discretion to identify a bank as an O-SII.¹⁵³⁸

First, the total exposure to default, classified under the category of size, targets the high volume of a bank's off-balance sheet items.¹⁵³⁹ Second, there are two optional indicators falling under the category of importance, including substitutability/financial system infrastructure, - namely the type of customers of the bank and the number of retail deposit accounts. The optional indicator of the type of bank customers may come to the fore during the disruption of essential services of a bank designed for a particular type of customers operating in a niche market where comparatively few financial market participants are involved in providing such services.¹⁵⁴⁰ For instance, a bank may specialise in lending services to households or SMEs such that, should the bank encounter failure, it would disrupt the smooth flow of financial services, thereby destabilising the financial system.¹⁵⁴¹ Further, banks that perform critical functions relating to financial markets infrastructures such as settlement and clearing systems, constitute a significant component of the financial system and may be difficult to substitute.¹⁵⁴² DNB indicates that these essential services and products of a bank tailored for a particular class of customers or sub-market should be substitutable if a bank fails.¹⁵⁴³ It further explains that the optional indicator pertaining to the number of retail deposit accounts signifies that a failure of a bank holding more customer deposits

¹⁵³⁸ These indicators are tabled in Annex 1, Table 2 of the *EBA Guidelines on O-SIIs assessment*. These indicators are also set out in the explanatory note of the Amendment Decree on Financial Markets of 2014.

¹⁵³⁹ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) July (2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021); DNB Notification template for Article 131 CRD – Other Systemically Important Institutions (O-SII) (March 2016) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification190116_osii_srb_nl.en.pdf?615bcceedb1005f26208177ab7a4ffb3 (accessed 8 April 2018).

¹⁵⁴⁰ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other systemically Important Institutions (O-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

¹⁵⁴¹ *Ibid*; See further, at paragraph 1.5 of Chapter One that highlighted the importance of financial institutions' role in financial markets infrastructure.

¹⁵⁴² DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

¹⁵⁴³ *Ibid*.

would bar their access to such funds and thus cause the disruption of essential financial services.¹⁵⁴⁴

Third, the two optional indicators falling under the interconnectedness category are respectively the potential contagion through shareholders; and deposits guaranteed under the national Deposit Guarantee Scheme (DGS).¹⁵⁴⁵ The potential contagion through shareholders implies that the collapse of a bank that has a stake in another bank may potentially lead to the risk of contagion and may result in the collapse of the latter bank also.¹⁵⁴⁶ Under the DGS, DNB bank pays account holders up to a maximum of 100 000 (hundred thousand) euros, per person, per bank, when a bank fails. Other domestic banks have to share the cost of such payment since they guarantee one another's deposits.¹⁵⁴⁷ Dutch banks contribute to the DGS; furnish DNB with data for the execution of the DGS and provide information to their customers regarding the DGS.¹⁵⁴⁸ Being members of the same DGS thus interconnects all EU member banks to each other as the decisions of the DGS in the context of bank resolution impact on them all.¹⁵⁴⁹ The rationale behind the DGS systemic indicator is to protect taxpayers

¹⁵⁴⁴ *Ibid.*

¹⁵⁴⁵ The Dutch Deposit Guarantee Scheme is administered in terms of Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (a recast of old DGS Directive) available at

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0049&from=EN> (accessed 23 February 2018). The Netherlands transposed this Directive to the Dutch financial landscape in November 2015. For this, see Official Gazette of the Kingdom of the Netherlands published on 25 November 2015 (Deposit Guarantee Scheme Implementation Decree) available at

<https://zoek.officielebekendmakingen.nl/stb-2015-434> (accessed 23 February 2018); See further, Dutch Deposit Insurance Scheme more risk-based available at <https://www.dnb.nl/en/news/news-and-archive/persberichten-2015/dnb334375.jsp> (accessed 23 February 2018). The Deposit Guarantee Scheme is designed to ensure that banks make a pay-out of a certain amount of deposit to their account holders in the event that they encounter failure and enter the resolution stage. The purpose of the DGS is to facilitate an orderly systemic collapse by preventing a bail-out of systemically important banks with taxpayers' money as well as the associated moral hazard. The international principles regarding deposit insurance are documented in the BCBS and International Association of Deposit Insurers Core Principles for Effective Deposit Insurance Systems (June 2009) available at

<https://www.bis.org/publ/bcbs156.pdf> (accessed 23 February 2019). For this, see paragraph 24, subparagraph 2.4.7 of Chapter Two

¹⁵⁴⁶ *Ibid.*

¹⁵⁴⁷ DNB Deposit Guarantee Scheme available at <https://www.dnb.nl/en/sector-information/deposit-guarantee-scheme/deposit-guarantee-scheme/> (accessed 30 November 2021) states that the Deposit Guarantee Fund, which is a separate legal entity that was established in 2015, is responsible for managing the financial resources and availing the funds for DNB to make payments to account holders when a bank fails.

¹⁵⁴⁸ DNB Deposit Guarantee Scheme available at <https://www.dnb.nl/en/sector-information/deposit-guarantee-scheme/deposit-guarantee-scheme/> (accessed 30 November 2021).

¹⁵⁴⁹ Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (a recast of old DGS Directive) available at

against the bail-out¹⁵⁵⁰ of an O-SII by establishing the liability of shareholders towards depositors through bail-in measures¹⁵⁵¹ when a bank collapses.¹⁵⁵² This systemic indicator further seeks to address the systemic implications arising from the resolution of subsidiaries which are identified as O-SIIs in host jurisdictions.¹⁵⁵³

Fourth, as part of its supervisory judgment approach, DNB classifies the indicators of potential reputational contagion and potential contagion through entities in a conglomerate under a separate category called the “behavioural effects” of a bank in the financial markets.¹⁵⁵⁴ Under potential reputational contagion, DNB evaluates the extent to which the failure or distress of a bank with a certain business model may result in a loss of trust in banks with comparable business models.¹⁵⁵⁵ The optional indicator of potential contagion through entities in a conglomerate, makes a bank critical for the proper functioning of a financial system, because if a bank that is part of a financial conglomerate encounters failure customers may indiscriminately lose trust in subsidiaries that operate under the same brand, regardless of how well capitalised they may be.¹⁵⁵⁶ Fifth, another optional indicator called the degree of resolvability of a bank evaluates any impediments to the resolution of banks that are no longer viable.¹⁵⁵⁷

4.4.3.3 Dutch O-SIIs

Article 131(12) of the CRD IV,¹⁵⁵⁸ enjoins the relevant authorities to notify the ESRB of the names of O-SIIs that have been identified and to state the reasons for the exercise of supervisory judgment in the identification of O-SIIs. The ESRB must

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0049&from=EN> (accessed 23 February 2018).

¹⁵⁵⁰ See paragraph 1.4 of Chapter One for the definition of the concept of a bail-out.

¹⁵⁵¹ See paragraph 1.7 of Chapter One for the discussion of bail-in measures.

¹⁵⁵² Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (a recast of old DGS Directive) available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0049&from=EN> (accessed 23 February 2018).

¹⁵⁵³ Westbrook JL (2014) “SIFIs and States” 49 *Texas International Law Journal* 329.

¹⁵⁵⁴ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

¹⁵⁵⁵ *Ibid.*

¹⁵⁵⁶ *Ibid.*

¹⁵⁵⁷ Annex 1, Table 2 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵⁵⁸ As amended by Article 1(47)(j) of the CRD V.

forward the specified notifications to the European Commission and the EBA without delay and publicly disclose which banks have been identified as O-SIIs.¹⁵⁵⁹ Further, the relevant authorities must annually review the identification of O-SIIs and report the outcome to the ESRB that must immediately forward the results to the European Commission and the ESRB must then publicly disclose the updated list of O-SIIs.¹⁵⁶⁰ The relevant authorities submit the names of O-SIIs in their respective Member States to the EBA, and the EBA in turn, publishes all the O-SIIs from all Member States on its website.¹⁵⁶¹

As part of the EBA's initiative to encourage banks to decrease their systemic footprint, the relevant authorities are required to publish, on their websites,¹⁵⁶² the methodologies and considerations underlying the assessment of the systemic importance of banks; the systemic scores to indicate which banks scored above the threshold and thus automatically are identified as O-SIIs with the indicator-based measurement approach;¹⁵⁶³ as well as the capital buffers applicable to the identified O-SIIs.¹⁵⁶⁴ If a systemic score threshold has been adjusted to accommodate the national specificities of a particular Member State as well as the resulting statistical distribution of the scores, the justification for such adjustment should be disclosed.¹⁵⁶⁵

The relevant authorities are also required to publish the optional indicators utilised under the supervisory judgment approach and how the discretion for setting the O-SII buffer requirement, as discussed in more detail below,¹⁵⁶⁶ was exercised.¹⁵⁶⁷ For each O-SII that has been identified in terms of the supervisory judgment approach, the relevant authorities disclose the chosen optional indicators, the relevance of the selected indicators for their Member States, and how the indicators render a bank

¹⁵⁵⁹ Article (12) of the CRD IV, as amended by Article 1(47)(j) of the CRD V; See paragraph 4.2 above for the role of the European Commission.

¹⁵⁶⁰ Article 131(12) of the CRD IV, as amended by Article 1(47)(j) of the CRD V.

¹⁵⁶¹ List of 2021 O-SIIs notified to the EBA available at <https://www.eba.europa.eu/risk-analysis-and-data/other-systemically-important-institutions-o-siis-> (accessed 6 June 2022).

¹⁵⁶² These publications are usually made by the central banks as they are, in most cases, the relevant authorities in the EU Member States.

¹⁵⁶³ See subparagraph 4.4.3.1 above.

¹⁵⁶⁴ Paragraph 16 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵⁶⁵ Paragraph 9 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵⁶⁶ In subparagraph 4.5.1.3

¹⁵⁶⁷ Paragraph 15 of the *EBA Guidelines on O-SIIs assessment*.

systemically important.¹⁵⁶⁸ The purpose of the systemic score disclosure requirements is to reinforce market discipline and transparency.¹⁵⁶⁹

There are five O-SIIs in the Netherlands, namely, *ING Bank N.V.* (ING), *Coöperatieve Rabobank U.A.* (Rabobank), *ABN AMRO Bank N.V.* (ABN), *Bank Nederlandse Gemeenten* (BNG) and *De Volksbank N.V.* (De Volksbank).¹⁵⁷⁰ Out of these five banks, DNB automatically identified the ING bank, Rabobank, ABN and BNG as O-SIIs with the indicator-based measurement approach without adjusting the systemic score threshold of 350 basis points.¹⁵⁷¹ ING bank, Rabobank, and ABN are the three largest banks, ranked most systemically significant relative to the size of the Dutch GDP, and have a larger combined market share in the Dutch financial banking sector than the other banks.¹⁵⁷² ING bank has also been identified as a G-SII, in addition to being an O-SII.¹⁵⁷³

¹⁵⁶⁸ Paragraph 10 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵⁶⁹ Paragraph 10 of the *EBA Guidelines on O-SIIs assessment*.

¹⁵⁷⁰ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021). The 2021 list of Dutch O-SIIs is the same as the list of O-SIIs that DNB originally identified in March 2016 after the development of the Dutch O-SII framework. Refer to DNB Notification template for Article 131 CRD – Other Systemically Important Institutions (O-SII) available at

https://www.esrb.europa.eu/pub/pdf/other/esrb.notification190116_osii_srb_nl.en.pdf?615bcceedb1005f26208177ab7a4ffb3 (accessed 3 April 2018).

¹⁵⁷¹ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

¹⁵⁷² *Ibid.*

¹⁵⁷³ The EU relevant national competent authorities identify banks as G-SIIs in accordance with Article 131(1) of the Capital Requirements Directive, and the methodology for assessing G-SIIs is consistent with that of the *Basel G-SIB framework*, as set out in Chapter Two. Further, financial institutions are grouped in Subcategories based on their systemic scores corresponding with the buckets of systemic importance. Subcategory 1 corresponds to a score of 130-229 basis points; Subcategory 2 encompasses score from 230 to 329 basis points; Subcategory 3 attracts scores from 330 to 429 basis points; Subcategory 4 contains scores ranging from 430 to 529 basis points and Subcategory 5 scores range from 530 to 629 basis points. For this, refer to Commission Delegated Regulation (EU) No 1222/2014 of 8 October 2014 supplementing Directive 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards for the specification of the methodology for the identification of global systemically important institutions and for the definition of subcategories of global systemically important institutions available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R1222> (accessed 1 February 2018). DNB identified ING Bank as a G-SII in accordance with Article 105c(1) of the Decree on Prudential Rules under the Financial Supervision Act, read in conjunction with Article 131 of the Capital Requirements Directive. Refer to DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Global Systemically Important Institutions (G-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20220322_GSII_NL~9d9be61fe4.en.pdf (accessed 30 November 2021); See further, DNB Notification template for Article 131 CRD – Global Systemically Important Institutions (G-SIIs) (March 2016)

Notably, DNB identified De Volksbank as an O-SII by applying the supervisory overlay approach that deploys the optional interconnectedness-indicator pertaining to payment made under the DGS, of up to a maximum of 100 000 euros, per depositor, per bank, when a bank fails.¹⁵⁷⁴ This means that De Volksbank is significantly interconnected within the Dutch domestic banking sector due to the cost in the sum of 100 000 euros per depositor, per bank, that it shares as part of the DGS with the other EU banks for depositor pay-out in the event of bank failure.¹⁵⁷⁵ De Volksbank holds substantial savings for its customers and plays a key role in the mortgage industry.¹⁵⁷⁶

It appears that there is no procedure in the *EBA Guidelines on O-SIIs assessment* and also no procedure in the Dutch O-SII framework in terms whereof banks are pre-notified of their identification as O-SIIs.¹⁵⁷⁷ The EBA considers it best practice that the relevant authorities should formally notify the identified banks through official communication, such as an email after the identification process is completed, that they will be subject to more stringent prudential regulation and enhanced supervision than other banks.¹⁵⁷⁸ Further, the EBA encourages that a reasonable time period must transpire between the time when a bank is identified as an O-SII and when the consequent O-SII buffer requirement is applied to an O-SII to ensure the smooth transition of the stringent prudential regulation of O-SIIs.¹⁵⁷⁹ The EBA also requires appropriate information sharing between the relevant home and host authorities where a bank with cross-border activity is identified as an O-SII.¹⁵⁸⁰

available at

https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20190227_gsii_nl~198d8dd6b4.en.pdf?49befd62ac0af025440b59075e042053 (accessed 26 September 2019).

¹⁵⁷⁴ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) July 2021 available at

https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

¹⁵⁷⁵ *Ibid.*

¹⁵⁷⁶ De Volksbank N-V. –Annual Report (2018) available at <https://www.dev Volksbank.nl/assets/files/de-Volksbank-N.V.-Annual-Report-2018-1.pdf> (accessed 14 November 2019).

¹⁵⁷⁷ Final Peer Review Report on the Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs) (November 2017) available at

<https://eba.europa.eu/sites/default/documents/files/documents/10180/1720738/02279f7d-7dc1-414a-9fa9-7376776e9288/Final%20Peer%20review%20Report%20on%20EBA%20O-SIIs%20Guidelines.pdf?retry=1> (accessed 3 April 2018).

¹⁵⁷⁸ *Ibid.*

¹⁵⁷⁹ *Ibid.*

¹⁵⁸⁰ *Ibid.*

4.5 The Dutch O-SII regulatory and supervisory framework

To facilitate a better understanding of the Dutch prudential regime, Table 4.5 below lists prudential requirements for Dutch O-SIIs discussed hereinafter.

Prudential requirements	EU	The Netherlands
CCvB	<ul style="list-style-type: none"> • 2.5% of RWAs 	<ul style="list-style-type: none"> • Consistent with the EU CCvB regime
CCyB	<ul style="list-style-type: none"> • Ranges between 0-2.5% of RWAs 	<ul style="list-style-type: none"> • Consistent with the EU CCyB regime
O-SII buffer	<ul style="list-style-type: none"> • The EBA framework currently recommends 0% of RWAs • The CRD IV provides for 3% of RWAs 	<ul style="list-style-type: none"> • 3% of RWAs
SyRB	<ul style="list-style-type: none"> • No regulatory limit 	<ul style="list-style-type: none"> • Abolished
Combined buffer requirement	<ul style="list-style-type: none"> • The aggregate of CCvB, CCyB, O-SII buffer or G-SII buffer and SyRB 	<ul style="list-style-type: none"> • The sum total of components of capital buffers that a bank must hold, namely; CCvB, CCyB and O-SII buffer
The supplementary leverage ratio	<ul style="list-style-type: none"> • 3% of a bank's total exposure 	<ul style="list-style-type: none"> • Consistent with the EU supplementary leverage ratio framework

The LCR and the NSFR	<ul style="list-style-type: none"> • 100% of the total LCR • 100% of the NSFR 	<ul style="list-style-type: none"> • Consistent with the EU LCR and the EU NSFR Ratio
Risk-management requirements	<ul style="list-style-type: none"> • O-SIIs are classified as Category 1 institutions and their risk-management requirements are enhanced 	<ul style="list-style-type: none"> • Consistent with the EU risk-management framework
The large exposure limit	<ul style="list-style-type: none"> • Not more than 25% of a bank's Tier 1 capital or Euro 150 million, whichever is higher 	Consistent with the EU large exposure limit framework
National flexibility measures	<ul style="list-style-type: none"> • They are outside of the CRD IV package prudential requirements 	<ul style="list-style-type: none"> • Include LTI ratio and LTV ratio
Recovery and resolution planning	<ul style="list-style-type: none"> • All banks including O-SIIs are subject to 	<ul style="list-style-type: none"> • Consistent with the EU recovery and resolution regime

	recovery and resolution regime	
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The national competent authorities of EU Members States are responsible for applying prudential standards, incorporating the components of the capital buffer regime, to banks including O-SIIs.¹⁵⁸¹ As indicated above,¹⁵⁸² the ECB is responsible for a “topping up power” in respect of these macro-prudential measures in line with the SSM Regulation.¹⁵⁸³ All the prudential standards that apply generally to all banks are also extended to O-SIIs. These prudential standards include the components of the capital buffer regime as well as other prudential requirements such as: the supplementary leverage ratio; liquidity requirements; risk-management requirements; the large exposure limit; and the national flexibility measures,¹⁵⁸⁴ whereas resolution planning is incorporated under the recovery and resolution regime.¹⁵⁸⁵

4.5.1 The capital buffer regime for Dutch O-SIIs

Article 128 of the CRD IV incorporates the capital buffer regime consisting of the CCvB; the CCyB; the O-SII buffer; the “global systemically important institution buffer” (G-SII buffer); and the SyRB. This provision largely implements the *Basel III capital framework* in the EU banking sector and financial system.¹⁵⁸⁶ The CCvB and the CCyB generally apply to all banks whereas the O-SII buffer specifically applies to O-SIIs

¹⁵⁸¹ Article 4 of the CRD IV; Ahtik M (2016) “Capital buffers for systemically important financial institutions in the European Union” 31 *Journal of International Banking Law and Regulation* 167 at 170 states that the NCAs apply the stringent prudential tools to O-SIIs, given that O-SIIs are domestic systemically important banks whose failure can threaten the entire financial system and domestic economy. The capital buffer regime is discussed in detail in subparagraph 4.5.1 below

¹⁵⁸² See subparagraph 4.2.3.

¹⁵⁸³ *A review of macro-prudential policy in the EU in 2016* (April 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/20170413_esrb_review_of_macroprudential_policy.en.pdf?9e1c0cbdefbc5fca7f120ef4475ae5da (accessed 23 February 2018).

¹⁵⁸⁴ These prudential requirements are respectively analysed below in subparagraphs 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5 and 4.5.6

¹⁵⁸⁵ Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2004/25/EC, 2007/36/EC, 2012/30/EU and 2013/36/EU and Regulations (EU) No 2093/2010 and (EU) No 648/2012, of the European Parliament and of the Council

available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0059&from=EN> (accessed 23 February 2018); The Dutch recovery and resolution regime is discussed below in subparagraph 4.5.7; paragraph 2.4 subparagraph 2.4.7, of Chapter Two, for the discussion of the resolution regimes.

¹⁵⁸⁶ The *Basel III capital framework* is discussed in paragraph 2.4 of Chapter Two.

only.¹⁵⁸⁷ The aggregate of the CCyB, the O-SII buffer or the G-SII buffer and the SyRB augment the CCvB to form a combined buffer.¹⁵⁸⁸ Article 160 of the CRD IV relates to transitional requirements for the capital buffers. To facilitate a smooth transition of the capital buffer regime, the CCvB, the CCyB, the O-SII buffer, the G-SII buffer and the SyRB were phased-in from January 2016 to December 2018 and commenced applying with full effect from January 2019.¹⁵⁸⁹

The Netherlands implemented Article 128 of the CRD IV regarding the capital buffer regime in Article 3:62a (1) of the Financial Supervision Act, which was phased-in from January 2016 to December 2018, consistent with the CRD IV.¹⁵⁹⁰ In terms of Article 3:62a (2) of the Financial Supervision Act, the minimum required size of the capital buffer plus the additional surcharges pertain to the following aspects:

- a. risks arising from a credit cycle;
- b. the risk that a financial institution poses to the stability of the financial system;
- c. risks arising from non-cyclical long-term systemic risks or non-cyclical macro-prudential long-term risks.

Given that Article 3:62a of the Financial Supervision Act is an enabling provision, its further details are specified in Article 105 of *the Decree on Prudential Rules under the Financial Supervision Act* regarding the required nature, size and composition of the capital buffer. In terms of Article 105(1) the required size of the capital buffer is the sum of the following components, if applicable, and it is expressed as a percentage of the total RWAs¹⁵⁹¹ as calculated in accordance with Article 92(3) of the CRR:¹⁵⁹²

- a. a CCvB, which is the minimum required amount of the capital buffer;¹⁵⁹³

¹⁵⁸⁷ See subparagraphs 4.5.1.1, 4.5.1.2, and 4.5.1.3 below for the discussion of the CCvB, the CCyB and the O-SII buffer, respectively.

¹⁵⁸⁸ See subparagraphs 4.5.1.4 and 4.5.1.5 below for the discussion of the SyRB and a combined buffer requirement. The G-SII buffer is composed of CET1 capital which a G-SII must hold in accordance with Article 131(4) of the CRD IV. As stated, the G-SII framework is outside the scope of this study.

¹⁵⁸⁹ The Dutch capital buffer regime transitional period is consistent with Article 160 of the CRD IV.

¹⁵⁹⁰ Article 3:276 of the Financial Supervision Act stipulates that DNB consolidated supervision extends to Article 3:62 regarding the application of capital buffer regime while subsidiaries of a parent bank are subject to sub-consolidated supervision in terms of Article 3:277a (1) thereof.

¹⁵⁹¹ See paragraph 2.2, subparagraph 2.2.4, of Chapter Two, on the BCBS's definition of RWAs.

¹⁵⁹² See subparagraph 4.5.1.1 below.

¹⁵⁹³ See subparagraph 4.5.1.1 below for the discussion of the Dutch CCvB regime. The Basel CCvB requirement is discussed in paragraph 2.4, subparagraph 2.4.1, of Chapter Two.

- b. a CCyB relating to risks arising from the credit cycle;¹⁵⁹⁴
- c. a system relevance buffer relating to the risk that the financial institution poses for the stability of the financial system, namely an O-SII buffer;¹⁵⁹⁵
- d. a SyRB that is calibrated to risks arising from non-cyclical long-term systemic risks or non-cyclical macro-prudential long-term risks.¹⁵⁹⁶

4.5.1.1 The capital conservation buffer

Article 129 of the CRD IV requires a bank to maintain, on an individual and consolidated basis as applicable, a CCvB being the own funds of a bank (composed of CET1 capital equal to 2.5 per cent of RWAs) in addition to the minimum regulatory capital it has to hold, as imposed by Article 92 of the CRR.¹⁵⁹⁷ The purpose thereof is to serve as a buffer in times of financial market stress. Breach of the CCvB results in restrictions in capital distributions of a bank¹⁵⁹⁸ and subjects the bank to the Maximum Distributable Amount (MDA) restriction, as explained in more detail later.¹⁵⁹⁹ The CRD IV augments the CCvB with the CCyB and the O-SII-buffer or, where applicable with

¹⁵⁹⁴ See subparagraph 4.5.1.2 below for the discussion of the Dutch CCyB regime. The Basel CCyB regime is discussed in paragraph 2.4, subparagraph 2.4.2, of Chapter Two.

¹⁵⁹⁵ See subparagraph 4.5.1.3 below for the discussion of the Dutch O-SII buffer regime. The Basel D-SIB regime, which is the equivalent of the O-SIB buffer regime, is examined in paragraph 2.2, subparagraph 2.2.2, and paragraph 2.4, subparagraph 2.4.3, of Chapter Two.

¹⁵⁹⁶ See subparagraph 4.5.1.4 below for the discussion of the Dutch SyRB regime.

¹⁵⁹⁷ Article 92(1) of the CRR provides that institutions shall maintain, at all times, own funds requirements composed of a CET1 capital ratio of 4.5 per cent, a Tier 1 capital ratio of 6 per cent and a total capital ratio of 8 per cent. Article 92(2)(a) states that the CET1 capital ratio is CET1 capital of an institution expressed as a percentage of the total risk exposure amount. The total risk exposure amount is calculated in terms of Article 92(3) of the CRR. Article 50 of the CRR states that the CET1 capital of an institution shall consist of CET1 items specified in Article 26 thereof such as retained earnings and other reserves. Article 92(2)(b) thereof provides that the Tier 1 capital ratio is the Tier 1 capital of an institution expressed as a percentage of the total risk exposure amount. Article 25 thereof states that the Tier 1 capital consists of CET1 capital and AT1 capital of an institution. Article 92(2)(c) thereof provides that the total capital ratio is the own funds of an institution expressed as a percentage of the total risk exposure amount. Article 72 thereof states that the own funds of an institution shall consist of the sum of its Tier 1 capital and tier 2 capital. Article 93 thereof requires an institution to hold the own funds that is not below the required amount of the capital on a going concern. Own funds requirements including some of the prudential standards listed in the next paragraphs are reported in Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0680&from=EN> (accessed 2 February 2018).

¹⁵⁹⁸ Article 129(6) of the CRD IV, as amended by Article 1(46) of the CRD V. The rules of the BCBS regarding the constraints of capital distribution when a bank breaches the CCvB are explained in paragraph 2.4, subparagraph 2.4.1 of Chapter Two.

¹⁵⁹⁹ The concept of a Maximum Distributable Amount is explained in subparagraph 4.5.1.5 below.

the G-SII buffer, or with the SyRB, to form the “combined buffer”.¹⁶⁰⁰ The Dutch CCvB regime is wholly consistent with Article 129 of the CRD IV.¹⁶⁰¹

4.5.1.2 The countercyclical capital buffer

Article 130 of the CRD IV incorporates the CCyB regime, which augments the CCvB.¹⁶⁰² The CCyB rate ranges between zero and 2.5 per cent comprising CET1 capital to the RWAs of a bank.¹⁶⁰³ The CCyB rate consists of the weighted average of the CCyB rates that apply in the jurisdictions where the relevant credit exposures of a bank are located.¹⁶⁰⁴ Just like the breach of the CCvB, violation of the CCyB requirement subjects a bank to constraints in capital distributions and similarly invokes the application of the MDA.¹⁶⁰⁵

In line with the ESRB macro-prudential framework,¹⁶⁰⁶ the CCyB is part of the macro-prudential toolkit deployed to curtail the cyclical systemic risk to mitigate excessive credit growth and high leverage in the EU financial system.¹⁶⁰⁷ Because of the time-varying dimension of cyclical systemic risk, the CCyB is activated during a period of undue credit growth associated with a build-up of risk and it is deactivated during normal times.¹⁶⁰⁸ As pointed out by Amorello, the CCyB is a macro-prudential tool introduced to effectively counteract the procyclicality of the EU financial markets.¹⁶⁰⁹

¹⁶⁰⁰ The combined buffer is discussed below in subparagraph 4.5.1.5.

¹⁶⁰¹ Article 105a of Decree on Prudential Rules under the Financial Supervision Act.

¹⁶⁰² Article 130(5) of the CRD IV, as amended by Article 1(46) of the CRD V; The CCvB is discussed in subparagraph 4.5.1.1 above.

¹⁶⁰³ Article 130(5) of the CRD IV; Article 136(4) of the CRD IV.

¹⁶⁰⁴ Article 140 of the CRD IV.

¹⁶⁰⁵ Article 130(6) of the CRD IV, as amended by Article 1(46) of the CRD V; Maximum Distributable Amount is described below in subparagraph 4.5.1.5.

¹⁶⁰⁶ See paragraph 4.2, subparagraph 4.2.1 above, for the explanation of the ESRB macro-prudential instruments, which amongst others, incorporate the CCyB.

¹⁶⁰⁷ The ESRB notes that the CCyB is one of the most frequently deployed macro-prudential tools to curb the undue credit expansion in the EU. Refer to *A review of macroprudential policy in the EU in 2015* (May 2016) available at

https://www.esrb.europa.eu/pub/pdf/reports/20160513_esrb_review_of_macroprudential_policy.en.pdf?2ab671c218ff09f875512bae97b817c5 (accessed 25 February 2018).

¹⁶⁰⁸ See paragraph 4.2, subparagraph 4.2.1 above; The time-varying dimension denotes a build-up of systemic risk overtime stemming from factors such as credit expansion and high leverage resulting in amplification of systemic shocks in a financial system. For this, see Smaga P “The concept of systemic risk” Systemic Risk Centre Special Paper August 2014 available at <http://eprints.lse.ac.uk/61214/1/sp-5.pdf> (accessed 13 November 2019); Schwarz SL (2008) “Systemic risk” 97 *Georgetown Law Journal* 193.

¹⁶⁰⁹ Amorello L (2016) “Europe goes ‘countercyclical’: A legal assessment of the new countercyclical dimension of the CRR/CRD IV” 17 *European Business Organisation Law Review* 137 at 146. See further, Claessens S *et al* “The regulatory responses to the global financial crisis: Some uncomfortable questions” IMF Working Paper (March 2014) available at

Each national competent authority in the respective EU Member States is responsible for assessing the intensity of cyclical systemic risk and the appropriateness of the quarterly CCyB rate for its Member State and the setting or adjusting of the CCyB rate if it becomes necessary.¹⁶¹⁰ Within the SSM area, the national competent authorities must set the rate of the CCyB together with the ECB, which, as pointed out above, is the competent authority for the exclusive purpose of “topping up” higher capital standards.¹⁶¹¹ The CCyB rate is fixed in accordance with the principle of “guided discretion” that entails a rules-based approach and principles that are designed to guide the discretion of national competent authorities in setting the appropriate applicable buffer.¹⁶¹² When setting the CCyB rate, the national competent authorities must take into consideration the principles issued by the ESRB that provide guidance on the appropriate exercise of the discretion, the general guidance on the buffer guide,¹⁶¹³ and the relevant variables indicating excessive credit expansion in a financial system, in particular, the credit-to-GDP ratio.¹⁶¹⁴

If the national competent authorities sets a CCyB rate that exceeds zero per cent or increases the current applicable rate, the rate shall apply twelve months after the date on which the increased buffer setting is announced.¹⁶¹⁵ The national competent authorities may set the CCyB in excess of 2.5 per cent in instances where any of the above-specified factors informing the policy decision for the setting of the buffer justify the application of the increased buffer rate.¹⁶¹⁶ When deciding to reduce the applicable rate of the CCyB, the national competent authorities are required to announce the indicative period during which no increased buffer setting may be expected.¹⁶¹⁷

<https://www.imf.org/external/pubs/ft/wp/2014/wp1446.pdf> (accessed 23 March 2018).

¹⁶¹⁰ Article 136(1) of the CRD IV, as amended by Article 1(50)(a) of the CRD V; In terms of Article 128(7) thereof, countercyclical buffer rate means the rate that an institution must apply in order to calculate the specific countercyclical capital buffer.

¹⁶¹¹ See paragraph 4.2, subparagraph 4.2.3 above, on the description of the limited macro-prudential role of the ECB.

¹⁶¹² Article 135 of the CRD IV; Recommendation European Systemic Risk Board of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1) available at https://www.esrb.europa.eu/pub/pdf/recommendations/2014/140630_ESRB_Recommendation.en.pdf?83075f19bd8f21d8a3b8e6afe7bea49b (accessed 23 March 2018).

¹⁶¹³ Article 128(9) of the CRD IV, read with Articles 135(1) and 136(2) thereof, provides that a buffer guide means a benchmark buffer rate that serves as a guidance of the exercise of the NCAs in the quarterly setting of the CCyB rate.

¹⁶¹⁴ Articles 135(1), 136(2), (3) and (4) of the CRD IV.

¹⁶¹⁵ Article 136(5) of the CRD IV.

¹⁶¹⁶ Article 136(4) of the CRD IV.

¹⁶¹⁷ Article 136(6) of the CRD IV.

The national competent authorities are further required to duly notify the ESRB of the quarterly setting of the CCyB.¹⁶¹⁸ An announcement for the setting of the CCyB rate occurs by way of publication on the website of national competent authorities.¹⁶¹⁹ DNB is thus responsible for setting the CCyB rate quarterly for credit exposures located in the Netherlands in accordance with Article 136 of the CRD IV¹⁶²⁰ and accordingly announces the applicable rate of the CCyB by publishing such rate on its website.¹⁶²¹ As of March 2020, the CCyB rate in the Netherlands remained at zero per cent due to subdued credit growth in the Dutch financial system.¹⁶²² This CCyB rate remained unchanged by March 2021.¹⁶²³ However, in February 2022, DNB released a policy document titled *Analytical framework for setting the countercyclical capital buffer in the Netherlands*.¹⁶²⁴ In terms of this framework, DNB will set a two per cent CCyB to RWAs of banks during a standard risk environment, and this buffer will be built up at the rate of one per cent per year to reach the level of two per cent after two years. The framework defines a standard risk environment as the period during which the cyclical systems risks are neither elevated nor decreased. DNB is of the view there is

¹⁶¹⁸ Article 136(7) of the CRD IV.

¹⁶¹⁹ Article 136(7) of the CRD IV, as amended by Article 1(50)(b) of the CRD V; As per Article 1(50)(b) of the CRD V, the announcement contains the following information; the applicable countercyclical buffer rate; the relevant credit-to-GDP ratio and its deviation from the long-term trend; the buffer guide; the justification for the buffer rate; the date from which institutions shall apply the increased buffer rate, and where it is increased, the justification in instances where the increased buffer rate is applied within a period that is less than twelve months; and the indicative period during which no increase in the buffer rate is expected if it is decreased. The NCAs shall notify the ESRB of any changes regarding the countercyclical buffer rates and the ESRB shall publish such information on its website.

¹⁶¹⁹ Article 136(g) of the CRD IV.

¹⁶²⁰ Article 105b(2) of the Decree on Prudential Rules under the Financial Supervision Act; Article 105c(1)(b) of the Decree on Prudential Rules under the Financial Supervision Act, as amended by Article VII of Chapter 10A of the Amendment Decree on Financial Markets.

¹⁶²¹ Article 105b(4) of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁶²² DNB leaves countercyclical buffer unchanged at 0% - March 2020 available at <https://www.dnb.nl/en/sector-news/dnb-leaves-countercyclical-buffer-unchanged-at-0-march-2020/> (accessed 25 May 2020). This decision remained unchanged from the decision that DNB made in December 2019 when it decided to leave the CCyB at zero per cent, which was also not altered from that of the previous quarter, because the credit to GDP gap still demonstrated subdued lending in the financial system as well as slowed credit growth in the real estate industry and other sectors. For this, see DNB leaves countercyclical buffer unchanged at 0 % December 2019 available at

<https://www.dnb.nl/en/sector-news/dnb-leaves-countercyclical-buffer-unchanged-at-0-december-2019/> (accessed 20 September 2019).

¹⁶²³ DNB leaves countercyclical buffer unchanged at 0% - March 2021 available at <https://www.dnb.nl/en/actueel/news-sector/sector-news-2021/dnb-leaves-countercyclical-buffer-unchanged-at-0-march-2021/> (accessed 15 August 2021).

¹⁶²⁴ Analytical framework for setting the countercyclical capital buffer in the Netherlands (February 2022) available at <https://www.dnb.nl/media/gd1m1mps/analytical-framework-for-setting-the-countercyclical-capital-buffer-in-the-netherlands.pdf> (accessed 29 March 2022).

uncertainty in evaluating cyclical systemic risks in times of a standard risk environment given the unpredictability of adverse developments in a financial system that may negatively affect the risk profile of banks, and thus, its opinion is that a positive CCyB will be appropriate. Subsequent to the publication of this framework, DNB increased the CCyB rate from zero per cent to 1 per cent in May 2022 and this measure will start applying from May 2023.¹⁶²⁵

Article 138 of the CRD IV stipulates that in cases where a bank has a credit exposure to a third country (which is a non-EU country) that has not enabled the application of the CCyB, or where the fixed buffer cannot sufficiently address the associated credit risk, the ESRB may issue a recommendation to the relevant national competent authorities of Member States on the appropriate CCyB rate for exposures to that country.¹⁶²⁶ This means for a Dutch bank that has a credit exposure to a third country that has not activated the CCyB regime or where the set buffer is insufficient to address those risks, DNB can set the appropriate CCyB for exposures to that country.

Further, an automatic reciprocation authorises the national competent authorities to impose the CCyB on domestically authorised institutions in the third country that has not activated it, irrespective of whether the ESRB issued a recommendation or not.¹⁶²⁷ Domestically authorised institutions are institutions that are licensed in an EU Member State for which a particular designated authority is responsible for setting the CCyB.¹⁶²⁸ The EU Member States may reciprocate the CCyB rate imposed on their domestically authorised institutions that is in excess of 2.5 per cent of the RWAs of a given domestically authorised institution.¹⁶²⁹ If the CCyB has already been activated by the third country, the national competent authorities may increase the rate upon consideration that unwarranted credit growth may not be satisfactorily addressed, and the set buffer may not be lower than the level that has been set by the third country

¹⁶²⁵ DNB increases countercyclical capital buffer to 1% - May 2022 available at <https://www.dnb.nl/en/sector-news/2022/dnb-increases-countercyclical-capital-buffer-to-1-may-2022/> (accessed 22 August 2022).

¹⁶²⁶ Article 138 of the CRD IV; Recommendation of the European Systemic Risk Board of 11 December 2015 on recognising and setting countercyclical buffer rates for exposures to third (ESRB/2015/1) available at https://www.esrb.europa.eu/pub/pdf/recommendations/ESRB_2015_1.en.pdf (accessed 23 March 2018).

¹⁶²⁷ Article 139(1) and (2) of the CRD IV.

¹⁶²⁸ Article 128(8) of the CRD IV.

¹⁶²⁹ Article 137 of the CRD IV.

unless it is in excess of 2.5 per cent of RWAs.¹⁶³⁰ Accordingly, a Dutch domestically authorised institution located in another Member State or third country will be subject to the CCyB set by the national competent authority of the relevant Member State or third country provided that DNB has not set a higher buffer rate.¹⁶³¹ In other words, if DNB decides to set a higher CCyB rate, it will override the rate that is set by the host authorities.

4.5.1.3 The O-SII buffer

As indicated above,¹⁶³² the identification of O-SIIs in accordance with the *EBA Guidelines on O-SIIs assessment* is intended to facilitate the application of the O-SII buffer to O-SIIs by national competent authorities for purposes of giving effect to Article 131(5) of the CRD IV. In alignment with the *EBA Guidelines on O-SIIs assessment*,¹⁶³³ the O-SII buffer is a prudential tool that implements the Higher Loss Absorbency (HLA) requirement of the *Basel D-SIB framework* by raising the loss absorbency capacity of O-SIIs.¹⁶³⁴ Its aim is to enhance the resilience of O-SIIs thereby decreasing the systemic impact of perverse incentives and moral hazard of TBTF EU institutions.¹⁶³⁵

Initially, Article 130(5) of the CRD IV gave the national competent authorities the discretion to subject O-SIIs to the application of an O-SII buffer of up to 2 per cent of RWAs comprising of the CET1 capital. Article 130(5) of the CRD IV, as amended by Article 1 of the CRD V, subsequently lifted the O-SII buffer cap to 3 per cent of RWAs.¹⁶³⁶ The authorisation of the European Commission is required before

¹⁶³⁰ Article 139(3) of the CRD IV seeks to achieve coherence in the setting of the CCyB for the third countries, and the ESRB can issue recommendations in that regard. In terms of Article 139(4) thereof, where the CCyB for third countries is increased, the NCAs shall set out the effective date which shall not be less than twelve months, unless the grounds are established for a shorter deadline. As per Article 139(5) thereof, the NCAs shall publish the buffer rate for the third country on the website including the countries to which it applies, as well as the justification for its application.

¹⁶³¹ Article 105b(3) of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁶³² See paragraph 4.4.

¹⁶³³ *Ibid.*

¹⁶³⁴ See paragraph 2.3, subparagraph 2.3.1, of Chapter Two for the analysis of the Higher Loss Absorbency requirement of the BCBS.

¹⁶³⁵ See paragraph 4.2, subparagraph 4.2.1 above, for the discussion of the macroprudential instrument of the ESRB targeting the heightened systemic risk posed by O-SIIs.

¹⁶³⁶ The *IWG Expert Group on the use of structural macroprudential instruments in the EU* recommended that the 2 per cent cap of the O-SII buffer should be raised to strengthen its loss absorbing capacity in increasing the resilience of O-SIIs. For this, see Final report on the use of structural macroprudential instruments in the EU by the *IWG Expert Group on the use of structural macroprudential instruments in the EU* (December 2017) available at

imposition of an O-SII buffer that is higher than 3 per cent of an O-SII's RWAs.¹⁶³⁷ The O-SII buffer size is supposed to be maintained at all times, and O-SIIs are prohibited from using the O-SII buffer to simultaneously meet minimum regulatory capital, or capital buffers or any capital requirement that is in excess of minimum regulatory capital.¹⁶³⁸ The size of the O-SII buffer is capped to ensure the consistent application of the O-SII buffer regime across EU Member States as well as the prevention of ring-fencing of banks in order to protect the internal market.¹⁶³⁹ *The view of the IWG Expert Group on the use of structural macroprudential instruments in the EU* is that all other things being equal, setting the O-SII buffer at the zero per cent should be avoided because each O-SII must account for its systemic importance.¹⁶⁴⁰

Article 131(5) of the CRD IV outlines three levels of consolidation for the unit of analysis of the application of the O-SII buffer to O-SIIs, namely: the consolidated, sub-consolidated and individual basis, as applicable, taking into account the criteria for the identification of a given O-SII.¹⁶⁴¹ This provision is, however, subject to many interpretations thereby giving rise to different implementations by the national competent authorities in the various EU Member States. The first interpretation implies that the scope of application of the O-SII buffer depends upon the level at which an O-SII has been identified, meaning that only one of the three consolidation levels can be applicable at a time.¹⁶⁴² Another version simultaneously subjects O-SIIs to the application of the O-SII buffer on more than one level of consolidation.¹⁶⁴³

https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments_en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶³⁷ Article 1 (47)(e)5a of the CRD V.

¹⁶³⁸ Article 131(13) of the CRD IV.

¹⁶³⁹ Ring-fencing is defined in terms of the functions that it seeks to perform such as protecting a bank from risks that are associated with bankruptcy and excluding its liability by permitting it to operate as a stand-alone entity even when its affiliated entities fail or by separating its assets from risky activities. For this, see Shwarcz SL (2013) "Ring-fencing" 87 *Southern California Law Review* 69 at 72-73.

¹⁶⁴⁰ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments_en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶⁴¹ "Consolidated basis" refers to the application of the requirements of the CRR to the parent institution including its subsidiaries as a whole whereas "sub-consolidated basis" means the application thereof on the consolidated basis of a subsidiary of the parent institution. For these definitions, see Article 4 (47), (48) and (49) of the CRR. "Individual basis" means the application of the requirements of the CRR to an institution as a single entity. For this, see Article 6(1) of the CRR.

¹⁶⁴² *Ibid.*

¹⁶⁴³ *Ibid.*

For purposes of addressing the ambiguity relating to the level of application of the O-SII buffer, the EBA is of the view that the imposition of the O-SII buffer should be at the highest level of consolidation incorporating the entire banking group including subsidiaries, as a starting point, which corresponds to the initial identification of an O-SII.¹⁶⁴⁴ Thereafter, the sub-consolidated or individual application of the O-SII buffer to an O-SII may be appropriate in cases reflecting the specificities of different banking sectors.¹⁶⁴⁵ In the view of *the IWG Expert Group on the use of structural macroprudential instruments in the EU* some instances meriting the concurrent application of the O-SII buffer at the different levels of consolidation may arise where a subsidiary within a banking group is so critical to a domestic economy that it renders the O-SII buffer at the consolidated position of the parent bank insufficient to comprehensively cover the systemic footprint of that subsidiary on a stand-alone basis.¹⁶⁴⁶ In such a case, the O-SII buffer will apply both to a banking group and a subsidiary to effectively address their systemic risks.¹⁶⁴⁷

The CRD IV provides that where the O-SII is a subsidiary of a G-SII or an O-SII that is subject to the application of the O-SII buffer on a consolidated basis, the O-SII buffer that will apply on an individual or sub-consolidated basis for the O-SII shall not exceed the lower of the sum of the higher of the G-SII or the O-SII buffer rate applicable to the group on the consolidated basis and 1 per cent of the total risk exposure amount calculated in accordance with Article 92(3) of the CRR.¹⁶⁴⁸ Further, the applicable O-SII buffer cannot exceed the lower of 3 per cent of the RWAs as calculated in accordance with Article 92(3) of the CRR or cannot exceed a rate that is higher than 3 per cent of RWAs that the European Commission has authorised to be applied to the group on a consolidated basis.¹⁶⁴⁹

The IWG Expert Group on the use of structural macroprudential instruments in the EU indicates that the rationale for the regulatory cap of the O-SII buffer rate for the

¹⁶⁴⁴ Part 2 of the *EBA Guidelines on O-SIIs assessment*.

¹⁶⁴⁵ *Ibid.*

¹⁶⁴⁶ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶⁴⁷ *Ibid.*

¹⁶⁴⁸ Article 131 (8) of the CRD IV, as amended by Article 1(47)(g)(a) of the CRD V.

¹⁶⁴⁹ Article 131(8) of the CRD IV, as amended by Article 1 (47)(g)(b) of the CRD V.

subsidiary of a G-SII or an O-SII (which is subject to the consolidated application of the O-SII buffer) is based on the presumption that the consolidated application of the O-SII buffer at the banking group level adequately captures the systemic importance of its subsidiaries that are identified as O-SIIs.¹⁶⁵⁰ However, this presumption is rebutted by the argument that host supervisors assess the systemic relevance of a subsidiary specifically in relation to the domestic economy and financial system of the host country.¹⁶⁵¹ This approach sharply contrasts with the systemic assessment of parent banking groups by home supervisors that focuses on the systemic impact of a failure of a bank on a domestic financial system of the home country.¹⁶⁵² Consequently, Ahtik observes that the O-SII buffer cap for subsidiaries would practically subject O-SIIs with a comparable systemic profile within the same jurisdiction to different O-SII buffers.¹⁶⁵³ On account of this discrepancy, *the IWG Expert Group on the use of structural macroprudential instruments in the EU* is of the view that the purpose of the O-SII buffer, being the prevention or mitigation of systemic risk posed by the O-SIIs may, however, be unwittingly defeated rendering the instrument ineffective in addressing systemic risk.¹⁶⁵⁴ The point is that each O-SII must be subject to the O-SII buffer that corresponds to its systemic importance so that its risks may be adequately addressed.

The CRD IV lays down the principle that the imposition of the O-SII buffer must not entail disproportionate adverse effects on the whole or parts of the financial system of Member States and the Union and thereby create an obstacle to the functioning of the internal market.¹⁶⁵⁵ The national competent authorities must review this buffer at least annually.¹⁶⁵⁶ Currently, neither the CRD IV nor the *EBA Guidelines on O-SIIs assessment* provide guidance for the calibration of the O-SII buffer to determine a

¹⁶⁵⁰ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶⁵¹ *Ibid.*

¹⁶⁵² *Ibid.*

¹⁶⁵³ Ahtik M (2016:171).

¹⁶⁵⁴ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶⁵⁵ Article 131(6)(a) of the CRD IV.

¹⁶⁵⁶ Article 131(6)(b) of the CRD IV.

proportionate buffer rate corresponding to the risk profile of a particular O-SII, meaning that the approaches are non-harmonised across the EU Member States.¹⁶⁵⁷ The CRD V envisaged bridging this gap by requiring the EBA to make a recommendation to the European Commission by 31 December 2020, after having consulted the ESRB, on the appropriate methodology for the design and calibration of the O-SII buffer rates.¹⁶⁵⁸ In December 2020, the EBA issued a Report recommending the establishment of an EU-wide floor methodology entailing four principles, comprising: a floor for the capital buffer set by the relevant authorities; the adoption of the bucketing approach; calculation of scores of individual O-SIIs based on the *EBA Guidelines on O-SIIs assessment* and their allocation to four buckets; the application of a non-zero calibration for the first floor.¹⁶⁵⁹

Ahtik argues that the legal lacunae in the different approaches of the calibration of the O-SII buffer across the Union may actually present an obstacle to the smooth functioning of the internal market, contrary to the letter and spirit of Article 131(6) of the CRD IV.¹⁶⁶⁰ Consequently, host authorities may be inclined to set tough O-SII buffer rates for subsidiaries, while home authorities may overly lower the O-SII buffer rates to enhance the competitive advantage of local banks.¹⁶⁶¹ As indicated in Chapter Two, the BCBS foresaw this challenge and sought to resolve it by recommending a higher standard of proof for results that produce different loss absorbency capacity relative to the systemic scores of a particular bank.¹⁶⁶²

Before the setting or adjusting of the O-SII buffer, the national competent authorities or the national designated authorities must send a notification to the ESRB, one month before the publication of the decision setting the O-SII buffer rate at 3 per cent of an

¹⁶⁵⁷ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶⁵⁸ Article 1 of the CRD V.

¹⁶⁵⁹ The EBA Report on the appropriate methodology to calibrate O-SII buffer rates (December 2020) available at https://www.eba.europa.eu/sites/default/files/document_library/Publications/Reports/2020/961796/EBA%20report%20on%20calibration%20of%20OSII%20buffer%20rates.pdf?retry=1 (accessed 3 June 2021).

¹⁶⁶⁰ Ahtik M (2016:170).

¹⁶⁶¹ *Ibid.*

¹⁶⁶² See paragraph 2.2, subparagraph 2.2.2, of Chapter Two.

O-SII's RWAs.¹⁶⁶³ They must also notify the ESRB three months before the publication of the decision setting an O-SII buffer rate that is higher than 3 per cent of an O-SII's RWAs.¹⁶⁶⁴ The ESRB must then swiftly forward such notifications to the European Commission, the EBA and the national competent authorities or the national designated authorities concerned.¹⁶⁶⁵ The notification should, in particular, justify the extent of the effectiveness and proportionality of the O-SII buffer in mitigating systemic risk; provide an assessment of the likely positive or negative impact of the O-SII buffer on the internal market based on the information available to Member States; and publish the O-SII buffer rate of the Member State.¹⁶⁶⁶

The aspect of the effectiveness of the O-SII buffer is directly linked to the statutory purpose of the O-SII buffer relative to other macro-prudential instruments, which, as indicated above, is to address the misaligned incentives and moral hazard issues to internalise negative externalities created by O-SIIs in order to minimise their probability of default.¹⁶⁶⁷ The proportionality principle is aligned with Principle 9 of the *Basel D-SIB framework* that pursues one of the fundamental principles of the *Basel D-SIB framework*, namely, that the D-SIB buffer should be commensurate with the systemic profile of an individual D-SIB.¹⁶⁶⁸ What this means for O-SIIs is that an O-SII buffer size that is suitable for raising the loss absorbency of an O-SII to the required levels should match the degree of each of individual O-SII's systemic importance (systemic score). Therefore, the higher the systemic footprint, the stricter the buffer level, and vice versa. Notably, as pointed out by *the IWG Expert Group on the use of structural macroprudential instruments in the EU*, the O-SII buffer cap may be inconsistent with the proportionality principle insofar as a cap could not be exceeded even in cases that

¹⁶⁶³ Article 131(7) of the CRD IV, as amended by Article 1 (47)(f)(7) of the CRD V.

¹⁶⁶⁴ *Ibid.*

¹⁶⁶⁵ *Ibid.*

¹⁶⁶⁶ Article 131(7) of the CRD IV.

¹⁶⁶⁷ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶⁶⁸ This is consistent with Principle 9 of the *Basel D-SIB framework* regarding the application of a D-SIB buffer that corresponds to a bank's systemic profile, as discussed in paragraph 2.3, subparagraph 2.3.2, of Chapter Two.

could justify the application of a higher buffer that corresponds to the elevated systemic footprint of a bank.¹⁶⁶⁹

The notification regarding the application of the O-SII buffer further entails an assessment of the likely positive or negative impact of the O-SII buffer on the internal market based on information that is available to EU Member States.¹⁶⁷⁰ Given that the implementation of macro-prudential measures is a relatively recent innovation, there is a scarcity of data regarding the impact of the O-SII buffer.¹⁶⁷¹

The rules relating to the accumulation of capital buffers are invoked when an O-SII is subject to the simultaneous application of the buffers to curb the excessive application of capital requirements.¹⁶⁷² Where an O-SII is subject to the consolidated application of both the O-SII buffer or the G-SII buffer, the higher of the two buffers applies.¹⁶⁷³ This means that the O-SII buffer is not added to the G-SII buffer where an O-SII is subject to the requirement of both buffers.¹⁶⁷⁴ The rationale is that the O-SII buffer and the G-SII buffer address the same risks though the scale of risks differs based on the domestic and global landscape.¹⁶⁷⁵

Article 105c(1)(c) of *the Decree on Prudential Rules under the Financial Supervision Act* read in conjunction with Article 3:62a (2) of the Financial Supervision Act, provides that the Dutch O-SIIs must hold a system relevance buffer. In other words, the O-SII buffer is called a “system relevance buffer” in the Netherlands, as it applies to banks

¹⁶⁶⁹ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁶⁷⁰ Article 131(7)(b) of the CRD IV.

¹⁶⁷¹ *A review of macroprudential policy in 2015* (May 2016) available at https://www.esrb.europa.eu/pub/pdf/reports/20160513_esrb_review_of_macroprudential_policy.en.pdf?2ab671c218ff09f875512bae97b817c5 (accessed 25 February 2018).

¹⁶⁷² Article 131(14), (15), (16) and (17) of the CRD IV.

¹⁶⁷³ Article 131(14)(a) of the CRD IV; Article 133(4) of the CRD IV; This provision is further relevant where a Dutch O-SII is also designated as a G-SII. In practice, DNB assesses the systemic relevance of O-SIIs in parallel to that of G-SIIs, and the systemic relevance at the national level is assessed differently from the systemic relevance at the global financial level.

¹⁶⁷⁴ *Ibid.*

¹⁶⁷⁵ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

that have been identified as O-SIIs in the Dutch domestic banking sector.¹⁶⁷⁶ In relation to banks, the O-SII buffer addresses the risks that a bank poses to the stability of the Dutch financial system.¹⁶⁷⁷ DNB justifies the deployment of the O-SII buffer for Dutch O-SII banks on the basis that the cost of failure of an O-SII bank would be unacceptably higher than that of a non-systemic bank.¹⁶⁷⁸ Thus, DNB deploys the O-SII buffer for Dutch O-SIIs to increase their loss absorbency and reduce their heightened systemic risks relative to non-systemic banks in order to minimise their probability of default.¹⁶⁷⁹

On a practical level, DNB determines, on a consolidated basis, the required size of the O-SII buffer that is applicable to O-SIIs.¹⁶⁸⁰ Initially, the applicable O-SII buffer amounted to 1 per cent, 1.5 per cent, and 2 per cent of the RWAs, respectively, depending on the systemic footprint of a specific O-SII.¹⁶⁸¹ It was noted above that the CRD V subsequently revised the CRD IV to subject an O-SII to the O-SII buffer rate of up to 3 per cent of RWAs. DNB applies the O-SII buffer of 2.5 per cent, 2 per cent, 1.5 per cent of RWAs to ING, Rabobank, and ABN, respectively.¹⁶⁸² BNG and De Volksbank are each subject to 1 per cent of the O-SII buffer on account of their decreased systemic relevance.¹⁶⁸³

DNB determines the appropriate level of the O-SII buffer based on an evaluation of the degree of systemic risk posed by an individual O-SII, which is translated to its established systemic footprint. Therefore, the decision pertaining to the applicable size of the O-SII buffer is supported by grounds upon which such determination is made. Thus, O-SIIs with a higher share of systemic presence will hold larger O-SII buffers.¹⁶⁸⁴

¹⁶⁷⁶ Article 105 (1) (c) of the Decree on Prudential Rules under the Financial Supervision Act, as amended by Article VII of Chapter 10A of the Amendment Decree on Financial Markets.

¹⁶⁷⁷ *Ibid.*

¹⁶⁷⁸ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) July 2021 available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

¹⁶⁷⁹ *Ibid.*

¹⁶⁸⁰ Article 105d(2) of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁶⁸¹ *Ibid.*

¹⁶⁸² DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

¹⁶⁸³ *Ibid.*

¹⁶⁸⁴ Refer to the explanatory note of the Financial Markets Amendment Decree.

The power to impose the O-SII buffer equally implies the authority to change or withdraw it, with the result that the O-SII buffer is only valid until it is withdrawn or changed.¹⁶⁸⁵

Except for when the ECB tops up the O-SII buffer, DNB has a legal obligation to inform the Minister of Finance of the intention to impose the buffer and the determined size, at least thirty days prior to the imposition of the applicable rate of the O-SII buffer.¹⁶⁸⁶ The same applies with regard to the amendment or withdrawal of the O-SII buffer.¹⁶⁸⁷ The notification to the Minister of Finance is necessary as the DNB's imposition of the O-SII buffer impacts upon the Minister of Finance's financial stability responsibilities.¹⁶⁸⁸ In particular, the Minister of Finance's interest may be in relation to its fiscal responsibility ensuring that the prohibition on bail-outs is observed for taxpayers' protection.¹⁶⁸⁹

4.5.1.4 The systemic risk buffer (SyRB)

Article 133(1) of the CRD IV, as amended by Article 1(49) of the CRD V, states that each Member State may apply the SyRB to the whole financial sector or some parts of the financial sector to prevent or mitigate macro-prudential or systemic risks, as well as risks not covered by the CCyB and the O-SII buffer in the EU financial system and the real economy. The rationale behind the introduction of the SyRB is to enhance the resilience of the EU financial system against systemic risk as defined in Article 4(3)(10) of the CRD IV consistently with the *FSB SIFI framework*.¹⁶⁹⁰ There is no statutory definition for the concept of "macro-prudential risk" in the EU but the ESRB relates it to systemic interconnectedness or concentration in the structure of the financial system that can make financial institutions susceptible to the risk of contagion.¹⁶⁹¹

¹⁶⁸⁵ *Ibid.*

¹⁶⁸⁶ *Ibid.*

¹⁶⁸⁷ Article 105d(3) of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁶⁸⁸ Article 1:90(5) of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁶⁸⁹ This safeguard is in line with the FSB's Key Attributes primary objective to eliminate bail-outs which have, over the past years, had devastating large cost implications on taxpayers' money. See further, Allen F *et al* (2015) "Moral hazard and government guarantees in the banking industry" 1 *Journal of Financial Regulation* 30.

¹⁶⁹⁰ See paragraph 4.2, subparagraph 4.2.1 above, regarding the purpose of the SyRB, as set forth in the ESRB macro-prudential framework. Article 4(3)(10) of the CRD IV states a verbatim description of systemic risk as defined in the *FSB SIFI framework* as "a risk of disruption in the financial system with the potential to have serious negative consequences for the financial system and the real economy."

¹⁶⁹¹ Recommendation ESRB/2013/1 stipulates that these types of systemic risks are structural and are associated with the interlinkages of a financial system.

The national competent authorities of Member States are responsible for setting the SyRB and for identifying the exposures and subsets of institutions to which it applies.¹⁶⁹² The unit of analysis for the application of the SyRB to a bank is either on an individual, consolidated or sub-consolidated basis, as applicable.¹⁶⁹³ The SyRB may apply to so-called “domestic exposures” incorporating all exposures located in the Member State that is setting the buffer,¹⁶⁹⁴ as well as to a number of sectoral exposures.¹⁶⁹⁵ The sectoral exposures encompass all retail exposures to natural persons secured by residential property and all other exposures excluding residential property mortgages; all exposures to legal persons secured by mortgages on commercial immovable property and all other exposures excluding mortgages on commercial immovable property; and subsets of any of the categories of the specified exposures.¹⁶⁹⁶ The EBA issued *Final guidelines on the appropriate subsets of sectoral exposures to which competent or designated authorities may apply a systemic risk buffer in accordance with Article 133(5)(f) of Directive 2013/36/EU*,¹⁶⁹⁷ in line with the CRD V mandate to the EBA to issue such guidelines, by 30 June 2020.¹⁶⁹⁸

Further, the SyRB applies to the following exposures; all exposures located in other Member States; sectoral exposures located in other Member States, only to enable recognition of a buffer rate set by another Member State in accordance with Article 134 of the CRD IV; and exposures located in third countries.¹⁶⁹⁹ Where the national competent authorities decide to set the SyRB based on exposures located in other Member States, the said buffer must be set equally on all exposures located within the

¹⁶⁹² Article 133(2) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁶⁹³ Article 133(3) of the CRD IV, as amended by 1(49) of the CRD V.

¹⁶⁹⁴ Article 133(8) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁶⁹⁵ Article 1(49) of the CRD V.

¹⁶⁹⁶ *Ibid.*

¹⁶⁹⁷ The EBA Final guidelines on the appropriate subsets of sectoral exposures to which competent or designated authorities may apply a systemic risk buffer in accordance with Article 135(5)(f) of Directive 2013/36/EU (September 2020) available at

https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2020/Guidelines%20on%20the%20appropriate%20subsets%20of%20exposures%20in%20the%20application%20of%20the%20systemic%20risk%20buffer/932759/Final%20Report%20on%20EBA%20draft%20GL%20on%20the%20appropriate%20subsets%20of%20exposures%20in%20the%20application%20of%20SyRB.pdf (accessed 15 November 2021).

¹⁶⁹⁸ Article 1(49) of the CRD V states that the EBA shall issue these guidelines in accordance with Article 16 of the EBA Regulation.

¹⁶⁹⁹ Article 1(49) of the CRD V.

Union unless it is set to reciprocate the SyRB rate set by another Member State in terms of Article 134 of the CRD IV, as discussed below.¹⁷⁰⁰

The SyRB requirement is set in steps of adjustment of 0.5 per cent, or multiples thereof, of a bank's RWAs and different requirements may be introduced for different subsets of institutions and of exposures.¹⁷⁰¹ The CRD IV stipulates that the application of SyRB to institutions must not entail disproportionate adverse effects on the EU financial system or of Member States creating and endangering the internal market.¹⁷⁰² However, the CRD IV does not state a methodology for determining the proportionality of the SyRB relative to risk exposures that are being mitigated. The relevant authorities are required to review the SyRB at least every other year.¹⁷⁰³

The competent authorities must announce the setting of the SyRB by way of the publication on their website indicating the following: the SyRB rate or rates; the banks to which the SyRB applies; the exposures to which the SyRB rate or rates apply; a justification for setting or resetting the SyRB rate or rates unless this disclosure could jeopardise financial stability; a date from which the banks shall apply the setting or resetting of the SyRB; and the names of the countries where the exposures located in the relevant Member States are recognised in the SyRB.¹⁷⁰⁴

The national competent authorities are also required to notify the ESRB before the publication or the setting of the SyRB and the ESRB must forward such notifications to the European Commission, the EBA and the national competent authorities of the Member States concerned without delay.¹⁷⁰⁵ In instances where the SyRB applies to a bank that is a subsidiary of a parent situated in another Member State, the relevant authorities of that Member State must be notified.¹⁷⁰⁶ Similarly, the national competent authorities must notify the ESRB where the SyRB rate applies to exposures located in

¹⁷⁰⁰ Article 133(18) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷⁰¹ Article 133(9) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷⁰² Article 133(10)(a) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷⁰³ Article 133(10)(b) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷⁰⁴ Article 133(16) of the CRD IV, as amended by 1(49) of the CRD IV.

¹⁷⁰⁵ Article 1(49) of the CRD V.

¹⁷⁰⁶ *Ibid.*

third countries, and the ESRB must, in turn, notify the supervisory authorities of the affected Member States.¹⁷⁰⁷

The notification requirements regarding the application of the SyRB are laid down in Article 133(11) of the CRD IV, as amended by Article 1(49) of the CRD V. The notification by the national competent authorities must detail the macro-prudential or systemic risks in the relevant Member State; the reasons why the dimension of the macro-prudential or systemic risks threaten financial stability thereby warranting the application of the SyRB; the justification regarding the effectiveness and proportionality of the SyRB in the mitigation of such risks; an assessment of the likely positive or negative impact of the SyRB on the internal market based on the information that is available to the Member State; the SyRB rate or rates that the national competent authorities intend to impose; the exposures to which it will apply and banks that will be subject to such rates and a justification of why the national competent authorities considers that the SyRB is not duplicating the functioning of the O-SII buffer where the buffer rate applies to all exposures.¹⁷⁰⁸ *The IWG Expert Group on the use of structural macroprudential instruments in the EU* observes that albeit the CRD IV does not place a limit on the rate of application of the SyRB, the notification requirements that must be complied with before the setting of the buffer are stringent.¹⁷⁰⁹

Where the rate of application of the SyRB does not result in a combined SyRB of 3 per cent of an O-SII's RWAs for the exposures to which it applies, the national competent authorities must notify the ESRB one month before the publication of the decision regarding the setting of the buffer rate.¹⁷¹⁰ Equally, the reciprocation of the SyRB set by another Member State as per Article 134 of the CRD IV, discussed below, should not exceed the specified threshold.¹⁷¹¹ If such rate exceeds 3 per cent of an O-SII's RWAs but is less than 5 per cent thereof, the national competent authorities

¹⁷⁰⁷ *Ibid.*

¹⁷⁰⁸ *Ibid.*

¹⁷⁰⁹ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁷¹⁰ Article 133(11) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷¹¹ *Ibid.*

should request the European Commission's opinion in the notification that is sent to the ESRB, which opinion will be furnished within one month of receipt of the notification.¹⁷¹² In the case of a negative opinion, the national competent authority is obliged to comply with such a recommendation, or furnish reasons for non-compliance.¹⁷¹³ Where the institution to which the specified SyRB rate applies is a subsidiary of a parent that is resident in another Member State, the national competent authority must request a recommendation from the European Commission and the ESRB and each are obliged to provide such a recommendation within six months.¹⁷¹⁴ Should the national authorities of a subsidiary or the parent disagree on the applicable rate of the SyRB, and in the event of the negative opinion from the European Commission and the ESRB, such rate is then suspended pending the decision of the EBA pursuant to Article 19 of the EBA Regulation.¹⁷¹⁵

If the rate of the application of the SyRB results in a combined SyRB exceeding 5 per cent of the exposures to which it applies, the national competent authority must seek the authorisation of the European Commission before implementing such a SyRB rate.¹⁷¹⁶ The ESRB must provide the European Commission with an opinion of the appropriateness of the rate of this buffer within six months of its receipt of the notification of the publication of the buffer.¹⁷¹⁷ The EBA may also provide an opinion in this regard in accordance with Article 34(1) of the EBA Regulation. If, in the opinion of the European Commission, having assessed the opinion of the ESRB and the EBA, where relevant, the SyRB does not entail disproportionate adverse effects on the whole or parts of the financial system of other Member States or of the Union, it must adopt an Act authorising the relevant national competent authority to adopt the proposed measure.¹⁷¹⁸

Other EU Member States may voluntarily reciprocate the SyRB to domestically authorised institutions for the exposures of the EU Member State that is setting the

¹⁷¹² Article 1(49) of the CRD V.

¹⁷¹³ *Ibid.*

¹⁷¹⁴ *Ibid.*

¹⁷¹⁵ *Ibid.*

¹⁷¹⁶ Article 133(12) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷¹⁷ *Ibid.*

¹⁷¹⁸ *Ibid.*

buffer.¹⁷¹⁹ According to *the IWG Expert Group on the use of structural macroprudential instruments in the EU* this practice of reciprocation may prevent the practice of “branchification” which refers to a tendency of converting subsidiaries in host jurisdictions to branches in order to circumvent the application of prudential requirements.¹⁷²⁰ The notification of the voluntary reciprocation of the SyRB is sent to the ESRB which then forwards such notification to the European Commission, the EBA and EU Member State that is setting the buffer.¹⁷²¹ The voluntary reciprocation will be based on information that is provided by the EU Member State concerned.¹⁷²² In the absence of voluntary reciprocation, the EU Member State that is setting the SyRB may request the ESRB to issue a recommendation regarding the recognition of its SyRB by other EU Member States for exposures which are caused by their domestically authorised institutions.¹⁷²³

The CRD IV stipulates that where the Member State sets the SyRB for domestically authorised institutions, such SyRB may be cumulative with the SyRB of the Member State setting the buffer with a proviso that they should address different risks.¹⁷²⁴ Nonetheless, where the systemic risk buffers address the same risks, only the higher of the buffers apply.¹⁷²⁵ This legal position is supported by *the IWG Expert Group on the use of structural macroprudential instruments in the EU* arguing that the application of two different SyRBs should be additive based on the sum total of all risks that are caused by those exposures to comprehensively capture such risks.¹⁷²⁶ According to the unofficial opinion of the EBA, the said two buffers should, however, not have a cumulative effect.¹⁷²⁷ Contrary to the opinion of *the IWG Expert Group on the use of*

¹⁷¹⁹ Article 134(1) of the CRD IV.

¹⁷²⁰ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁷²¹ Article 134(2) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷²² Article 134(3) of the CRD IV.

¹⁷²³ Article 134(5) of the CRD IV.

¹⁷²⁴ Article 133(4) of the CRD IV, as amended by Article 1(49) of the CRD V.

¹⁷²⁵ *Ibid.*

¹⁷²⁶ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁷²⁷ This opinion is entitled “*The question relates to systemic risk buffers and whether they can be additive*” (March 2017) available at https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2017_3229 (accessed 27 February 2018).

structural macroprudential instruments in the EU, the EBA is of the view that if the SyRB on the exposures that are subject to reciprocation is higher, reciprocation will be unnecessary. However, if it is lower, the reciprocating EU Member State may impose a SyRB that is greater than that of the EU Member State setting the buffer.¹⁷²⁸

Similar to the principles that apply to the O-SII buffer, *the IWG Expert Group on the use of structural macroprudential instruments in the EU* indicate that effectiveness of the SyRB should be viewed in terms of successfully combating systemic or macroprudential risks sought to be controlled.¹⁷²⁹ In other words, the SyRB must be capable of addressing structural risks to strengthen the resilience of the financial system. The SyRB is proportional if its size corresponds to the level of macroprudential risks or systemic risk or the risk exposures in question because any lesser or higher rate would be regarded as disproportionate.¹⁷³⁰ Similar to other capital buffers, *the IWG Expert Group on the use of structural macroprudential instruments in the EU* observes that the potential impact of the SyRB on the internal market is yet to be seen, due to limited available ex-ante analysis given its relatively recent implementation.¹⁷³¹

The CRD IV originally stipulated that if an O-SII was subject to the consolidated application of the G-SII buffer, the O-SII buffer, and the SyRB, the highest buffer applied,¹⁷³² and where the O-SII buffer and the SyRB were imposed on an individual or sub-consolidated position of an O-SII, the higher of the two applied.¹⁷³³ The CRD V subsequently repealed this provision, thus rendering the application of the O-SII buffer and the SyRB additive. Further, the CRD V prohibits an overlap in the application of the O-SII buffer and the SyRB because the latter can no longer be employed to cover residual risks¹⁷³⁴ other than macroprudential or systemic risks as originally intended by the legislator.¹⁷³⁵ Prior to this amendment, the EU Member States preferred to apply

¹⁷²⁸ *Ibid.*

¹⁷²⁹ Final report on the use of structural macroprudential instruments in the EU by the IWG Expert Group on the use of structural macroprudential instruments in the EU (December 2017) available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?f6d24e0eb1de617c5759a1572df96dd0 (accessed 23 February 2018).

¹⁷³⁰ *Ibid.*

¹⁷³¹ *Ibid.*

¹⁷³² Article 131(14)(b) of the CRD IV; Article 133(4) of the CRD IV.

¹⁷³³ Article 133(4) of the CRD IV.

¹⁷³⁴ According to Article 80 of the CRD IV, residual risk is the remaining risk after the employment of credit risk mitigation techniques.

¹⁷³⁵ Article 1(49) of the CRD V.

the SyRB to O-SIIs instead of applying an O-SII buffer due to the flexibility it had in addressing any kind of systemic risk as well as its unlimited buffer size.

Just like in the case of the CCvB, the CCyB and the O-SII buffer, breach of the SyRB requirement attracts capital distribution constraints. A bank that fails to comply with the SyRB requirement shall be required to calculate the MDA and must restrict capital distributions based on the calculated MDA.¹⁷³⁶ If the said calculated MDA leads to an unsatisfactory restoration of CET1 capital necessary to address the relevant systemic risk, the national competent authorities must exercise supervisory measures stipulated in Article 64 of the CRD IV regarding the imposition of penalties. These include: the right to withdraw an authorisation of an activity of a credit institution under Article 18 thereof; requiring a bank to hold own funds in excess of capital requirements; imposing specific liquidity requirements such as restrictions on maturity mismatches between assets and liabilities; and restricting the business operations of a bank in Article 104 thereof.¹⁷³⁷

The SyRB requirement for Dutch O-SIIs is stipulated in Article 105(1) (d) of *the Decree on Prudential Rules under the Financial Supervision Act*, read in conjunction with Article 3:62a(2)(c) of *the Financial Supervision Act*, regarding the regulation of structural systemic risks to the Dutch financial system. *The Regulation on specific provisions of CRD IV and CRR*,¹⁷³⁸ was issued in December 2013 by DNB to give effect to some specific provisions of the CRD IV package including the provision on the SyRB requirement, as set out in Articles 133 and 134 of the CRD IV. Whereas the rules pertaining to the Dutch O-SII buffer requirement were implemented by subsequent amendments to *the Decree on Prudential Rules under the Financial Supervision Act*, the SyRB was subsequently transposed into the Netherlands in 2014 by Article 2.1.1 of *the Regulation on specific provisions of CRD IV and CRR*. Article 105e of *the Decree on Prudential Rules under the Financial Supervision Act* stipulates that DNB may establish further rules for a SyRB to address systemic risks or long-

¹⁷³⁶ Article 133(17) of the CRD IV, as amended by Article 1 (49) of the CRD V.

¹⁷³⁷ *Ibid.*

¹⁷³⁸ Scheme of De Nederlandsche Bank NV of 9 December 2013 containing rules regarding the implementation of specific provisions from the Capital Requirements Directive and the implementation of specific provisions of the Capital Requirements Regulation (Regulation on Specific provisions of CRD IV and CRR) available at <http://wetten.overheid.nl/BWBR0034435/2015-10-15> (accessed 9 April 2018).

term non-cyclical macro-prudential risks. The SyRB is calculated on the consolidated position of a parent bank.¹⁷³⁹ It is evaluated at least every three years in line with Article 105c(3) and 105e of *the Decree on Prudential Rules under the Financial Supervision Act* to give effect to Article 133(10)(b) of the CRD IV.

Initially, DNB applied the SyRB of 3 per cent of RWAs to ING, Rabobank and BNG.¹⁷⁴⁰ The rationale was that these three O-SIIs are excessively systemically important, hence, they pose a heightened systemic risk warranting the application of the highest buffer rate to enhance their higher loss absorbency capacity for purposes of decreasing their likelihood of failure, and preservation of the stability of the financial system.¹⁷⁴¹ DNB deemed that the application of the SyRB was ideal for the large and highly concentrated and interconnected nature of the Dutch banking system, given the structural nature of the SyRB.¹⁷⁴² Subsequently, DNB reduced the SyRB of 3 per cent for ING, Rabobank and BNG, respectively, to 2.5 per cent, 2 per cent and 1 per cent of RWAs to support lending in the wake of the global Covid19 pandemic.¹⁷⁴³ DNB noted that it would compensate the SyRB with the gradual increase of the CCyB to 2 per cent of an O-SII's RWAs.¹⁷⁴⁴ After the implementation of the CRD V later in 2020, DNB abolished the SyRB requirement and fully replaced it with the O-SII buffer considering the implications of the additivity of the O-SII buffer and the SyRB.¹⁷⁴⁵

¹⁷³⁹ Article 2:1:1(3) of *the Regulation on specific provisions of CRD IV and CCR Regulations*.

¹⁷⁴⁰ DNB Notification template for Article 131 CRD – Other Systemically Important Institutions (O-SII) (March 2016) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification190116_osii_srb_nl.en.pdf?615bcceedb1005f26208177ab7a4ffb3 (accessed 3 April 2018).

¹⁷⁴¹ *Ibid.*

¹⁷⁴² *Ibid.*

¹⁷⁴³ DNB lowers systemic buffer requirements to support lending (April 2020) available at <https://www.toezicht.dnb.nl/en/2/51-236832.jsp> (accessed 5 June 2020).

¹⁷⁴⁴ Press release: DNB lowers bank buffer requirements to support lending (March) 2020 available <https://www.dnb.nl/en/general-news/press-releases-2020/dnb-lowers-bank-buffer-requirements-to-support-lending/> (accessed 5 June 2020); DNB temporarily lowers bank buffer requirements to support lending (March) 2020 <https://www.dnb.nl/en/general-news/dnbulletin-2020/dnb-temporarily-lowers-bank-buffer-requirements-to-support-lending/> (accessed 5 June 2020).

¹⁷⁴⁵ DNB Notification template for Article 131 of the Capital Requirements Directive (CRD) – Other Systemically Important Institutions (O-SIIs) (July 2021) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20211208_OSII_NL~9674240597.eng.pdf (accessed 30 November 2021).

4.5.1.5 The combined buffer requirement

The combined buffer refers to the total CET1 capital required of a bank to meet the requirement for the CCvB, which is extended by the CCyB, the O-SII buffer or the G-SII buffer, and the SyRB.¹⁷⁴⁶ Article 141(1) of the CRD IV prohibits banks to distribute CET1 capital to an extent that would deplete the combined capital buffer below the minimum required level.¹⁷⁴⁷ Specifically, a bank is prohibited from taking actions such as making a distribution in connection with CET1 capital and payments on additional Tier 1 (AT1) capital.¹⁷⁴⁸ The combined buffer requirement for Dutch banks is consistent with Article 141 of the CRD IV.¹⁷⁴⁹ In line with Article 3:62a of the Financial Supervision Act, read in conjunction with Article 105 of *the Decree on Prudential Rules under the Financial Supervision Act* (as amended by the Financial Markets Amendment Act of 2014), the question of whether a Dutch bank complies with the combined buffer requirement depends on the total components of the applicable capital buffer that must be fully met at all times. DNB is responsible for determining the size of the various components of the capital buffer to be held by individual Dutch O-SIIs.

The breach of the combined buffer requirement means that a bank fails to comply with the capital buffer requirement in a required amount and quality as well as in respect of the own funds requirement.¹⁷⁵⁰ Therefore, Article 141(2) of the CRD IV directs Member States to require institutions that do not meet the combined buffer requirement to calculate the MDA and such institutions must notify the competent authorities of the calculated MDA.¹⁷⁵¹ The MDA is the pay-out amount that a given bank that is subject to constraints in capital distribution is allowed to make relative to the amount of CET1 capital that such a bank holds.¹⁷⁵² This means that a bank that fails to meet the combined capital buffer requirement is restricted from distributing capital exceeding its calculated MDA.¹⁷⁵³ Accordingly, banks whose capital distribution is restricted may

¹⁷⁴⁶ Article 128(6) of the CRD IV.

¹⁷⁴⁷ Article 141(1) of the CRD IV, as amended by Article 1(51) of the CRD V.

¹⁷⁴⁸ Article 141(2) of the CRD IV, as amended by Article 1(51) of the CRD V.

¹⁷⁴⁹ DNB Capital buffer requirements under the CRD (April 2018) available at <http://www.toezicht.dnb.nl/en/3/51-237104.jsp> (20 July 2019). DNB confirms systemic buffers (December 2018) available at

<http://www.toezicht.dnb.nl/en/3/51-237104.jsp> (accessed 20 July 2019).

¹⁷⁵⁰ Article 141(2)(a) of the CRD IV, as amended by Article 1(52) of the CRD V.

¹⁷⁵¹ Article 141(2) of the CRD IV, as amended by Article 1(51) of the CRD V.

¹⁷⁵² Article 141(3) of the CRD IV.

¹⁷⁵³ *Ibid.*

make such payments only to the maximum of the MDA that is calculated in accordance with Article 141(4) of the CRD IV.¹⁷⁵⁴ In line with Article 141(2) of the CRD IV, a bank that does not meet the combined buffer requirement and intends to make capital distributions must notify DNB thereof, stating the MDA.¹⁷⁵⁵

Article 142(1) of the CRD IV directs a bank that violates the combined buffer requirement to draft a capital restoration plan and to submit it to the relevant authority within a timeframe of five days from the date that the violation occurred (unless an extension of ten days is granted).¹⁷⁵⁶ The capital restoration plan outlines a plan and timeframe for remedying the breach of the combined buffer requirements.¹⁷⁵⁷ The relevant national authority may approve the capital restoration plan upon a reasonable belief that capital levels will be raised within a specified reasonable period.¹⁷⁵⁸ If the capital restoration plan is rejected by the relevant national authority, Article 142 of the CRD IV requires a bank to increase its capital levels within a specified timeframe. Alternatively, stricter restrictions on distributions are imposed under Article 102 of the CRD IV than those that have already been required under Article 141 of the CRD IV.¹⁷⁵⁹ As such, Article 102 of the CRD IV thus requires the national competent authorities to take necessary measures at an early stage to address the violation of the CRD IV rules.¹⁷⁶⁰

Consistent with Article 142(1) of the CRD IV, if a bank does not comply with the capital buffer regime or foresees non-compliance, such bank must promptly notify DNB of the deficit.¹⁷⁶¹ The bank concerned must thus submit a capital conservation plan within five working days after the notification of non-compliance stating measures that it

¹⁷⁵⁴ Article 105g(1) of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁷⁵⁵ Article 105g(2) and 105h of the Decree on Prudential Rules under the Financial Supervision Act; Article 141(8) of the CRD IV.

¹⁷⁵⁶ Article 142(1) of the CRD IV.

¹⁷⁵⁷ Article 142(2) of the CRD IV.

¹⁷⁵⁸ Article 142(3) of the CRD IV.

¹⁷⁵⁹ Article 142(4) of the CRD IV.

¹⁷⁶⁰ Article 102 of the CRD IV provides for supervisory measures that are incorporated in Article 104 of the CRD IV. In terms of Article 104 of the CRD IV, supervisors may require banks to hold own funds in excess of minimum regulatory capital to address risks that are not covered by regulatory capital; restrict or limit the business operations of banks or to request the divestment of activities that pose excessive risks to the soundness of an institution; impose specific liquidity requirements, including restrictions on maturity mismatches between assets and liabilities; require additional disclosures; reinforcement of risk-management governance and recovery and resolution planning.

¹⁷⁶¹ Article 3:62a(3) of the Financial Supervision Act.

intends to take to comply.¹⁷⁶² DNB may extend the timeframe of five days if it deems it appropriate having regard to the scale and complexity of the bank's activities.¹⁷⁶³ As stated above, the CRD IV authorises the national competent authorities to grant ten days extension. A capital conservation plan must contain, at least the following: an estimate of revenue and expenditure and forecast balance sheet; a description of the measures that a bank intends to take to increase regulatory capital; and a timeframe within which compliance will be made.¹⁷⁶⁴ If the capital conservation plan contains plausible measures for restoring the compliance of the bank concerned within a reasonable time then it will be approved, and if not, DNB will require compliance within a specified period.¹⁷⁶⁵ In terms of Article 142(4) of the CRD IV, DNB imposes restrictions on capital distributions on banks that breach CET1 capital for the combined buffer until such time that the deficit is remedied under a capital conservation plan.¹⁷⁶⁶

Article 128 of the CRD IV prohibits banks from using the CET1 capital used to meet the combined capital buffer requirement to comply with the own funds requirements required in terms of Article 92 of the CRR.¹⁷⁶⁷ They may also not use it to comply with the required capital stipulated in Article 104(a) of the CRD IV, that is in excess of the own funds requirements as well as any applicable elements of the combined buffer requirement.¹⁷⁶⁸

4.5.2 The supplementary leverage ratio

The CRR sets the supplementary leverage ratio for EU banks as comprising a minimum of 3 per cent of a bank's CET1 capital divided by its total exposure.¹⁷⁶⁹ EU banks have been subject to the supplementary leverage ratio disclosure from January 2015, which is disclosed on the EBA uniform disclosure reporting template.¹⁷⁷⁰ As

¹⁷⁶² Article 3:62a(4) of the Financial Supervision Act.

¹⁷⁶³ Article 3:362a(5) of the Financial Supervision Act.

¹⁷⁶⁴ Article 105i of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁷⁶⁵ Article 3:62a(6) (a) and (b) of the Financial Supervision Act.

¹⁷⁶⁶ Article 3:62b(1) of the Financial Supervision Act; Article 3:62b(4) of the Financial Supervision Act.

¹⁷⁶⁷ Article 128 of the CRD IV, as amended by Article 1(45) of the CRD V.

¹⁷⁶⁸ *Ibid.*

¹⁷⁶⁹ Article 92(d) of the CRR II, read with Article 1(46) of the CRR; Article 429 of the CRR.

¹⁷⁷⁰ Article 430(2) of the CRR; Commission Delegated Regulation (EU) 2015/62 of 10 October 2014 amending Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to the leverage ratio available at

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0062&from=EN> (accessed 23 February 2018); Commission Implementing Regulation (EU) 2016/200 of 15 February 2016 laying down implementing technical standards with regard to disclosure of the leverage ratio for institutions,

pointed out by DNB, the Netherlands aligns with the EU supplementary leverage ratio framework.¹⁷⁷¹

4.5.3 The Dutch liquidity regulation

The CRR implemented the *Basel III LCR framework* and the *Basel III NSFR framework* in the EU.¹⁷⁷² In the Netherlands, banks had been subject to weekly and monthly liquidity coverage requirements under the Financial Supervision Act.¹⁷⁷³ This liquidity coverage requirement has been phased-out by the EU LCR and the NSFR frameworks, and the Netherlands is now subject to EU LCR and the NSFR frameworks.¹⁷⁷⁴ The EU LCR framework was phased-in from October 2015 to January 2018 to give effect to Article 412(1) of the CRR regarding the liquidity coverage requirement. In addition, banks have been subject to the LCR disclosure requirement from March 2017.¹⁷⁷⁵ In July 2017, the BCBS assessed the EU LCR framework as largely compliant with the *Basel III LCR framework*.¹⁷⁷⁶

according to Regulation (EU) No 575/2013 of the European Parliament and of the Council available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0200&from=EN> (accessed 23 February 2018). This Regulation is developed subject to article 456(1)(j) of the CRR. See further, the EBA Final Draft Implementing Technical Standards on disclosure of the leverage ratio under Article 451(2) of the Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR) (June 2014) available at <https://eba.europa.eu/sites/default/documents/files/documents/10180/717567/2936fa8b-7998-4ab4-89eb-fdcd284317be/EBA-ITS-2014-04%20%28Final%20Draft%20ITS%20leverage%20ratio%20disclosure%29.pdf?retry=1> (accessed 23 February 2018).

¹⁷⁷¹ DNB Technical Report: Results from the Basel III monitoring exercise in the Netherlands (2014) available at

https://www.dnb.nl/binaries/Results%20of%20the%20Basel%20III%20monitoring%20exercise%20in%20the%20Netherlands_tcm46-316582.pdf (2 February 2018). See further, van Loopkin M *et al* “Netherlands” – Chapter 25 – In Putnis J (Ed.) (2019) “The banking regulation review” 10th ed. 376.

¹⁷⁷² See paragraph 2.4.5 of Chapter Two for the discussion of the Basel III LCR and the Basel III NSFR.

¹⁷⁷³ Article 3:63 of the Financial Supervision Act; Articles 106, 108 and 111 of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁷⁷⁴ Kingdom of the Netherlands – Netherlands IMF Financial Sector Assessment Program Technical note – macroprudential policy framework (April 2017) available at

<https://www.imf.org/en/Publications/CR/Issues/2017/04/13/Kingdom-of-the-Netherlands-Netherlands-Financial-Sector-Assessment-Program-Technical-Note-44818> (accessed 3 April 2018).

¹⁷⁷⁵ Articles 415(1) and 509(1) of the CRR; the EBA issued guidelines on the LCR disclosure in accordance with Article 435 of the CRR and monitors and evaluates the data that the banks report under the liquidity coverage requirement and the impact on their risk profile and financial stability and communicates its findings to the European Commission on an annual basis.

¹⁷⁷⁶ BCBS RCAP Assessment of Basel III LCR regulations – European Union (July 2017)

<https://www.bis.org/bcbs/publ/d410.pdf> (accessed 30 November 2019). Assessed as largely compliant, the EU LCR incorporates most of the provisions of the Basel III LCR such as general and operational requirements, and it is also consistent with the Basel approach on the definitions of outflows and inflows.

The EU LCR requires banks to maintain 100 per cent HQLA to offset cash outflows over thirty days of liquidity stress scenarios.¹⁷⁷⁷ Liquidity outflows include retail deposits, the current amounts outstanding in respect of other liabilities and outflows from credit and liquidity facilities.¹⁷⁷⁸ Inflows comprise contractual inflows from exposures that are not yet due and for which a bank has no reason to expect non-performance within a thirty-day horizon.¹⁷⁷⁹

Level 1 assets comprise coins, banknotes, central bank reserves, assets or marketable securities representing claims on, or guaranteed by, the ECB or Member State's central bank, third countries' central banks, central or regional governments, local authorities or public sector entities, multilateral development banks, and international organisations.¹⁷⁸⁰ The scope of the EU LCR framework expands beyond the Basel III LCR to also cover assets that are issued by certain credit institutions (banks), for which a Member State has the legal obligation "to protect the economic basis of the credit institution", or where the credit institution is a "promotional lender".¹⁷⁸¹

Level 2A assets include assets or marketable securities representing claims on, or guaranteed by, regional governments, local authorities, public sector entities in a Member State, central government, or central bank of a third country which are risk-

¹⁷⁷⁷ Article 460 of the CRR; Recital 101 of the CRR; Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for credit institutions (Commission Delegated Regulation (EU) 2015/61) available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0061&from=EN> (accessed 23 February 2018). Article 18 thereof states that an asset ceasing to comply with the high-quality assets requirements shall no longer be recognised as such. See paragraph 2.4.5, subparagraph 2.4.5.1, of Chapter Two, for the concept of HQLA.

¹⁷⁷⁸ Articles 421, 422, 423 and 424 of the CRR.

¹⁷⁷⁹ Article 425 of the CRR.

¹⁷⁸⁰ Article 10 of the Commission Delegated Regulation (EU) 2015/61.

¹⁷⁸¹ Article 10(1)(e) of the Commission Delegated Regulation (EU) 2015/61. In this Article, a promotional lender is defined as "any credit institution whose purpose is to advance the public policy objectives of the Union or of the central or regional government or local authority in a Member State predominantly through provision of promotional loans on a non-competitive, not for profit basis, provided that at least 90% of the loans that is grants are directly or indirectly guaranteed by the central or regional government or local authority and that any exposure to that regional government or local authority, as applicable, is treated as an exposure to the central government of the Member State in accordance with Article 115(2) of Regulation (EU) NO 575/2013." Article 115(2) of the CRR provides that exposures to regional government or local authorities shall be treated as exposures to the central government in whose jurisdiction they are established.

weighted at 20 per cent.¹⁷⁸² Further, they include high quality covered bonds, covered bonds that are issued by credit institutions in third countries, and corporate debt securities, which meet specified criteria.¹⁷⁸³ Level 2B assets include asset-backed securities fulfilling criteria such as a high credit rating, corporate debt securities whose maturity period is, for instance, in ten years, shares, restricted-use committed facilities that may be provided by the ECB, the central bank of a Member State, or the central bank of a third country.¹⁷⁸⁴

The EU NSFR framework requires banks to maintain 100 per cent available stable funding relative to required stable funding.¹⁷⁸⁵ To enable the national competent authorities to determine whether banks maintain the available stable funding, banks must report certain items that include Tier 1 capital instruments, tier 2 capital instruments and retail deposits.¹⁷⁸⁶ The required stable funding comprises items such as liquid assets discussed above, equity securities and gold.¹⁷⁸⁷

Where the LCR or the NSFR falls below the set requirement, a bank is required to notify the competent authorities and must submit, without undue delay, a plan to the competent authorities for timely restoration of the NSFR to the required levels.¹⁷⁸⁸ The competent authorities must monitor the implementation of a restoration plan and further require a more speedy restoration of the requirement, if appropriate.¹⁷⁸⁹

4.5.4 The Dutch risk-management framework

Article 97 of the CRR sets out a supervisory review and evaluation process (SREP) of Pillar 2 requirements in the EU.¹⁷⁹⁰ The SREP mandates the national competent authorities to review, on an annual basis, the arrangements, strategies and control mechanisms for evaluating the risks to which institutions are exposed to.¹⁷⁹¹ The

¹⁷⁸² Article 11(1)(a) and (b) of the Commission Delegated Regulation (EU) 2015/61.

¹⁷⁸³ Article 11(c), (d) and (e) of the Commission Delegated Regulation (EU) 2015/61.

¹⁷⁸⁴ Articles 12(1)(a) (b) (c) (d), 13, 14 and 15 of the Commission Delegated Regulation (EU) 2015/61.

¹⁷⁸⁵ Article 413 (1) of the CRR.

¹⁷⁸⁶ Article 427 of the CRR.

¹⁷⁸⁷ Article 428 of the CRR.

¹⁷⁸⁸ Article 414 of the CRR.

¹⁷⁸⁹ *Ibid.*

¹⁷⁹⁰ See paragraph 2.5 of Chapter Two for a discussion of the Basel Pillar 2 requirements.

¹⁷⁹¹ Article 97(1) of the CRD IV. The SREP takes account of systemic risk as regulated by the EBA as per Article 23 of the EBA Regulation.

purpose of the SREP is to determine a bank's capital and liquidity adequacy relative to its risks for purposes of ensuring sound risk-management.¹⁷⁹²

The EBA developed *Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing* in accordance with technical criteria stipulated in Article 98 of the CRD IV.¹⁷⁹³ The ECB's guidelines (contained in the SSM SREP methodology booklet) are formulated by the ECB together with national competent authorities of the SSM jurisdictions, consistent with these technical criteria.¹⁷⁹⁴ The national competent authorities are accordingly enjoined to publish methodologies for the SREP.¹⁷⁹⁵ The EBA monitors the convergence of supervisory practices on the SREP across the EU Member States by means of regular reviews.¹⁷⁹⁶

The SREP's technical criteria are tailored to the systemic profile of a bank.¹⁷⁹⁷ The EU O-SIIs are category 1 institutions, meaning that they are automatically subject to an enhanced supervisory regime given their heightened systemic profile.¹⁷⁹⁸ This

¹⁷⁹² Article 97(3) of the CRD IV; See further, DNB Eurosystem Financial Stability Report Autumn 2017 available at <https://www.dnb.nl/en/publications/publications-dnb/fsr/financial-stability-report-autumn-2017/> (accessed 20 May 2018).

¹⁷⁹³ Article 98(1)(j) of the CRD IV; Article 107(3) of the CRR; Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP) 19 December 2014, EBA/GL/2014/13 available at [https://eba.europa.eu/sites/default/documents/files/documents/10180/935249/4b842c7e-3294-4947-94cd-ad7f94405d66/EBA-GL-2014-13%20\(Guidelines%20on%20SREP%20methodologies%20and%20processes\).pdf](https://eba.europa.eu/sites/default/documents/files/documents/10180/935249/4b842c7e-3294-4947-94cd-ad7f94405d66/EBA-GL-2014-13%20(Guidelines%20on%20SREP%20methodologies%20and%20processes).pdf) (accessed 25 February 2018).

¹⁷⁹⁴ ECB SSM LSI SREP methodology 2020 edition available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.srep_methodology_booklet_lsi_2020.en.pdf (accessed 20 November 2021); ECB SSM SREP methodology booklet 2017 edition – to be applied in 2018 available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.srep_methodology_booklet_2017.en.pdf?508ca0e386f9b91369820bc927863456 (accessed 2 May 2018); ECB Eurosystem *Financial Stability Review* (May 2017) available at <https://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201705.en.pdf> (accessed 19 June 2018).

¹⁷⁹⁵ Article 143(1)(c) of the CRD IV; Article 438(6) of the CRR.

¹⁷⁹⁶ Article 107 of the CRD IV.

¹⁷⁹⁷ Article 97(4) of the CRD IV.

¹⁷⁹⁸ Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing (July 2018) available at <https://eba.europa.eu/sites/default/documents/files/documents/10180/2282666/fb883094-3a8a-49d9-a3db1d39884e2659/Guidelines%20on%20common%20procedures%20and%20methodologies%20for%20SREP%20and%20supervisory%20stress%20testing%20-%20Consolidated%20version.pdf> (accessed 2 May 2018); BCBS RCAP Assessment of Basel G-SIB framework and review of D-SIB frameworks – European Union June 2016 available at <https://www.bis.org/bcbs/publ/d371.pdf>

intensive supervision, *inter alia*, includes frequent on-site inspections and enhanced reporting requirements, and quarterly monitoring of emerging developments in the financial system.¹⁷⁹⁹ In particular, the technical criteria entails a review of the viability of the business model, such as being a universal bank or retail lender, and sustainability of the strategic plan of a bank.¹⁸⁰⁰ The criteria further facilitate evaluation of the robustness of the internal governance and controls of a bank relative to the size, business model, risk profile and complexity of such bank to ensure effective risk-management.¹⁸⁰¹

If the assessment reveals that the combined capital buffer of the Pillar 1 requirements is not enough to cover the material risks, then the supervisory authorities may direct banks to hold additional own funds under the Pillar 2 requirements (that are in excess of the Pillar 1 requirements) to address safety and soundness concerns.¹⁸⁰² Part of the SREP evaluates the liquidity position of a bank against its liquidity risks to determine whether it is necessary to impose specific liquidity requirements or restrict maturity mismatches.¹⁸⁰³

(accessed 25 February 2016); the EBA Report on convergence of supervisory practices November 2017 available at

<https://www.eba.europa.eu/documents/10180/2036318/EBA+Report+on+convergence+of+supervisory+practices+-+2017.pdf> (accessed 10 March 2018); Amorello L (2016: 137 at 153); Meissner M (2016) "The Supervisory Review and Evaluation Process (SREP): Ultimate test for the banking union?" 31 *Journal of International Banking Law and Regulation* 331 at 333.

¹⁷⁹⁹ Article 98(1) of the CRD IV

¹⁸⁰⁰ Article 98(1)(i) of the CRD IV.

¹⁸⁰¹ Article 98(7) of the CRD IV; The element of internal governance and control relates to the risk-management system, risk culture, risk infrastructure including remuneration policies that take into account the risk profile of the institution. Refer to *Corporate governance principles for banks*, as discussed in paragraph 2.5, subparagraph 2.5.1, of Chapter Two.

¹⁸⁰² Article 104(1)(a), (2)(b) (3)(d) of the CRD IV; Article 16(b) and (c) of the SSM Regulation empowers the ECB to require extra capital under the SREP. Risks to capital include credit risk, operational risk, market risk, as per Article 98(1) of the CRD IV, as well as concentration risk as stipulated under Article 98(1)(b) thereof. See further, Opinion of the European Banking Authority on the interaction of Pillar 1, Pillar 2, and combined buffer requirements and restrictions on distributions (December 2015) available at

<https://www.eba.europa.eu/documents/10180/983359/EBA-Op-2015-24+Opinion+on+MDA.pdf> (accessed 19 June 2018); Huertas M (2017) "EU law: Banking supervision – supervisory review and evaluation process" 32 *Journal of International Banking Law and Regulation* 141; Joosen BPM (2012) "Further changes to the Capital Requirements Directive: CRD IV – major overhaul of the current European CRD legislation to adopt the Basel III accord: Part 1" 27 *Journal of International Banking Law and Regulation* 45 at 57-59 notes that stress-testing is used to bolster capital requirements.

¹⁸⁰³ Article 104(1)(k) of the CRD IV; Article 105(1)(d) of the CRD IV; Article 98(2) thereof provides that for liquidity risk, the competent authorities shall regularly carry out a comprehensive assessment of the overall liquidity risk-management by institutions and promote the development of sound internal methodologies. While conducting those reviews, the competent authorities shall have regard to the role played by institutions in the financial markets. The competent authorities in one Member State shall duly consider the potential impact of their decisions on the stability of the financial system in all other

One of the supervisory measures that may be taken to enforce compliance by a bank with prudential requirements include early intervention measures under Article 102 of the CRD IV.¹⁸⁰⁴ Other prudential requirements include the submission of a restoration plan for compliance with prudential requirements; the restriction of business operations or divestment of activities with excessive risks to the soundness of a bank; the prohibition of capital distributions; and additional disclosure requirements.¹⁸⁰⁵

The SREP is facilitated by the *EBA Guidelines on institutions' stress testing*.¹⁸⁰⁶ These guidelines require banks to establish a stress-testing programme setting out stress-testing types that cover all types of risk under severe scenarios including group, legal entity specific and system-wide stress-testing.¹⁸⁰⁷ The frequency with which stress-testing is carried out, and its methodologies and procedures are supposed to be proportionate to a bank's risk profile.¹⁸⁰⁸ The stress-testing programme must be supported by IT infrastructure for effective identification of risk data consistent with the *Basel Principles for effective risk data aggregation and risk data reporting*.¹⁸⁰⁹ It should further include "reverse" stress-testing, which focuses on the area of vulnerability of a bank in the recovery and resolution regime once its business model becomes unviable and unsustainable.¹⁸¹⁰

Member States concerned. Article 98(6) thereof stipulates that the risk of excessive leverage might impact on the liquidity position of an institution.

¹⁸⁰⁴ As alluded to in subparagraph 4.5.1.5 above, Article 102 of the CRD IV provides for supervisory measures that are incorporated in Article 104 of the CRD IV. Article 104 of the CRD IV stipulates that supervisors may require banks to hold own funds in excess of minimum regulatory capital to address risks that are not covered by regulatory capital; restrict or limit the business operations of banks or to request the divestment of activities that pose excessive risks to the soundness of an institution; impose specific liquidity requirements; require additional disclosures; reinforcement of risk-management governance and recovery and resolution planning.

¹⁸⁰⁵ Article 104(1)(c)(e)(i)(l) of the CRD IV.

¹⁸⁰⁶ Article 100 of the CRD IV; Article 22(2) of the EBA Regulation; the EBA Guidelines on institutions' stress testing Final Report (July 2018) available at <https://eba.europa.eu/sites/default/documents/files/documents/10180/2282644/2b604bc8-fd08-4b17-ac4a-cdd5e662b802/Guidelines%20on%20institutions%20stress%20testing%20%28EBA-GL-2018-04%29.pdf?retry=1> (accessed 21 July 2018), see paragraphs 47, 48 and 49 thereof.

¹⁸⁰⁷ *Ibid.*

¹⁸⁰⁸ Article 5(6) of the BRRD.

¹⁸⁰⁹ The EBA Guidelines on institutions' stress testing Final Report (July 2018) available at <https://eba.europa.eu/sites/default/documents/files/documents/10180/2282644/2b604bc8-fd08-4b17-ac4a-cdd5e662b802/Guidelines%20on%20institutions%20stress%20testing%20%28EBA-GL-2018-04%29.pdf?retry=1> (accessed 21 July 2018); Principles for effective risk data aggregation and risk reporting are discussed in paragraph 2.5, subparagraph 2.5.3, of Chapter Two.

¹⁸¹⁰ Article 32 of the BRRD.

The Netherlands implemented the EU SREP in Article 3:18a of the Financial Supervision Act. The Dutch risk-management framework conforms to the technical criteria that are stipulated in Article 98 of the CRD IV.¹⁸¹¹ DNB and the ECB undertake the stress-testing for Dutch banks at least once a year to facilitate the evaluation of the SREP.¹⁸¹² DNB's supervisory strategy called FOCUS, in terms of which a bank's risk profile informs its supervisory regime (meaning that the riskier a bank is the more intrusive its supervision must be), incorporates more intrusive and vigorous supervision for O-SIIs.¹⁸¹³ FOCUS was guided by several lessons from the 2008 GFC that are articulated in two DNB-publications, namely, *From analysis to action – progress report on the action plan for a change in the conduct of supervision (Uitvoering Plan van aanpak cultuurverandering toezicht DNB)*¹⁸¹⁴ and *the Supervisory strategy 2010-2014*.¹⁸¹⁵ In general, FOCUS entails the risk assessment of macro-prudential risks that are recorded in a “macro register”, as well as micro-prudential risks, and together these risks are translated into supervisory action.¹⁸¹⁶ In terms of FOCUS, the “optimum level” of supervisory regime seeks to address banks with a low risk profile; the “neutral level” addresses banks that have neither a high nor a low risk profile; the “urgent level” addresses a high risk of banks and emergency situations without delay. To enable proper execution of DNB supervisory regime, DNB has a

¹⁸¹¹ Article 23a of the Decree on Prudential Rules under the Financial Supervision Act.

¹⁸¹² Article 3:18a(5) of the Decree on Prudential Rules under the Financial Supervision Act. See further, Sahin C *et al* (2020) “Banking stress test effects on returns and risks” 117 *Journal of Banking and Finance* 1.

¹⁸¹³ DNB FOCUS! The new supervisory approach of De Nederlandsche Bank (May 2012) available at <http://www.toezicht.dnb.nl/en/binaries/51-225814.pdf> (accessed 16 May 2018).

¹⁸¹⁴ DNB Report on analysis to action plan for a change in the conduct of supervision (August 2010) available at https://www.dnb.nl/en/binaries/From%20Analysis%20to%20Action_tcm47-239499.pdf (accessed 16 May 2018);

¹⁸¹⁵ DNB Supervisory strategy 2010-2014 available at https://www.dnb.nl/en/binaries/DNB%20Supervisory%20Strategy%202010-2014_tcm47-238092.pdf?2016082702 (accessed 16 May 2018); Further see, DNB Annual Report (2012) available at https://www.dnb.nl/en/binaries/Annual%20Report%20DNB%202012_tcm47-286661.pdf (accessed 16 May 2018); Other subsequent supervisory strategies are DNB Supervisory strategy 2014-2018 available at https://www.dnb.nl/en/binaries/Supervisory_tcm47-307508.pdf?2017021722 (accessed 16 May 2018); DNB Supervisory strategy 2018-2022 available at https://www.dnb.nl/en/binaries/DNB_Visie%20op%20Toezicht_ENG_tcm47-366240.pdf?2020062212 (accessed 22 June 2020); and DNB Supervisory strategy 2021-2024 <https://www.dnb.nl/media/mbfbhzdj/supervisory-strategy-2021-2024.pdf> (accessed 7 January 2023).

¹⁸¹⁶ DNB further adopts the supervisory theme-based register issued annually involving the thematic programmes outlining the assessment of risk areas in financial institutions. For this, see DNB Supervisory themes (2011) available at <https://www.dnb.nl/media/2rubh5rb/dnb-supervisory-themes-2011.pdf> (accessed 16 May 2018).

Risk Management of Supervision Processes Department that verifies whether supervision is being conducted in accordance with the corresponding supervisory regime and whether it produces the desired results.¹⁸¹⁷

4.5.5 The large exposure limit framework

The CRR, as amended by the CRR II, subjects all EU banks to large exposure requirements.¹⁸¹⁸ Banks are required to report a large exposure to their competent authorities including the identity of the client or the group of connected clients to which they have the exposure, the exposure value before, and after, taking into account the effect of credit risk mitigation.¹⁸¹⁹ Two or more clients connected by a control relationship or that are economically interdependent are considered to pose a single risk.¹⁸²⁰

In terms of the CRR, a bank must not incur an exposure to a client or group of clients of which the value exceeds 25 per cent of its Tier 1 capital, after taking into account the effect of credit risk mitigation.¹⁸²¹ In the case where the client is a bank or the group of clients includes one or more institutions, the value of the exposure must not exceed 25 per cent of its Tier 1 capital or Euro 150 million, whichever is higher.¹⁸²² However, where the value of the exposure exceeds Euro 150 million, the value of such exposure must not exceed a reasonable limit as set in terms of the bank's Tier 1 capital.¹⁸²³

The CRR requires banks to comply with the large exposure limit at all times. Without prejudice to this requirement, Article 396(1) of the CRR, nonetheless, stipulates that in an exceptional case where a bank breaches the exposure limit, such bank must

¹⁸¹⁷ *Ibid.*

¹⁸¹⁸ Article 387 of the CCR.

¹⁸¹⁹ Article 96 of the CRR II.

¹⁸²⁰ The EBA Final Report Guidelines on connected clients under Article 4(1)(39) of Regulation (EU) No 575/2013 (November 2017) available at <https://www.eba.europa.eu/sites/default/documents/files/documents/10180/2025808/a77be1e9-7564-47d2-a9d1-b7da98220352/Final%20Guidelines%20on%20connected%20clients%20%28EBA-GL-2017-15%29.pdf?retry=1> (accessed 22 August 2022). The EBA developed these guidelines subject to Article 390(8) of the CRR. Section 4(1)(39) of the CRR provides that two or more persons constitute a single risk when one of them is directly or indirectly having control over the other or others.

¹⁸²¹ Article 395(1) of the CRR, as amended by Article 97(a)(1) of the CCR II.

¹⁸²² *Ibid.*

¹⁸²³ Article 97(a)(1) of the CRR II stipulates that competent authorities are required to set a lower concentration exposure limit than Euro 150 million, in which case they must inform the EBA and the European Commission.

report, without delay, the value of the exposure that exceeds the exposure limit to the competent authority. The competent authority may then allow such bank a limited time period within which to comply with the large exposure limit. Where the value of the exposure that exceeds the large exposure limit is higher than Euro 150 million, the competent authority is permitted to allow the exposure limit to be exceeded, on a case-by-case basis.¹⁸²⁴ Where the competent authority allows the limit to be exceeded for a period beyond three months, the bank concerned must present a plan for a timely return to compliance with the set limit to the satisfaction of the competent authority. The bank must further carry out the plan as agreed with the competent authority, and the competent authority must monitor the implementation of the plan and must require a more rapid return to compliance, if appropriate.¹⁸²⁵

The EBA issued *Final Guidelines specifying the criteria to assess the exceptional cases when institutions exceed the large exposure limits of Article 395(1) of Regulation (EU) No 575/2013 and the time and measures to return to compliance pursuant to Article 396(3) of Regulation (EU) No 575/2013*.¹⁸²⁶ These guidelines set out the following considerations when assessing the breach of a large exposure limit where an exceptional case justifies the breach: the breach must be rare; any breach that a bank could have foreseen would not constitute an exceptional case; and the breach must have been beyond the bank's control. When reporting the breach of a large exposure limit, a bank must furnish a minimum set of information, namely: the name of the client or group of connected counterparties; the date of the occurrence of the breach and the magnitude thereof relative to Tier 1 capital; and the reasons for breach and expected time needed to return to compliance.

¹⁸²⁴ Article 98 of the CRR II.

¹⁸²⁵ *Ibid.*

¹⁸²⁶ Final Guidelines specifying the criteria to assess the exceptional cases when institutions exceed the large exposure limits of Article 395(1) of Regulation (EU) No 575/2013 and the time and measures to return to compliance pursuant to Article 396(3) of Regulation (EU) No 575/2013 (September 2021) available at https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2021/EBA-GL-2021-09%20GL%20on%20large%20exposure%20breaches/1019615/Final%20Report%20on%20Guidelines%20on%20large%20exposures%20breaches%20and%20time%20and%20measures%20to%20return%20to%20compliance.pdf (accessed 19 August 2022).

When considering the appropriate time for return to compliance, the competent authority must take the following factors into account: the bank's record of breach (and if the breach is repeated, a bank cannot be granted beyond three months to return to compliance); the reasons, complexity and magnitude of breach; the type of counterparties and their creditworthiness; and the measures already taken to address the breach. When assessing the measures of the bank to return to compliance, the competent authority should evaluate whether a bank would no longer be close to breaching the limit again in the near future; and the bank's set of measures for return to compliance must incorporate the following: arrangements to reduce the exposure; increase of own funds; reinforcement of internal risk-management and control processes; procedures to ensure timely implementation of the measures to return to compliance; and a detailed timetable to implement the planned measures.

4.5.6 National flexibility measures

The initial part of this Chapter highlighted that Article 458 of the CRR permits the relevant national authorities to adopt national flexibility measures to address the intensity of macro-prudential or systemic risks in their own jurisdictions that cannot be adequately addressed by common macro-prudential measures that are provided for in the CRD IV package.¹⁸²⁷ To that end, the ESRB and the EBA are enjoined to provide their opinion to the Council, the European Commission, and the Member State concerned, on the following: the intensity of macroprudential or systemic risk; a justification why these risks cannot be addressed by the measures incorporated in the CRR; the effectiveness and proportionality of national flexibility measures in addressing these risks; and assessment of the likely positive or negative impact of these measures on the internal market based on the information which is available to the Member State concerned.¹⁸²⁸ As per Article 460 of the CRR, where macro-prudential measures that are contained in the CRD IV package are insufficient to deal with the intensity of micro-prudential and macro-prudential risks arising from market developments in the Union or outside the Union affecting all Member States, stricter prudential measures are adopted by the European Commission.¹⁸²⁹ The European Commission, assisted by the ESRB, must, at least annually, submit to the European

¹⁸²⁷ See paragraph 4.2 above.

¹⁸²⁸ Article 458(2) and (4) of the CRR.

¹⁸²⁹ Article 459 of the CRR.

Parliament and the Council a Report on market developments potentially requiring the application of the national flexibility measures.¹⁸³⁰

Some of the most commonly used national flexibility measures in the EU Member States include loan-to-value (LTV), loan-to-income (LTI) and Debt Service-to-Income (DSTI) ratios, and they are aimed at curtailing systemic risk that is associated with excessive lending in the mortgage industry.¹⁸³¹ Therefore, the ECB proposes the harmonisation of the LTV and LTI ratios for their consistent application in the EU internal market.¹⁸³² According to Hartmann, this proposed common approach would ensure the effective mitigation of systemic risk originating from the real estate sector throughout the EU.¹⁸³³ This macro-prudential framework would specifically target a build-up of systemic risk owing to credit expansion in the mortgage industry relative to the CCyB that regulates excessive credit expansion in general.¹⁸³⁴

The Dutch national flexibility measures were implemented in 2013 by a ministerial regulation consistent with Article 3:66 of the Financial Supervision Act. The Minister of Finance introduced LTV and LTI ratios in response to the recommendations of the Dutch Banks Structure Committee (otherwise known as the Wijffels Committee) regarding the regulation of systemic risk emanating from the Dutch mortgage lending industry.¹⁸³⁵ After issuing a warning in 2016, the Financial Stability Board (FSB)

¹⁸³⁰ *Ibid.*

¹⁸³¹ Dierick F (2014) "The ESRB and national macro-prudential measures – its role and first experiences" Macro-prudential Commentaries (July 2014) available at https://www.esrb.europa.eu/pub/pdf/commentaries/ESRB_commentary_1407.pdf?3d99c1394fb1e3e890f97aedf84927f9 (accessed 1 March 2018); Van den End JW (2016) "A macroprudential approach to address liquidity risk with Loan-to-Deposit ratio" 22 *The European Journal of Finance* 237.

¹⁸³² ECB Financial integration in Europe (May 2017)

available at

<https://www.ecb.europa.eu/pub/pdf/other/ecb.financialintegrationineurope201705.en.pdf> (accessed 23 February 2018); ECB contribution to the European Commission's consultation on the review of the EU macroprudential policy framework (2016)

available at

<http://www.ecb.europa.eu/pub/pdf/other/revieweumacroprudentialpolicyframework201612.en.pdf> (accessed 3 May 2018); Claessens S *et al* (2013) "Macro-prudential policies to mitigate financial system vulnerabilities" 39 *Journal of International Money and Finance* 153

¹⁸³³ Hartmann P (2015) "Real estate markets and macroprudential policy in Europe" 47 *Journal of Money, Credit and Banking* 69-80.

¹⁸³⁴ De Nederlandsche Bank Financial Stability Report Autumn 2016 available at

<https://www.dnb.nl/en/publications/publications-dnb/fsr/financial-stability-report-autumn-2016/> (accessed 3 April 2018).

¹⁸³⁵ The Dutch Banks Structure Committee (Wijffels Committee) recommendation (June 2013) available at

recommended the utilisation of these macro-prudential instruments to restrict undue real estate lending in the Netherlands.¹⁸³⁶ Van't Hof observes that these limits are intended to restrict high mortgage lending by Dutch banks to address cyclical systemic risks.¹⁸³⁷

In the Financial Stability Report of October 2019, DNB announced that banks will be required to maintain more capital against their mortgage loan portfolios for purposes of decreasing systemic risk reportedly posed by all-time high housing lending.¹⁸³⁸ DNB envisaged imposing a minimum average risk weight for mortgage loans after issuing a consultative document in October 2019,¹⁸³⁹ following the recommendation issued by the ESRB regarding the curtailment of the housing systemic risk.¹⁸⁴⁰ This measure,

<https://translate.google.co.za/translate?hl=en&sl=nl&u=https://www.vno-ncw.nl/meer-informatie/rapport-commissie-structuur-nederlandse-banken&prev=search> (accessed 26 June 2018). The Wijffels Committee was set up to explore structural reforms of the Dutch banking sector with a view to ensuring their resolvability so as to preserve financial stability.

¹⁸³⁶ Warning of the European Systemic Risk Board of 22 September 2016 on medium-term vulnerabilities in the residential real estate sector of the Netherlands (ESRB/2016/10) available at https://www.esrb.europa.eu/pub/pdf/warnings/161128_ESRB_NL_warning.en.pdf?a3a1061e97c9337a48f7d57340cbb88f (accessed 3 April 2018); Recommendation of the European Systemic Risk Board of 31 October 2016 on closing real estate data gaps available at https://www.esrb.europa.eu/pub/pdf/recommendations/ESRB_2016_14.en.pdf?230e5c27078803424f6cc2d7e6584dad (accessed 2 March 2018); See further, FSB Peer review of the Netherlands – Review Report (November 2014) available at <https://www.fsb.org/wp-content/uploads/Netherlands-peer-review-report.pdf> (accessed 3 April 2018).

¹⁸³⁷ Van't Hof A (2016) "Designing macroprudential regulation and supervision outside the scope of the banking union: Lessons from the Netherlands and Ireland" 18 *Journal of Banking Regulation* 201-212; Eerola E (2017) "Macroprudential measures in the housing markets – a note on the empirical literature" 18 *The Journal of Risk Finance* 326; Cerutti EM *et al* (2017) "The use and effectiveness of macroprudential policies: New evidence" 28 *Journal of Financial Stability* 203-224; Claessens S *et al* (2013) "Macro-prudential policies to mitigate financial system vulnerabilities" 39 *Journal of International Money and Finance* 153-185; Crowe C *et al* (2013) "How to deal with real estate booms: Lessons from country experiences" 9 *Journal of Financial Stability* 300-319; Lim C *et al* "Macroprudential policy: What instruments and how to use them? Lessons from country experiences" (October 2011) IMF Working Paper available at <https://www.imf.org/external/pubs/ft/wp/2011/wp11238.pdf> (accessed 3 May 2018); Mian A *et al* (2009) "The consequences of mortgage credit expansion: Evidence from the US mortgage default crisis" 124 *Quarterly Journal of Economics* 1449-1496; Vandebussche J (2015) "Macroprudential policies and housing prices: A new database and empirical evidence for Central, Eastern, and Southeastern Europe" 47 *Journal of Money, Credit and Banking*, 344-377; IMF Kingdom of the Netherlands – Netherlands Financial System Stability Assessment April 2017 available at <https://www.bing.com/search?q=IMF+FSAP+report+April+2017+in+the+Netherlands&cvid=b4d0b02b1e4d44c4b748f6ce192a43a8&FORM=ANNTA1&PC=U531> (accessed 3 May 2018).

¹⁸³⁸ DNB Financial Stability Report Autumn 2019 available at <https://www.dnb.nl/en/publications/publications-dnb/fsr/financial-stability-report-autumn-2019/> (accessed 10 June 2020).

¹⁸³⁹ Regulation on risk weighting for mortgage loans – consultation version available at <https://www.dnb.nl/media/unchzokd/consultatieversie-regeling-risicoweging-hypotheccaire-leningen.pdf> (accessed 5 June 2020).

¹⁸⁴⁰ Recommendation of the European Systemic Risk Board of 27 June 2019 on medium-term vulnerabilities in the residential real estate sector in the Netherlands (ESRB/2019/7) available at

which is designed to run for a period of two years, and which would be renewed afterwards, was set to enter into force six months after the publication of the legal text in the Government Gazette.¹⁸⁴¹

4.5.7 Recovery and resolution planning

Although the focus of this thesis is not on bank resolution, it has been observed that is nevertheless important to make a few remarks in this regard given the systemic importance of SIFIs and the possibility that their failure may lead to widescale financial system collapse.¹⁸⁴² *The Bank Recovery and Resolution Directive of 2014* (BRRD) is the legal framework for orderly resolution regimes for EU banks.¹⁸⁴³ The BRRD was amended in 2019 by *the Bank Recovery and Resolution Directive II* (BRRD II).¹⁸⁴⁴ Article 3 of the BRRD requires each Member State to designate one or more resolution authorities that are charged with applying the resolution tools and exercising the resolution powers set out in the BRRD. *The Single Resolution Mechanism Regulation* (the SRM Regulation),¹⁸⁴⁵ as amended by *the Single Resolution Mechanism Regulation II* (the SRM Regulation II),¹⁸⁴⁶ creates the Single Resolution Board (SRB)

https://www.esrb.europa.eu/pub/pdf/recommendations/esrb.recommendation190923_nl_recommandation~dedbe77acd.en.pdf (accessed 5 June 2020).

¹⁸⁴¹ DNB Template for notifying intended measures to be taken under Article 458 of the Capital Requirements Regulation (CRR) (December 2019) available at https://www.esrb.europa.eu/pub/pdf/other/esrb.notification200311_crr_nl~244fe01d0a.en.pdf (accessed 5 June 2020).

¹⁸⁴² See paragraph 1.7 of Chapter One.

¹⁸⁴³ Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2004/25/EC, 2007/36/EC, 2012/30/EU and 2013/36/EU and Regulations (EU) No 2093/2010 and (EU) No 648/2012, of the European Parliament and of the Council available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0059&from=EN> (accessed 23 February 2018); See paragraph 2.4, subparagraph 2.4.7, for the discussion of the resolution regimes.

¹⁸⁴⁴ Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0879&from=EN> (accessed 5 June 2020).

¹⁸⁴⁵ Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0806&from=EN> (accessed 25 July 2018).

¹⁸⁴⁶ Regulation (EU) 2019/877 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 806/2014 as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms (SRM Regulation II) available at

as the resolution authority within the SRM. As noted in the discussion of the role of the ECB within the banking union,¹⁸⁴⁷ the SRM is the second pillar of the banking union that was established after the introduction of the SSM.¹⁸⁴⁸

The BRRD further mandates the resolution authority, in consultation with the competent authority and the competent authorities of host jurisdictions, to draw up individual and group resolution plans for banks.¹⁸⁴⁹ Article 50 of the BRRD also requires resolution colleges for group-level resolution. To facilitate the drawing up of resolution plans, the resolution authorities must ensure that the entities submit the required information.¹⁸⁵⁰

In the Netherlands, DNB is the resolution authority for banks that do not fall within the scope of the SRM.¹⁸⁵¹ Accordingly, DNB compiles resolution plans for such banks.¹⁸⁵² In line with the BRRD, DNB, and the SRB, where applicable, must determine the contents of recovery plans (which are drafted by the banks themselves) and resolution plans (which are drafted by the resolution authority with input from the banks).¹⁸⁵³ The content of the recovery plans includes information on governance procedures and policies of a bank, core business lines including legal structures and critical functions and recovery options, and any material changes in the recovery plan and the preparatory measures for its implementation and effectiveness.¹⁸⁵⁴ Further, this

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0877&from=EN> (accessed 5 June 2020).

¹⁸⁴⁷ See subparagraph 4.2.3 above.

¹⁸⁴⁸ See paragraph 4.2, subparagraph 4.2.3 above, for a detailed discussion of the pillars of the banking union.

¹⁸⁴⁹ Articles 10 and 12A of the BRRD.

¹⁸⁵⁰ Article 11 and 13 of the BRRD.

¹⁸⁵¹ Article 3a:9 of the Financial Supervision Act; See further, DNB A new step towards manageable systemically important banks (July 2012) available at <https://www.dnb.nl/en/news/news-and-archive/dnbulletin-2012/dnb275575.jsp> (accessed 20 July 2019).

¹⁸⁵² DNB Resolution planning for banks available at

<https://www.dnb.nl/en/sector-information/resolution-sector/resolution-of-banks/resolution-planning-for-banks/> (accessed 20 July 2019).

¹⁸⁵³ Article 4 of BRRD.

¹⁸⁵⁴ Articles 3, 5, 6, 8, 9, 14, 15 and 22 of the Commission Delegated Regulation (EU) 2016/1075 of March 2016 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the content of recovery plans, resolution plans and group resolution plans, the minimum criteria that the competent authority is to assess as regards recovery plans and group recovery plans, the conditions for group financial support, the requirements for independent valuers, the contractual recognition of write-down and conversion powers, the procedures and contents of notification requirements and of notice of suspension and the operational functioning of the resolution colleges (Commission Delegated Regulation (EU) 2016/1075) available at

content incorporates a summary of the plan, a credible resolution strategy and the different resolution actions that would be applied to the identified legal entity or entities.¹⁸⁵⁵

In terms of the BRRD a resolution plan should incorporate a description of arrangements to ensure continuity of critical functions during resolution decision-making; a description of financing requirements and financing sources necessary for the implementation of the resolution strategy; information regarding cooperation and coordination between resolution authorities for group resolution plans; and plans for communication with critical stakeholders groups.¹⁸⁵⁶ A resolution plan must also contain a contractual term pertaining to the acknowledgement and acceptance by the counterparty of a bank in a resolution process that the liability may be subject to the exercise of write-down and conversion powers by the resolution authority (that is, the conversion of debt into equity to facilitate bail-in of the affected bank).¹⁸⁵⁷

The credibility and feasibility of the resolution strategy that is selected under a resolution plan, which may either be the multiple-point-of-entry (MPoE) strategy or the single-point-of-entry (SPoE)-strategy, must be assessed regularly by the resolution authorities and the authorities must revise it where appropriate.¹⁸⁵⁸ The assessment of the credibility of a resolution plan must specifically consider the likely impact of the resolution of a bank on the financial system to ensure the continuity of its critical functions, whereas the feasibility aspect evaluates whether there will be timely and required payment of deposits under the Deposit Guarantee Scheme (DGS) when a bank fails.¹⁸⁵⁹ The feasibility assessment identifies obstacles to a bank's resolution such as the insufficiency of the minimum requirements for own funds and eligible liabilities (MREL) and total-loss absorbency capacity (TLAC), illiquid assets, complex

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1075&from=EN> (accessed 23 February 2018).

¹⁸⁵⁵ Article 22 of the Commission Delegated Regulation (EU) 2016/1075; Articles 10 and 12 of the BRRD.

¹⁸⁵⁶ Article 10 of the BRRD.

¹⁸⁵⁷ Article 55 of the BRRD; Article 44 of the Commission Delegated Regulation (EU) 2016/1075.

¹⁸⁵⁸ Articles 23 and 25 of the Commission Delegated Regulation (EU) 2016/1075; Articles 26 to 32 of the BRRD.

¹⁸⁵⁹ Article 24 of the Commission Delegated Regulation (EU) 2016/1075; Article 31 of the BRRD.

structure and the inability of accurate assessment due to inadequate information.¹⁸⁶⁰ In the EU, MREL refers to the minimum capital that a bank needs to hold to absorb losses during resolution while TLAC is a loss-absorbing capital for EU global systemically important institutions (G-SIIs) that are placed into resolution.¹⁸⁶¹

4.6 The legal remedies for challenging identification of Dutch O-SIIs

The Algemene Wet Bestuursrecht, known as *the General Administrative Law Act*, (hereinafter GALA)¹⁸⁶² allows persons that are affected by decisions of administrative bodies to challenge such decisions.¹⁸⁶³ A decision is defined as a written decision of an administrative body that is made in the exercise of its authority under the applicable law.¹⁸⁶⁴ The GALA stipulates that interested parties can submit a notice of objection, within six weeks, against the decision of the administrative body.¹⁸⁶⁵ In general, however, the objection does not suspend the effect of the decision.¹⁸⁶⁶

The interested party is afforded a right of hearing before a final decision on the matter is made.¹⁸⁶⁷ The administrative body will reconsider the contested decision, and if good cause is shown, it will revoke the decision and replace it with a new decision.¹⁸⁶⁸ In terms of Article 6:22 of the GALA, a decision against which an objection has been lodged may be upheld if it is unlikely to adversely affect the interested party.¹⁸⁶⁹

If an interested party is granted the right to lodge an appeal before the administrative court, such a party must lodge an objection with the administrative body first.¹⁸⁷⁰ In other words, an interested party may appeal against a decision of the administrative

¹⁸⁶⁰ European Parliament briefing, loss absorbing capacity in the banking union: TLAC implementation and MREL review (July 2016) available at [https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/574408/IPOL_BRI\(2016\)574408_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/574408/IPOL_BRI(2016)574408_EN.pdf) (accessed 25 July 2018); MREL/TLAC available at https://www.dnb.nl/en/binaries/MREL_TLAC_tcm47-361556.pdf (accessed 30 November 2019).

¹⁸⁶¹ *Ibid.*

¹⁸⁶² Law of 4 June 1992, containing general rules of administrative law (General Administrative Law Act) available at <https://wetten.overheid.nl/BWBR0005537/2020-07-01> (accessed 16 May 2018).

¹⁸⁶³ Article 1:1 of the GALA defines an administrative body as a body of legal person established under public law, or another person or college, with some public authority. In terms of Article 1:2 thereof, an interested party means the person whose interest is directly affected by a decision.

¹⁸⁶⁴ Article 1:3 of the GALA.

¹⁸⁶⁵ Article 6:4 and 6:7 of the GALA.

¹⁸⁶⁶ Article 6:16 of the GALA.

¹⁸⁶⁷ Article 7:2 of the GALA.

¹⁸⁶⁸ Article 7:11 of the GALA.

¹⁸⁶⁹ Article 7:25 of the GALA.

¹⁸⁷⁰ Articles 7:1a (1) of the GALA.

body to the administrative court if an objection was unsuccessful.¹⁸⁷¹ However, an interested party may directly appeal the decision of the administrative body without lodging an objection first if the leave of court is granted.¹⁸⁷² An interested party may further appeal against the judgment of the administrative court to the appeal court.¹⁸⁷³

From the aforementioned, it appears that Dutch banks that are identified as O-SIIs would be able to oppose the DNB's decision of designation which has significant legal implications that attract more stringent prudential regulation and intensified supervision. These banks are entitled in terms of the GALA to raise an objection with DNB and to appeal to the administrative court if they are aggrieved by the decision. It is, however, to be noted that these legal remedies would only be available subsequent to the identification process.

Banks are not afforded an opportunity to make submissions prior to the identification stage because they are automatically identified as O-SIIs with the DNB indicator-based measurement approach upon exceeding a specified cut-off systemic score. This is equally true for banks that fall below the set systemic score threshold of the indicator-based measurement approach and are thus identified as O-SIIs subject to DNB's discretion.

4.7 Conclusion

The Netherlands implemented the EU O-SII framework through the Financial Supervision Act, as amended, within the Dutch Twin Peaks model in line with the CRD IV package, as amended. This framework is operationalised under the financial regulatory architecture of the ESFS (constituted of the ESRB, the EBA, the EIOPA, the ESMA, and the national competent authorities) and the SSM.

The ESRB's macro-prudential policy framework is relevant to the regulation of EU O-SIIs because it broadly incorporates macro-prudential instruments that are directly targeted at specific macro-prudential intermediate objectives to regulate systemic risk arising from banks in order to safeguard the EU financial system. The EBA is the

¹⁸⁷¹ Article 8:1 of the GALA.

¹⁸⁷² Articles 7:1a (1) and 8:1 of the GALA.

¹⁸⁷³ Article 105 of the GALA.

crucial role player in the context of the identification of EU O-SIIs, specifically in the development of the guidelines providing guidance for the national competent authorities regarding the identification of O-SIIs across EU Member States in accordance with the CRD IV, as amended. By virtue of the SSM Regulation, the ECB has the authority to regulate significant credit institutions within the Eurozone and is accordingly included in the ESFS. Further, the ECB is vested with supervisory authority over the Eurozone financial system.

The Dutch financial system is regulated in accordance with the Dutch Twin Peaks model in terms of which DNB has the overall financial stability mandate and is responsible for the supervision of the Dutch financial system and prudential regulation of financial institutions, whereas the AFM regulates the market conduct of Dutch financial institutions. Although the prudential regulation of Dutch banks is the primary responsibility of DNB, the ECB may exercise macro-prudential regulatory authority entailing the “topping up power” in respect of higher capital requirements under the SSM. DNB shares the prudential regulation of credit institutions with the ECB to the extent that the latter is responsible for regulating “significant” credit institutions and the former is charged with the regulation of credit institutions which are classified as “not significant”.

The Dutch O-SII framework is operationalised within the EU-wide O-SII framework. DNB identifies O-SIIs (in consultation with the ECB) consistent with the *EBA Guidelines on O-SIIs assessment*, consisting of the indicator-based measurement approach, as supplemented by supervisory judgment. The DNB supervisory overlay methodology is informed by the optional indicators of the *EBA Guidelines on O-SIIs assessment* that are relevant in the context of the Dutch financial system and banking sector. Out of five Dutch O-SIIs, ING, Rabobank, ABN, and BNG have been identified as O-SIIs with the indicator-based measurement approach, and De Volksbank was identified as an O-SII in terms of supervisory judgment. ING, Rabobank and ABN are the largest O-SIIs relative to the Dutch GDP and their total market share in the financial system.

Consistent with the CRD IV package, as amended, Dutch O-SIIs are subject to the capital buffer regime comprising the CCvB, the CCyB and the O-SII buffer. DNB

abolished the SyRB requirement after the implementation of the CRD V. The total components of the capital buffers add up to a combined capital buffer requirement for individual Dutch O-SIIs.

Other prudential requirements that apply to Dutch O-SIIs include the supplementary leverage ratio, liquidity standards and a large exposure limit. Further, the Dutch supervisory regime for O-SIIs is consistent with the CRD IV package, as amended, and it incorporates the enhanced risk-management framework and stress-testing regime, amongst other requirements. In addition, Dutch O-SIIs are subject to national flexibility measures articulated in Article 458 of the CRR, and these measures fall outside the ambit of the CRD IV package. The Netherlands has further implemented recovery and resolution plans for banks.

Overall, the effectiveness of the Dutch macro-prudential framework in regulating systemic risk is yet to be tested given the relatively recent implementation of the macro-prudential regime for the EU financial system. Further, there is currently no case law on the identification of O-SIIs and the resultant stringent prudential regulation and enhanced supervision in the Netherlands because Dutch O-SIIs have not yet explored the available legal remedies.

CHAPTER FIVE

THE SOUTH AFRICAN LEGAL FRAMEWORK FOR DESIGNATION AND REGULATION OF DOMESTIC SYSTEMICALLY IMPORTANT BANKS (D-SIBs)

5.1 Introduction

This Chapter analyses the implementation of the *Basel D-SIB framework* within the context of the South African financial and banking system. The analysis focuses on D-SIBs given that there are currently no G-SIBs in South Africa.¹⁸⁷⁴ The preliminary part of this Chapter highlights the legal and regulatory architecture for the South African financial system to set the scene for the discussion of the institutional and operational framework for banks that have been designated as SIFIs (SIFI-banks/D-SIBs) in South Africa. The general legislative procedure for the designation of financial institutions as SIFIs as well as the review of the implementation of the *Basel D-SIB framework* pertaining to identification of banks as D-SIBs are detailed in the discussions that follow. The Chapter also interrogates the legal consequences of designation of banks as SIFIs pertaining to the application of stringent prudential requirements. Further, the available legal remedies for banks that are designated as SIFIs are briefly investigated. The Chapter finally considers the developments in South Africa regarding the implementation of the *Basel D-SIB framework*.

5.2 The South African Twin Peaks Model of Financial Regulation

The South African financial system consists of banks and other non-bank financial institutions that render a variety of financial services. The SARB, as the central bank of South Africa, was created in terms of section 9 of *the Currency and Banking Act No. 31 of 1920* and is currently governed in terms of *the South African Reserve Bank Act No. 90 of 1989* (SARB Act).¹⁸⁷⁵ Section 223 of *the Constitution of the Republic of South Africa, 1996* (the South African Constitution) confirms the position of the SARB as the central bank of South Africa.¹⁸⁷⁶ In terms of section 3 of the SARB Act, the SARB's

¹⁸⁷⁴ Paragraph 5.5 below lists banks that have been identified as D-SIBs in the South African banking sector. Currently, there are no South African banks that have been identified as G-SIBs.

¹⁸⁷⁵ Currency and Banking Act No.31 of 1920 available at <https://www.resbank.co.za/en/home/about-us/history> (accessed 2 June 2016); South African Reserve Bank Act No. 90 of 1989 available at

https://www.gov.za/sites/default/files/gcis_document/201503/act-90-1989.pdf (accessed 2 June 2016).

¹⁸⁷⁶ The Constitution of the Republic of South Africa 1996 available at

primary objective is “the protection of the value of the currency of the Republic in the interest of balanced and sustainable economic growth in the Republic.” The SARB thus has the responsibility for implementing monetary policy aimed at price stability.¹⁸⁷⁷ This primary mandate was later confirmed in section 224(1) of the Constitution of the Republic of South Africa, 1996. The SARB also had other powers, functions and duties in terms of the SARB Act prior to South Africa’s move to a Twin Peaks model, as discussed below and the SARB fulfilled the traditional central bank role of supervisor of banks, overseer of the payments, clearing and settlement system, and acting as lender of last resort. In addition, the SARB also had the responsibility for the maintenance of financial stability although this mandate was implied and not expressly captured in the SARB Act.¹⁸⁷⁸ Section 225 of the South African Constitution provides that the powers and functions of the SARB are those that are customarily exercised and performed by central banks.¹⁸⁷⁹ Section 224(2) of the South African Constitution confirms the SARB’s autonomy by requiring it to perform its functions independently without fear, favour or prejudice and to consult with the Ministers responsible for the financial sector.

South Africa has recently transitioned to a Twin Peaks model of financial regulation introduced by *the Financial Sector Regulation Act No.9 of 2017* (FSR Act), which was signed into law in August 2017 and that is being phased-in incrementally since 1 April 2018.¹⁸⁸⁰

<http://www.justice.gov.za/legislation/constitution/SACConstitution-web-eng.pdf> (accessed 2 June 2016).

¹⁸⁷⁷ Address by Mboweni TT, Governor of the South African Reserve Bank, at the Pretoria Council for Businesswomen, Pretoria, March 14, 2000 “The role of the South African Reserve Bank in the economy” <https://www.bis.org/review/r000321a.pdf> (accessed 31 December 2019); See also De Jager J (2006) “The South African Reserve Bank: An evolution of the origin, evolution and status as central bank (Part 2) 18 *South African Mercantile Law Journal* 274-283; De Jager JJ (2013) “The South Africa Reserve Bank: Blowing the winds of change (Part 1)” 25 *SA Mercantile Law Journal* 342 at 344 and 357.

¹⁸⁷⁸ In terms of section 10 of the SARB Act, the powers and functions of the SARB include: making and issuing banknotes and coins; establishing, organising and participating in a clearing system and taking up shares in a company formed for the management of and operation of any such system; acquiring shares in a limited company; accepting money on deposit; granting loans and advances; buying and selling securities; buying and selling foreign currency; opening credits and issuing guarantees; and performing such any other functions of bankers and financial agents as central banks customarily may perform. See further, that the role of the SARB as lender of last resort is expanded by De Jager J (2010) “Central bank, lender of last resort assistance: An elusive concept?” 43 *De Jure* 228; See also Van Niekerk MG *A comparative analysis of the role of the central bank in promoting and maintaining financial stability in South Africa* (LLD thesis, University of Pretoria, 2018) at 72 to 79.

¹⁸⁷⁹ See section 10 of the SARB Act.

¹⁸⁸⁰ The Financial Sector Regulation Act No.9 of 2017 available at <http://www.treasury.gov.za/legislation/acts/2017/Act%209%20of%202017%20FinanSectorRegulation.pdf> (accessed 5 June 2018). The Minister of Finance tabled the Financial Sector Regulation Bill in

The new South African Twin Peaks model entails “regulation by objective” and replaces the previous sectoral model of financial regulation which followed a silo approach that did not afford holistic regulatory coverage of the financial system.¹⁸⁸¹ In contrast, the Twin Peaks model takes a more comprehensive approach to financial regulation as, in addition to its focus on micro-prudential aspects of financial regulation, it has a very distinct macro-prudential focus that is aligned with the G20 global financial reforms implemented after the 2008 GFC, which pursue financial stability as a core regulatory objective.¹⁸⁸²

Parliament on 27 October 2015 with a *Media statement: Tabling of Financial Sector Regulation Bill to give effect to Twin Peaks reform* available at

http://www.treasury.gov.za/comm_media/press/2015/2015102701%20-%20Twin%20Peaks%20Reform.pdf (accessed 6 July 2016). The FSR Act was voted on in the National Assembly in December 2016, as specified in the *Erratum: Financial Sector Regulation Bill as voted on in the National Assembly* available at

<http://www.treasury.gov.za/twinpeaks/2016%2012%2009%20Erratum%20Publication%20of%20tabled%20FSR%20Bill.pdf> (accessed 13 February 2018). See further, Implementation of the Financial Sector Regulation Act, 9 of 2017 (August 2017) available at

<http://www.treasury.gov.za/twinpeaks/Implementation%20of%20the%20Financial%20Sector%20Regulation%20Act.pdf> (accessed 13 February 2018).

¹⁸⁸¹ Twin Peaks in South Africa: response and explanatory document – accompanying the second draft of the Financial Sector Regulation Bill (December 2014) available at

https://juta.co.za/media/filestore/2015/03/2014_12_12_Response_document.pdf (accessed 9 November 2016). In this document, the South African National Treasury Department states that the Twin Peaks model is ideal for the South African jurisdiction because the South African financial system is highly interconnected and dominated by financial conglomerates and financial institutions providing complex financial products. See further, Schmulow AD “Approaches to financial system regulation: An international comparative survey” Centre for International Finance and Regulation Research Working Paper January 2015 available at

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2556545 (accessed 27 October 2019). Schmulow notes that the Twin Peaks model is featured by “regulation by objective”. See also, Schmulow AD (2015) “The four methods of financial system regulation: An international survey” 26 *Journal of Banking and Finance Law and Practice* 151 at 165; Van Heerden CM *The legislative and institutional framework for South Africa’s new Twin Peaks Model of Financial Regulation*, June 11, 2018, 2nd Law & Political Science Conference, Prague; Huls N *Twin Peaks in a flat country: Observations from the Netherlands*, presentation at the Colloquium on Twin Peaks, September 28, 2017, University of Pretoria, South Africa; Mwenda KK *Global trends in financial services regulation: Lessons to share with Africa*, August 14, 2016, presentation at the University of Pretoria. Mwenda KK stated that “In a system that subscribes to ‘regulation by objectives’, the regulatory model ‘seeks to achieve certain explicit objectives by giving responsibility for one or more of them (i.e. the objectives) to specific regulatory bodies that exist solely for that purpose.’”

¹⁸⁸² Just like other G-20 jurisdictions such as the US and the Netherlands, South Africa committed to the ex-post GFC financial regulatory reforms of the G-20 for the restoration of financial stability. The pursuit of macro-prudential regulation for the South African financial system, as incorporated in the FSR Act, augmented the “silo” regulatory approach which was inadequate to address the cross-sectoral risks that are posed by financial conglomerates and banking institutions that are SIFIs. For this, refer to IMF South Africa: Financial System Stability Assessment, Including Report on the Observance of Standards and Codes on the following topic: Securities regulation (October 2008) available at

<https://www.imf.org/external/pubs/ft/scr/2008/cr08349.pdf> (accessed 19 June 2016); Schmulow A (2017) “Financial regulatory governance in South Africa: The move towards Twin Peaks” 25 *African Journal of International and Comparative Law* 393 at 401; See also, Rajendaran D *Approaches to Financial Regulation and the case of South Africa* IFMR Finance Foundation March 6th, 2012 available at

South Africa's transition to a Twin Peaks model was initiated by the recommendation of the South African National Treasury Department in a policy document titled *A safer financial sector to serve South Africa better* (the Red Book), released in February 2011.¹⁸⁸³ The Red book was followed up by a subsequent policy document that was published in February 2013, laying down the structure for the South African Twin Peaks model, as proposed by the Financial Regulatory Reform Committee (FRRC), titled *Implementing a Twin Peaks Model of Financial Regulation in South Africa* (the Roadmap).¹⁸⁸⁴

A two-phased approach was adopted for the implementation of the South African Twin Peaks model: in the first stage, the FSR Act established the regulatory architecture for the two twin regulators, the Prudential Authority (PA) and the Financial Sector Conduct Authority (FSCA).¹⁸⁸⁵ Stage two is an ongoing process which involves laying down the

<https://www.dvara.com/blog/2012/03/06/approaches-to-financial-regulation-and-the-case-of-south-africa/> (accessed 3 September 2018).

¹⁸⁸³ Department of National Treasury of South Africa *A safer financial sector to serve South Africa better* (February 2011) available at

<http://www.treasury.gov.za/documents/national%20budget/2011/A%20safer%20financial%20sector%20to%20serve%20South%20Africa%20better.pdf> (accessed 2 June 2016); See further, Godwin AJ *et al* (2015) "The Financial Sector Regulation Bill in South Africa, second draft: Lessons from Australia" 132 *The South African Law Journal* 756. Godwin and Schmulow observe that the South African Twin Peaks model drew experiences from the Australian Twin Peaks model, and it was implemented with a variant regulatory design that takes into consideration the peculiarities of the South African financial landscape. Godwin A *et al* (2016) "A jurisdictional comparison of the twin peaks model of financial regulation" 18 *Journal of Banking Regulation* 103 notes that jurisdictional implementation of the Twin Peaks model differs according to the structural features of various financial systems. See also, Godwin AJ *et al* (2016) "Twin Peaks and financial regulation: The challenges of increasing regulatory overlap and expanding responsibilities" 49 *The International Lawyer* 273; Taylor M (1995) "Twin peaks": A regulatory structure for the new century?" Centre for the Study of Financial Innovation December 1995 available at

<https://static1.squarespace.com/static/54d620fce4b049bf4cd5be9b/t/55241159e4b0c8f3afe1d11e/1428427097907/Twin+Peaks+A+regulatory+structure+for+the+new+century.pdf> (accessed 2 June 2016). Taylor invented the Twin Peaks model of financial regulation by proposing that systemic regulation should be split from conduct regulation.

¹⁸⁸⁴ Department of National Treasury of South Africa *Implementing a twin peaks model of financial regulation in South Africa* (February 2013) available at

<http://www.treasury.gov.za/twinpeaks/20131211%20-%20Item%203%20Roadmap.pdf> (accessed 2 June 2016).

¹⁸⁸⁵ Section 32(1) of the FSR Act establishes the PA and section 56 (1) of the FSR Act creates the FSCA. See further, Department of National Treasury of South Africa *Twin Peaks in South Africa: response and explanatory document – accompanying the second draft of the Financial Sector Regulation Bill* (December 2014). This document laid down a two-phased implementation process of the South African Twin Peaks model. Phase one established a regulatory architecture for the PA and the FSCA and phase two is currently establishing the dedicated regulatory frameworks for each twin peak regulator. See further, Havemann R *et al* *Financial Sector Regulation Bill 2013 – implementing Twin Peaks – phase 1* (January 2014) available at

[http://www.treasury.gov.za/twinpeaks/20140128%20\(Workshops\)%20v4%20Twin%20peaks%20presentation.pdf](http://www.treasury.gov.za/twinpeaks/20140128%20(Workshops)%20v4%20Twin%20peaks%20presentation.pdf) (accessed 6 July 2016); Schmulow AD "Twin Peaks: A theoretical analysis" Centre for International Financial Regulation Working Papers January 2015 available at

regulatory architecture for the PA and FSCA to ensure the effective and efficient execution of their statutory mandate under the FSR Act.

Under the new Twin Peaks model the SARB no longer has the function of bank supervisor although it has retained the rest of the functions it had pre-Twin Peaks, as alluded to above. Notably the SARB's overall financial stability mandate is now also expressly addressed in the FSR Act.¹⁸⁸⁶ The task of prudential supervision of financial institutions, including banks, is now assigned to the PA.¹⁸⁸⁷ The PA is a newly created prudential regulator and is a juristic person operating independently within the administration of the SARB as central bank of South Africa.¹⁸⁸⁸ The objectives of the PA are to promote and enhance the safety and soundness of financial institutions and financial market infrastructures, to protect financial customers against the risk that financial institutions will default on their obligations and to assist the SARB in its financial stability mandate.¹⁸⁸⁹ As mentioned, with the advent of the Twin Peaks model, the PA took over the prudential regulation and supervision of banks from the then Bank Supervision Department (BSD) of the SARB, which supervisory function was discharged under *the Banks Act No.94 of 1990* (the Banks Act), as amended.¹⁸⁹⁰ Thus, in the new South African Twin Peaks model the PA is the prudential regulator and supervisor of all financial institutions, including banks.¹⁸⁹¹

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2625331 (accessed 6 July 2016) states that the Twin Peaks comprises the financial stability and market conduct objectives for pursuit of financial stability.

¹⁸⁸⁶ Section 11 of the FSR Act.

¹⁸⁸⁷ Van Heerden C *et al* G "The role of the SARB as Central Bank in the South African Twin Peaks model" In Godwin A *et al* (Eds.) (2021) *The Cambridge Handbook of Twin Peaks Financial Regulation* 153-166.

¹⁸⁸⁸ Section 32(2) of the FSR Act; Section 41(1) of the FSR Act establishes the Prudential Committee. In terms of section 42 thereof, the Prudential Committee is responsible for overseeing the management and administration of the PA to ensure that it is efficient and effective.

¹⁸⁸⁹ Section 33 of the FSR Act.

¹⁸⁹⁰ The Banks Act No.94 of 1990 available at

https://www.gov.za/sites/default/files/gcis_document/201503/act-94-1990s.pdf (accessed 2 June 2016). The Bank Supervision Department used to issue annual reports as part of executing its mandate of prudential regulation of banks under the Banks Act. For example, see Bank Supervision Department Annual Report 2012 available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/reports/pa-annual-reports/2013/5733> (accessed 7 April 2017); Banking Supervision Department Annual Report 2013 available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/reports/pa-annual-reports/2014/6245> (accessed 7 April 2017). Subsequent to entering into force of the FSR Act, the PA published the inaugural annual Report 2018/2019 available at

<https://www.resbank.co.za/en/home/publications/prudential-authority/pa-annual-report> (accessed 13 January 2020).

¹⁸⁹¹ Sections 34 of the FSR Act.

Pre-Twin Peaks the Financial Services Board was responsible for the market conduct regulation and supervision of non-bank financial institutions under *the Financial Advisory and Intermediary Services Act No. 37 of 2002 (FAIS)*.¹⁸⁹² There was no dedicated market conduct regulator and supervisor for banks. The newly established FSCA is now the market conduct regulator and supervisor of all financial institutions, including banks.¹⁸⁹³ It is a separate juristic person and stand-alone market conduct agency as per the FSR Act.¹⁸⁹⁴ The primary objective of the FSCA is to enhance and support the efficiency and integrity of financial markets and to protect financial customers by promoting fair treatment of financial customers by financial institutions, providing customers and potential customers with financial education programs and promoting financial literacy to enhance the ability of financial customers to make sound financial decisions and to assist the SARB in maintaining financial stability.¹⁸⁹⁵

Notably, the South African Twin Peaks model is, in fact, a three-peak model¹⁸⁹⁶ as the SARB forms yet another (arguably apex) peak, being mandated with macro-prudential oversight to ensure the promotion and maintenance of the stability of the South African financial system.¹⁸⁹⁷

The implementation process of the South African Twin Peaks model is currently in phase two. During this period, the PA and the FSCA are in the process of developing policy and regulatory frameworks to respectively facilitate system-wide prudential and market conduct regulation of financial institutions, within the constraints of the FSR Act as enabling legislation. The Banks Act, as amended, remains in force and

¹⁸⁹² The Financial Advisory and Intermediary Act No.37 of 2002 available at https://www.gov.za/sites/default/files/gcis_document/201409/a37-020.pdf (accessed 2 June 2016).

¹⁸⁹³ Section 58 of the FSR Act.

¹⁸⁹⁴ Section 56(1) of the FSR Act; In terms of Section 56(2) of the FSR Act, the FSCA is a national public entity, chaired by the Commissioner who is placed as the accounting authority.

¹⁸⁹⁵ Section 57 of the FRS Act.

¹⁸⁹⁶ Some authors like Schmulow opine that it is actually a four peak model given that the National Credit Regulator (NCR), established in terms of the National Credit Act No.34 of 2005, that is responsible for the regulation and supervision of the South African credit market has not been assimilated into the FSCA as the general market conduct regulator. For this, see Schmulow A (2017) "Retail market conduct reforms in South Africa under Twin Peaks" 11 *Law and Financial Markets Review* 163 at 166 and 168; Schmulow AD (2016) "Curbing reckless and predatory lending: A statutory analysis of South Africa's National Credit Act" 24 *Competition and Consumer Law Journal* 24. Further, the Financial Stability Board observed that the role of the NCR will be expected to overlap with the market conduct regulation of the FSCA within the South African Twin Peaks Model. For this, refer to FSB Peer Review of South Africa – Review Report (February 2013) available at https://www.fsb.org/wp-content/uploads/r_130205.pdf (accessed 6 July 2016).

¹⁸⁹⁷ Section 11(1) of the FSR Act.

accordingly serves as designated framework for the regulation and supervision of banking institutions in South Africa. Further, *the Regulations relating to banks* which are issued by Minister of Finance in terms of section 90 of the Banks Act, lay down detailed provisions regarding the regulatory framework for the South African banking sector pursuant to the Banks Act.¹⁸⁹⁸ The Banks Act and *the Regulations relating to banks* were amended at various stages and such amendments are captured in the most recent version of the Banks Act and *the Regulations relating to banks*.¹⁸⁹⁹ In addition, the SARB issues *Directives* and *Circulars*, which are binding regulatory tools, as well as non-binding *Guidance Notes*, pursuant to the Banks Act.¹⁹⁰⁰

5.2.1 The institutional framework for the financial stability mandate of the SARB under the FSR Act

The preamble of the FSR Act provides a broad indication of the regulatory approach on which the South African Twin Peaks model is based as it depends on a network of financial sector regulators and institutions, and committees, having to actively cooperate and collaborate, dedicated to creating a more resilient and stable financial sector for South Africa.¹⁹⁰¹

Specifically, section 7(1) of the FSR Act stipulates that the overarching objective of the Act is to achieve a stable financial sector that works in the interests of financial customers and underpins a sustainable economic growth in South Africa. In particular, section 7 of the FSR Act provides that the Act seeks to achieve a stable financial sector by establishing, in conjunction with the specific financial sector regulators, a regulatory and supervisory framework that, *inter alia*, promotes: financial stability; the safety and soundness of financial institutions; the fair treatment and protection of financial

¹⁸⁹⁸ The Banks Act No.94 of 1990: Regulations Relating to Banks of December 2012 available at http://www.treasury.gov.za/legislation/35950_12-12_ReserveBankCV01.pdf (accessed 2 June 2016).

¹⁸⁹⁹ The Banks Act No.94 of 1990 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-banks-act/2002/2591> (accessed 30 November 2022).

¹⁹⁰⁰ The Banks Act Directives and Circulars are respectively issued pursuant to sections 6(6) and 6(4) of the Banks Act and the Guidance Notes are issued in terms of section 6(5) thereof.

¹⁹⁰¹ As per sections 27 and 77 of the FSR Act, all these collaborative and concerted efforts were implemented through memoranda of understandings (MOUs) in terms of which individual and collective responsibilities of the financial service sector stakeholders were delineated and formalised. These MOUs are non-legislative documents that ought to be signed within 6 months of entering into force of the FSR Act.

customers; the efficiency and integrity of the financial system; transformation of the financial sector; and confidence in the financial system.¹⁹⁰²

As indicated in Chapter One, financial stability is a notoriously “fuzzy” concept with the result that no generally accepted definition of the concept exists in the international financial regulatory context. However, as pointed out by De Jager, it would be challenging for a regulator to pursue the promotion and maintenance of financial stability without at least some indication of what it entails.¹⁹⁰³ Accordingly, the FSR Act aims to address this issue by defining “financial stability” in section 4 to mean that;

- (a) “financial institutions generally provide financial products and financial services, and market infrastructures generally perform their functions and duties in terms of financial sector laws, without interruption;
- (b) financial institutions are capable of continuing to provide financial products and financial services, and market infrastructures are capable of continuing to perform their functions and duties in terms of financial sector laws, without interruption despite changes in economic circumstances; and
- (c) there is general confidence in the ability of financial institutions to continue to provide financial services and financial products, and the ability of market infrastructures to continue to perform their functions and duties in terms of financial sector laws, without interruption despite changes in economic circumstances.”

Section 4(2) of the FSR Act further provides that “maintaining” financial stability includes “restoring” financial stability if it is adversely affected.

Section 11(1)(a) of the FSR Act explicitly confers an overall financial stability mandate on the SARB in order to give effect to the overarching objective of the Act.¹⁹⁰⁴ This is

¹⁹⁰² Sections 7(a), (b), (c), (d), (g) and (h) of the FSR Act.

¹⁹⁰³ De Jager JJ (2013) “The South Africa Reserve Bank: Blowing the winds of change (Part 1)” 25 *SA Mercantile Law Journal* 342.

¹⁹⁰⁴ The Minister of Finance explicitly confirmed the financial stability role of the SARB in a letter dated 16 February 2010 titled *Clarification of the Reserve Bank’s mandate* available at http://www.treasury.gov.za/comm_media/press/2010/2010021701.pdf (accessed 2 June 2016). The SARB is considered well placed to perform this role as the systemic regulator due to its experience in the workings and interactions of the financial system and macro-economic factors. Its financial stability mandate is in addition to its broad constitutional responsibility for monetary policy aimed at protecting

an explicit and comprehensive mandate, the parameters of which are set out in the FSR Act for the first time in South African history, as opposed to the implied *de facto* financial stability mandate that the SARB exercised pre-Twin Peaks.¹⁹⁰⁵ The result is that the primary objective of the SARB as set out in section 3 of the SARB Act, has been expanded to also cover the stability of the financial system as a whole.¹⁹⁰⁶

For purposes of executing the financial stability mandate, the SARB is obliged to align its functions with the policy framework agreed between the Minister of Finance in the South African National Treasury and the Governor of the SARB.¹⁹⁰⁷ This requirement is in recognition of section 8 of the FSR Act which provides that the Minister is responsible for the administration of the Act. Further, the SARB is charged to exercise any powers vested in it by virtue of being a central bank,¹⁹⁰⁸ or those conferred on it in terms of the FSR Act.¹⁹⁰⁹

Given that the SARB is the primary, but not the sole, custodian of financial stability,¹⁹¹⁰ as the PA and the FSCA must assist the SARB in promoting financial stability, the SARB collaborates, coordinates and cooperates with other financial sector regulators that are key stakeholders in the promotion and maintenance of financial system stability in line with sections 26 and 76 of the FSR Act.¹⁹¹¹ Section 26(1)(b) of the FSR Act requires the financial sector regulators to provide assistance and information to

the value of the currency, as per section 3 of the SARB Act and section 224(1) of the Constitution of South Africa, as stated above.

¹⁹⁰⁵ Van Heerden C *et al* G (2017) "Twin Peaks in South Africa: a new role for the central bank" 11 *Law and Financial Markets Review* 152-162; Hollander H *et al* "A review of the South African Reserve Bank's financial stability policies" Stellenbosch Economic Working Papers (July 2019) available at <https://ideas.repec.org/p/sza/wpaper/wpapers325.html> (accessed 2 June 2016).

¹⁹⁰⁶ Schedule 4 of the FSR Act. The interaction and conflicting roles of financial stability and monetary policy objectives are elaborated by De Jager JJ (2013) "The South African Reserve Bank: Blowing the winds of change (Part 2)" 25 *SA Mercantile Law Journal* 492 at 498-506; See further, Nel H "Introduction to macroprudential policy and instruments of the SARB" SAIFM Regulatory Summit Financial Stability Department South African Reserve Bank (September 2017) available at <http://www.regulatorysummit.co.za/Site/wp-content/uploads/2017/03/Introduction-to-macroprudential-policy-and-instruments-of-the-SARB.pdf> (accessed 2 June 2016).

¹⁹⁰⁷ Section 11(2)(a) of the FSR Act.

¹⁹⁰⁸ See paragraph 5.2 above.

¹⁹⁰⁹ Section 11(2)(b) of the FSR Act.

¹⁹¹⁰ See sections 33(d) and 57(c) of the FSR Act.

¹⁹¹¹ Section 26(1)(a) of the FSR Act requires cooperation and collaboration between financial sector regulators and the SARB in the maintenance, protection and enhancement of financial stability. Section 76 of the FSR Act stipulates that the financial sector regulators and the SARB must co-operate and collaborate when performing their functions in terms of financial sector laws, the National Credit Act and the Financial Intelligence Centre Act. As abovementioned, other key players in the financial stability matters besides the PA and the FSCA include the National Credit Regulator and the Minister of Finance.

the SARB and the FSOC to maintain or restore financial stability. As such, the financial sector regulators must promptly report to the SARB any matter that poses or may pose risk to financial stability¹⁹¹² and gather information from, and about, financial institutions that concerns financial stability.¹⁹¹³ Likewise, the SARB, when exercising its powers in terms of financial stability mandate must take into account any views expressed and information provided by the financial sector regulators.¹⁹¹⁴

In order to give effect to section 27 of the FSR Act in terms of the required cooperation and collaboration pertaining to financial stability matters, the SARB entered into Memoranda of Understandings (MOUs) with the PA and the FSCA, and the PA entered into a Memorandum of Understanding (MOU) with the FSCA.¹⁹¹⁵ Section 76 of the FSR Act further requires cooperation and collaboration between the financial sector regulators and the SARB generally in the performance of their functions in terms of the financial sector laws. Given this institutional setup, the collaboration between the SARB, the PA and the FSCA is vitally instrumental in the successful operation of the South African Twin Peaks model.¹⁹¹⁶

The financial stability oversight role of the SARB is executed at the top level by the Financial Stability Oversight Committee (FSOC), which is established in section 20(1) of the FSR Act.¹⁹¹⁷ The FSOC is an interagency institution that is constituted of: the

¹⁹¹² Section 26(1)(c) of the FSR Act.

¹⁹¹³ Section 26(1)(d) of the FSR Act.

¹⁹¹⁴ Section 26(2)(a) of the FSR Act.

¹⁹¹⁵ Memorandum of Understanding (MOU) between the Prudential Authority (PA) and the Financial Sector Conduct Authority (FSCA) available at

https://www.fsca.co.za/Regulatory%20Liaison/MOU_FSCA%20and%20PA.pdf (accessed 2 August 2019); Memorandum of Understanding between the South African Reserve Bank and the Prudential Authority available at

<https://www.google.com/search?q=Memorandum+of+Understanding+between+the+South+African+Reserve+Bank+and+the+Prudential+Authority&oq=Memorandum+of+Understanding+between+the+South+African+Reserve+Bank+and+the+Prudential+Authority&aqs=chrome..69i57j131j0j7&sourceid=chrome&ie=UTF-8> (accessed 2 August 2019); Memorandum of Understanding between the South African Reserve Bank and the Financial Sector Conduct Authority available at

https://www.fsca.co.za/Regulatory%20Liaison/MOU_FSCA%20and%20SARB.pdf (assessed 2 August 2019).

¹⁹¹⁶ Van Heerden C *et al* (2017:152-172); See further, Van Niekerk G *et al* (2020) "The importance of a legislative framework for co-operation and collaboration in the Twin Peaks model of financial regulation" 137 *South African Law Journal* 108 -144.

¹⁹¹⁷ Section 20(2)(a) of the FSR Act; Section 21 of the FSR Act stipulates that the FSOC has the following functions: to serve as a forum for representatives of the SARB and each of the financial sector regulators to be informed, and to exchange views, about the activities of the SARB and the financial sector regulators regarding financial stability; to make recommendations to the Governor of the SARB on the designation of systemically important financial institutions; to advise the Minister of Finance and

Governor of the SARB, the Deputy Governor of the SARB, the Chief Executive Officer of the PA, the Commissioner of the FSCA, the Chief Executive Officer of the National Credit Regulator (NCR), the Director of the Financial Intelligence Centre, and a maximum of three additional persons appointed by the Governor of the SARB.¹⁹¹⁸

Specifically, the primary objectives of the FSOC are to support the SARB in performing its financial stability functions and to facilitate cooperation and collaboration between, and coordination of action, among, the financial sector regulators and the SARB in respect of financial stability matters.¹⁹¹⁹ Accordingly, the FSOC's centrality to financial stability is specifically in respect of acting as a forum that enables the SARB and the financial sector regulators to get together to discuss and decide upon various issues related to financial stability. The FSR Act requires the SARB to take into consideration the recommendations of the FSOC when discharging its macro-prudential surveillance function.¹⁹²⁰ The FSOC serves as a forum where the representatives of the SARB and financial sector regulators exchange views about financial stability matters.¹⁹²¹ Given that it is comprised of the heads of the different financial sector regulators¹⁹²² possessing different skills-set and knowledge of a broader systemic perspective, Van Heerden and Van Niekerk point out that the FSOC is appropriately qualified to act as the advisory body to the SARB on financial stability matters and is in actual fact the forum where the main decisions on financial stability are taken.¹⁹²³ One of the FSOC's key functions is to make recommendations to the Governor of the SARB on the designation of SIFIs.¹⁹²⁴ The FSR Act further established the Financial Stability Contingency Forum (FSCF) to aid the FSOC in identifying emerging systemic risks in the financial system.¹⁹²⁵

the SARB on steps to be taken to promote, protect or maintain, or to manage or prevent systemic risks to, financial stability, and matters relating to crisis management and prevention; to make recommendations to other organs of state regarding steps that are appropriate for them to take to assist in maintaining, or managing or preventing risks to financial stability; and any other function conferred on it in terms of applicable legislation.

¹⁹¹⁸ Section 22(1) of the FSR Act; Section 24 thereof provides that the FSOC must meet at least every six weeks and it is administratively and financially assisted by the SARB pursuant to section 23 thereof.

¹⁹¹⁹ Section 20(2) of the FSR Act.

¹⁹²⁰ Section 26(2)(b) of the FSR Act.

¹⁹²¹ Section 21(a) of the FSR Act.

¹⁹²² Section 22(1) of the FSR Act.

¹⁹²³ Van Niekerk G *et al* (2020) "The importance of a legislative framework for co-operation and collaboration in the Twin Peaks model of financial regulation" 137 *South African Law Journal* 108-144.

¹⁹²⁴ Section 21(b) of the FSR Act.

¹⁹²⁵ Section 25 (1) of the FSR Act; Section 25(2) thereof provides that the objective of the FSCF is to identify potential risks that systemic events will occur and to coordinate the appropriate plans,

Pursuant to section 28(a) of the FSR Act, other organs of state, are enjoined to consider the financial stability implications of their actions,¹⁹²⁶ and therefore mandated to provide assistance to the SARB and the FSOC in maintaining and restoring financial stability.¹⁹²⁷ Specifically, the cooperation of the SARB with the Minister of Finance, as the state organ with the leading authority for financial sector policy and fiscal responsibility, is crucial for the SARB's discharge of its macro-prudential function. Notably, the FSR Act expressly requires the SARB to take account of the roles and functions of other organs of state whose powers affect other aspects of the economy in the exercise of its macro-prudential supervisory role.¹⁹²⁸

The SARB conducts macro-prudential analysis by monitoring the strengths and vulnerabilities of the financial system and responding to emerging risks.¹⁹²⁹ Thereafter, the results of such macro-prudential analysis is recorded in the *Financial Stability Review*, which is published semi-annually.¹⁹³⁰ The *Financial Stability Review* covers the financial stability assessment in the period under review, the pre-emptive identification and assessment of risks in at least the next 12 months, an overview of the steps to be taken by the SARB and the financial sector regulators to identify and manage the detected financial stability risks and disruptions, and finally, the recommendations of the SARB and the FSOC for risk mitigation.¹⁹³¹ Further, the FSR

mechanisms, and structures to mitigate those risks. Section 25(3) thereof enumerates at least eight members of the FSCF, namely, the Deputy Governor designated by the Governor, representatives of the financial sector regulators and of other organs of state as determined by the SARB. Section 25(4) thereof states that the FSCF shall meet at least once in six months. Section 25(6) thereof states that the FSCF is supported administratively and financially by the SARB.

¹⁹²⁶ Besides the Minister of Finance, such organs of state include the Minister of Trade and Industry.

¹⁹²⁷ Section 28(b) of the FSR Act.

¹⁹²⁸ Section 11(2)(c) of the FSR Act.

¹⁹²⁹ Section 12(a) of the FSR Act.

¹⁹³⁰ Section 13(1) of the FSR Act. The SARB started issuing the publications of the Financial Stability Review from 2004. For this, see the Financial Stability Review (March 2004) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2004/3939> (accessed 2 June 2016) and Financial Stability Review (September 2004) available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2004/3940> (accessed 2 June 2016). One of the recent publications is the Financial Stability Review first edition 2019 available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2019/9276> (accessed 5 November 2019).

¹⁹³¹ Section 13 (2)(a), (b), (c) and (d) of the FSR Act. In quoting the *Financial stability Review* first edition 2016 available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2016/7278> (accessed 23 March 2017) Christine stated that financial stability is "...generally regarded as an important precondition for sustainable economic growth...". See Christine O "A financial

Act provides that information which, if published may materially increase the possibility of a systemic event, only needs to be published in *the Financial Stability Review* after the risk of a systemic event (as defined below) subsides, or has been addressed.¹⁹³² Since the financial system is generally risk-averse, the publication of systemic risk information may lead to disruption of the financial system and adversely affect the economy. As opposed to disclosure of general information, specific and sensitive information regarding the names of the financial institutions encountering financial distress may aggravate panic in the financial markets causing contagion in unaffected solvent financial institutions.¹⁹³³

As the systemic risk supervisor, the SARB is thus tasked with primarily preventing systemic events from occurring.¹⁹³⁴ The FSR Act defines a “systemic risk” as the risk that a systemic event has occurred.¹⁹³⁵ Pursuant to section 1 of the FSR Act, the verbatim definition of a “systemic event” is; “an event or a circumstance, including one that occurs or arises outside the Republic, that may reasonably be expected to have a substantial adverse effect on the financial system or on economic activity in the Republic, including an event or circumstance that leads to a loss of confidence that operators of, or participants in, payment systems, settlement systems or financial markets, or financial institutions, are able to continue to provide financial products or financial services, or services provided by a market infrastructure.”¹⁹³⁶

From the aforesaid, it is clear that systemic events have the potential to erode financial stability, and thus, a hallmark of a stable financial system is effective and efficient holistic financial regulation that guarantees systemic protection. Ideally, as observed

systems resilience index for South Africa: Joining the Twin Peaks” Financial Stability Research Conference October 26-27, 2017, South African Reserve Bank, South Africa.

¹⁹³² Section 13(3) of the FSR Act.

¹⁹³³ This point is highlighted in the *IMF and BIS Background Paper on Guidance to assess the systemic importance of financial institutions, markets and instruments: Initial considerations* (October 2009), which is overviewed in paragraph 1.3 of Chapter One.

¹⁹³⁴ Section 15(1)(a) of the FSR Act; When supervising the financial system, the SARB must regularly assess adherence to the principles developed by the international standard-setting bodies and report its findings on the progress in the implementation process of such principles. See paragraph 1.7 of Chapter One for an elaboration of the concept of systemic risk.

¹⁹³⁵ Section 12(c) of the FSR Act.

¹⁹³⁶ Section 1 of the FSR Act.

by Acharya, macro-prudential regulation strives to safeguard the entire financial system to eliminate the possibility of systemic collapse in a “domino fashion”.¹⁹³⁷

The FSR Act affords the SARB certain powers in relation to systemic events in order to appropriately deal with its financial stability mandate. These powers entail that the SARB is responsible for making a determination, in consultation with the Minister of Finance, that a specific event or circumstance, or the combination thereof, constitute a systemic event,¹⁹³⁸ as well as making a determination that a specified systemic event has occurred or is imminent which then triggers certain emergency powers that can be exercised by the SARB.¹⁹³⁹ The exercise of these powers may be either proactive or retrospective as they may be invoked before or after the occurrence of a systemic event.¹⁹⁴⁰

The consultation of the SARB with the FSOC before reaching a decision that a specified event or circumstance, or the combination thereof, constitute a systemic event is apparently discretionary but,¹⁹⁴¹ as pointed out by Van Heerden and Van Niekerk, it is likely that the SARB will consult the FSOC as a matter of course regarding the determination of systemic events.¹⁹⁴² It is incumbent upon the SARB to notify the Minister of Finance of the determination that a specified event or circumstance constitute a systemic event, and to keep the determination under review.¹⁹⁴³ This determination may, at any time, be amended or revoked in writing, in consultation with the Minister of Finance,¹⁹⁴⁴ and both the Minister of Finance and the financial sector regulators must be notified of such determination, amendment or revocation.¹⁹⁴⁵ The

¹⁹³⁷ Acharya VV (2009) “A theory of systemic risk and design of prudential regulation” 5 *Journal of Financial Stability* 224.

¹⁹³⁸ Section 14(1) of the FSR Act.

¹⁹³⁹ Section 14(4) of the FSR Act.

¹⁹⁴⁰ Section 14(3) of the FSR Act; Goodhart CAE *et al* (2013) “Preventative macroprudential policy” 1 *Journal of Financial Management, Markets and Institutions* 115 at 122 emphasises on the efficacy of the timely implementation of prudential measures enabling supervisors to have a will to act with preventative effects to curtail the propagation of systemic shocks.

¹⁹⁴¹ Section 14(2) of the FSR Act.

¹⁹⁴² Van Heerden C *et al* G (2017) “Twin Peaks in South Africa: a new role for the central bank” 11 *Law and Financial Markets Review* 152-162.

¹⁹⁴³ Section 14(5)(a) and (b) of the FSR Act.

¹⁹⁴⁴ Section 14(5) (c) of the FSR Act.

¹⁹⁴⁵ Section 14(5) (d) and (6) of the FSR Act.

SARB must publicize the determination, or the amendment or revocation thereof, and table it in Parliament and on its website.¹⁹⁴⁶

Apart from preventing systemic events, the SARB is responsible for mitigating and managing the effects of systemic events if they occur.¹⁹⁴⁷ In this regard, the FSR Act directs the SARB to mitigate promptly the adverse effects of the systemic event on the financial system, if it occurs or if it is imminent.¹⁹⁴⁸ Overall, the SARB is obliged to have regard to minimising the impact of a systemic event on the financial system and economic activity and internalising the cost as well as protecting financial customers when preventing or mitigating a systemic event.¹⁹⁴⁹ This is because, in terms of section 11(1)(b) of the FSR Act, part of the financial stability mandate involves restoring and maintaining financial stability in the event that it is negatively affected.¹⁹⁵⁰

The FSR Act also requires the SARB to notify the Minister of Finance of the occurrence of, or an imminent systemic event, and of any steps being taken or proposed to manage the event and the effects of the event.¹⁹⁵¹ Accordingly, the SARB is prohibited from taking measures that will, or are likely to, bind the National Revenue Fund to any expenditure, have material impact on the cost of borrowing or create a future financial commitment or contingent liability for the National Revenue Fund, without the Minister of Finance's approval.¹⁹⁵² The SARB must seek the ministerial approval concerning such actions because they impact upon the fiscal responsibility and these provisions also reflect the alignment of South Africa with the post-GFC regulatory sentiment that seeks to discourage ad hoc and ill-considered bail-outs of SIFIs.¹⁹⁵³

In terms of section 17 of the FSR Act, the participation of the financial sector regulators in instances of systemic events entails the exchange of regulatory information about financial institutions under their regulatory jurisdiction that is necessary for preventing

¹⁹⁴⁶ Section 14(7) of the FSR Act.

¹⁹⁴⁷ Section 15 (1)(b) of the FSR Act.

¹⁹⁴⁸ Section 15(2)(a) of the FSR Act.

¹⁹⁴⁹ Section 15(2)(b) and (c) of the FSR Act.

¹⁹⁵⁰ Section 11(1)(b) of the FSR Act.

¹⁹⁵¹ Section 16(1) of the FSR Act.

¹⁹⁵² Section 16(2) of the FSR Act; De Jager JJ (2013: 492 at 511) states that the Minister of Finance is responsible for fiscal policy and the SARB is a lender of last resort and the liquidity provider.

¹⁹⁵³ See paragraph 1.4 of Chapter One for the definition of a "bail-out" concept.

the escalation of a systemic event.¹⁹⁵⁴ The financial sector regulators must further consult with the SARB before exercising any of their powers in a way that may compromise steps taken or proposed to prevent, mitigate and manage a systemic event or the effects thereof.¹⁹⁵⁵ The SARB can issue directives to the financial sector regulators requiring information that it needs to make a determination of a systemic event; to determine the occurrence or imminence of a systemic event; and to prevent and mitigate a systemic event and its effects.¹⁹⁵⁶ The SARB's directive to the financial sector regulators requiring steps to be taken in cases of the occurrence or imminence of a systemic event may be aimed at: supporting restructuring, resolution or winding-up of any financial institution; preventing or reducing the spread of risk, weakness or disruption through the financial system; or increasing the resilience of financial institutions to risk, weakness or disruption.¹⁹⁵⁷ The resolution and winding-up measures constitute an integral part of the macro-prudential framework ensuring the orderly resolution of financial institutions to avoid systemic collapse.¹⁹⁵⁸

If the SARB has made a determination that a systemic event has occurred or is imminent, an organ of state may not, without the Minister of Finance's approval, acting in consultation with the Cabinet member responsible for that organ of state, exercise its powers in a way that is inconsistent with a decision or steps by the Governor of the SARB or the SARB in managing that systemic event or its effects,¹⁹⁵⁹ and any unresolved dispute between them is referred to Cabinet.¹⁹⁶⁰

In November 2016, the SARB published *A new macroprudential policy framework for South Africa* (the SARB macroprudential framework) indicating how it would approach its financial stability oversight responsibility under (then) envisaged Twin Peaks

¹⁹⁵⁴ Section 17(a) of the FSR Act; Section 26(1)(c) and (d) thereof provides that the financial sector regulators must promptly report to the SARB any matter that may pose systemic risk to financial stability and gather information from and about financial institutions that concerns financial stability.

¹⁹⁵⁵ Section 17(b) of the FSR Act.

¹⁹⁵⁶ Section 18(1) of the FSR Act.

¹⁹⁵⁷ Section 18(2) of the FSR Act; In terms of section 18(3) and (4) thereof, the PA, the FSCA and the Financial Intelligence Centre must comply with the specified SARB's directive, and the NCR must also be in compliance with such directive provided that the Minister of Finance has consulted the Minister of Trade and Industry responsible for consumer credit matters on the directive.

¹⁹⁵⁸ Paragraph 1.3 of Chapter One highlighted that macro-prudential measures relating to resolution regimes are entailed in the FSB Key Attributes.

¹⁹⁵⁹ Section 19(1) of the FSR Act.

¹⁹⁶⁰ Section 19(2) of the FSR Act; Section 19(3) thereof provides that section 19(1) thereof does not apply to financial sector regulators.

model.¹⁹⁶¹ The SARB macroprudential framework chiefly focuses on systemic regulation by monitoring systemic vulnerabilities including risks posed by SIFIs as channels for the transmission and amplification of systemic risk.¹⁹⁶² Further, it builds a case for macro-prudential intervention with the implementation of appropriate macro-prudential instruments targeting specific macro-prudential intermediate objectives to combat systemic risk.¹⁹⁶³

5.2.2 The regulatory framework of the PA

In principle, section 34 of the FSR Act requires that the PA's regulatory and supervisory approach must be pre-emptive, outcomes-focused and risk-based, taking into account the standards issued by international-standard setting bodies.¹⁹⁶⁴ What this means for banking supervision is that the PA must adhere to, *inter alia*, the standards of the Basel Committee on Banking Supervision (BCBS) and Financial Stability Board (FSB) in the regulation and supervision of the South African banking sector. Further, the FSR Act requires the PA to perform its mandate without fear, favour or prejudice.¹⁹⁶⁵ Section 152 of the FSR Act provides that a financial sector regular may seek a court order to enforce compliance with the financial sector laws applicable to entities that it supervises.

The role of the PA in the context of SIFIs is significant because section 30 of the FSR Act requires the PA, as prudential regulator, to impose more stringent prudential

¹⁹⁶¹ SARB A new macroprudential policy framework for South Africa (November 2016) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2016/7547> (accessed 20 March 2017). As pointed out in paragraph 5.2 above, the SARB macroprudential framework was formulated by the SARB in agreement with the Minister, as per the requirement of the FSR Act.

¹⁹⁶² Paragraph 5 of the SARB macroprudential framework.

¹⁹⁶³ Paragraphs 3, 4 and 5 of the SARB macroprudential framework; See further, Farell G *Implementing macroprudential policies: A South African Reserve Bank Perspective* South African Reserve Bank Conference on financial stability, developments, challenges and policy responses (November 2015) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/research-conference-on-financial-stability/2015/6963> (accessed 4 November 2019).

¹⁹⁶⁴ Section 34 of the FSR Act; Risk-based supervision involves the identification of risks, assessment, monitoring and management of such risks with a particular focus on principles-based regulation, which entails principles as opposed to rules-based approach. For this, refer to Schmulow A (2017: 409-411). Paragraph 2.5 of Chapter Two pointed out that the SIFI framework notes that the outcomes-focused regulation is an improved technique that is used by supervisors that focuses on the outputs, rather than on the processes that produce unintended supervisory results.

¹⁹⁶⁵ Section 34 (4)(a) of the FSR Act.

requirements set out in prudential standards or regulator's directives on SIFIs¹⁹⁶⁶ after the SARB completes the SIFI-designation procedure.¹⁹⁶⁷ Accordingly, this provision charges the PA with more intrusive regulation of SIFIs, including SIFI-banks, to increase their loss absorbing capacity and make them more resilient in times of financial distress. The PA is required to notify the SARB and the FSOC of any steps taken to enforce a prudential standard made or a regulator's directive issued and the effect of those steps.¹⁹⁶⁸ The PA must thus notify the SARB and the FSOC of the steps taken to enforce prudential standards or regulator's directives applicable to SIFIs, in their respective capacity as the systemic regulator and the macro-prudential advisory body,¹⁹⁶⁹ given that imposing more stringent prudential measures is the legal consequence of the designation process.¹⁹⁷⁰

To give effect to the FSR Act requirement for the financial sector regulators to issue a regulatory strategy within six months of the coming into effect of the Act, the PA adopted its *Regulatory Strategy 2018-2021* providing general guidance of its envisaged regulatory targets and goals in the upcoming three years.¹⁹⁷¹ Amongst its strategic priorities, the PA indicated that it will strengthen the regulatory and supervisory framework for banks and align it with the BCBS standards, as required by the FSR Act.¹⁹⁷² The PA recently released its *Regulatory Strategy 2021-2024* in which it confirmed its commitment to incorporate the BCBS post-Crisis reforms into *the Regulations relating to banks*.¹⁹⁷³

¹⁹⁶⁶ Section 30(1) and (2) of the FSR Act; In terms of section 105 of the FSR Act, the PA makes prudential to regulate financial institutions. The PA issues directives in terms of section 143 of the FSR Act to enforce compliance of its prudential standards, made in terms of section 105 thereof, by financial institutions.

¹⁹⁶⁷ See paragraph 5.3 below.

¹⁹⁶⁸ Section 30(3) of the FSR Act.

¹⁹⁶⁹ As discussed in subparagraph 5.2.1 above.

¹⁹⁷⁰ Section 12(b) of the FSR Act.

¹⁹⁷¹ Prudential Authority Regulatory Strategy 2018-2021 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/PA-financial-sector-regulation/sector-regulation-act/2018/8800> (accessed 1 March 2019); See further, that the Prudential Authority Annual Report 2019/2020 (resbank.co.za) (accessed 30 November 2020) which assesses the extent to which the first Regulatory Strategy has been implemented.

¹⁹⁷² *Ibid.*

¹⁹⁷³ Prudential Authority Regulatory Strategy 2021-2024 (resbank.co.za) (accessed 13 December 2021); See also, that the Prudential Authority Annual Report 2020/2021 (resbank.co.za) (accessed 13 December 2021) was published after the release of this Regulatory Strategy.

Further note should be taken that *the Regulations relating to banks*,¹⁹⁷⁴ as amended by *the Banks Act No.94 of 1990: Amendment of Regulations of 2016* (hereinafter, Amendment of the Regulations relating to banks)¹⁹⁷⁵ initially in 2016, mandated the Registrar of Banks¹⁹⁷⁶ to identify banks as D-SIBs for purposes of imposing the D-SIB buffer on them. This role was transferred to the PA¹⁹⁷⁷ after the FSR Act came into operation. This means that beyond applying prudential standards to SIFIs, the PA is further tasked with identifying banks as D-SIBs for purposes of imposing the D-SIB buffer on them in accordance with the *Regulations relating to banks*, as amended. In effect though, a bank that has been identified as a D-SIB bank under *the Regulations relating to banks* will then also meet the requirements for designation as a SIFI under the FSR Act.

5.3 The designation of SIFIs under the FSR Act

Part of the financial stability mandate of the SARB entails the designation of financial institutions as SIFIs in line with section 29 of the FSR Act with the overall objective of preventing or mitigating systemic risks in the South African financial system. In terms of section 29(1)(a) of the FSR Act, the Governor of the SARB has the discretion to designate financial institutions (thus banks and non-banks) as SIFIs, by a written notice to a financial institution concerned. The FSR Act further stipulates that the authority of the SARB in respect of the designation of SIFIs may not be delegated.¹⁹⁷⁸ The Governor of the SARB's authority to designate SIFIs is inherent in the SARB's systemic oversight role entailing the system-wide assessment of risks, including identification and monitoring of systemic risk stemming from financial institutions, as stipulated in the SARB macroprudential framework.¹⁹⁷⁹ Also to be noted is that the FSR Act does not set the interval at which the Governor of the SARB may designate financial institutions as SIFIs.

¹⁹⁷⁴ Regulation 38(8)(e)(vi)(A) of *the Regulations relating to banks*.

¹⁹⁷⁵ The Banks Act No.94 of 1990: Amendment of Regulations of May 2016 available at https://www.gov.za/sites/default/files/gcis_document/201605/40002gen297.pdf (accessed 7 March 2017).

¹⁹⁷⁶ The Registrar of banks was the SARB official that was the head of the Office of Banks in the (then) Bank Supervision Department.

¹⁹⁷⁷ Regulation 38(8)(e)(vi)(A) of *the Regulations relating to banks*, as amended by *the Amendment of the Regulations relating to banks of May 2016* available at https://www.gov.za/sites/default/files/gcis_document/201605/40002gen297.pdf (accessed 7 March 2017).

¹⁹⁷⁸ Section 29(1)(b) of the FSR Act.

¹⁹⁷⁹ See part 3, part 4 and part 5 of the SARB macroprudential framework.

Section 1 of the FSR Act defines a SIFI as “a financial institution that is designated in terms of section 29 of the Act.” The provision is thus intended to cover various types of financial institutions that could be systemically important in South Africa but, as indicated below,¹⁹⁸⁰ to date only SIFI-banks have been identified. Section 29(2)(a) of the FSR Act stipulates that the procedure for the designation of a financial institution as a SIFI formally commences with written notice of a proposed designation by the SARB to the FSOC.¹⁹⁸¹ Such notice must be accompanied by the grounds upon which the designation is proposed, and invite the FSOC to give advice on such proposed designation within a reasonable period.¹⁹⁸² The FSR Act is, however, silent on the issue of what would constitute a reasonable period within which the FSOC must give advice on the proposed designation.

Section 29(2)(b) of the FSR Act further provides that if the Governor of the SARB proposes to designate the relevant financial institution as a SIFI subsequent to the consideration of the FSOC’s advice, such financial institution will be afforded a reasonable period to make submissions to show cause why it should not be designated as a SIFI. The legislature does not specify what a reasonable period would amount to and whether the submissions for contesting a designation should be oral or written. Notably, section 29(2)(b) of the FSR Act seeks to enforce section 228 of the FSR Act which places an obligation on a public authority to notify a person that is affected by a decision, to furnish the reasons for such a decision, and to provide for a financial institution’s right of reconsideration of a decision.¹⁹⁸³ In terms of section 229(a) of the FSR Act, reasons for a decision may be requested within thirty days after the date on which a notification of a decision was received. The requested reasons must be provided, together with the material facts underlying the basis for the decision, within one month after the receipt of the request.¹⁹⁸⁴ Although section 29 of the FSR Act does not specifically provide for judicial review of such decision, it is possible to challenge it, as discussed below,¹⁹⁸⁵ pursuant to *the Promotion of Administrative Justice Act No.3 of 2000* (PAJA).¹⁹⁸⁶ Section 91 of the FSR Act affirms this position by

¹⁹⁸⁰ See paragraph 5.4 below.

¹⁹⁸¹ Section 29(2)(a) of the FSR Act.

¹⁹⁸² *Ibid.*

¹⁹⁸³ Section 228(a) and (b) of the FSR Act.

¹⁹⁸⁴ *Ibid.*

¹⁹⁸⁵ See paragraph 5.7 below.

¹⁹⁸⁶ See section 6 of the PAJA.

stipulating that the PAJA applies to any administrative action taken by a financial sector regulator in terms of the FSR Act. As indicated in Chapter Three,¹⁹⁸⁷ the Council's non-bank SIFI-designation process in terms of section 113 of the Dodd-Frank Act is identical to the FSR Act's SIFI-designation process. Notably, this similarity is in respect of the notification that is sent to the financial institution concerned, the hearing of submissions of the financial institution and providing a right of judicial review of the Governor of the SARB's decision of SIFI-designation.

In terms of section 29(3) of the FSR Act, the following list of non-exhaustive factors should inform the Governor of the SARB's decision in designating a financial institution as a SIFI:

- (a) the size of the financial institution;
- (b) the complexity of the financial institution and its business affairs;
- (c) the interconnectedness of the financial institution with other financial institutions within and outside the Republic;
- (d) whether there are readily available substitutes for the financial products and financial services that the financial institution provides, or, in the case of a market infrastructure, the market infrastructure;
- (e) the recommendations of the FSOC;
- (f) the submissions made by, or for the financial institution; and
- (g) any other matters that may be prescribed by the Regulations.

The Governor of the SARB may designate a financial institution as a SIFI on non-compliance or partial compliance with section 29(2) of the FSR Act if the Governor of the SARB makes a determination that a systemic event has occurred or is imminent under section 14 thereof.¹⁹⁸⁸ This emergency designation disregards the normal procedure and *modus operandi* regarding the written notice to the FSOC, accompanied by the justifiable grounds for a proposed designation and the FSOC's advice, as well as the reasonable timeframes within which an institution is supposed to make submissions prior the designation. Post the emergency designation, the financial institution concerned may make submissions on the designation to the

¹⁹⁸⁷ See paragraph 3.10 of Chapter Three.

¹⁹⁸⁸ Section 29(4)(a) of the FSR Act; See paragraph 5.1, subparagraph 5.2.1 above.

Governor of the SARB within thirty days after being notified of the designation.¹⁹⁸⁹ The nature of these submissions is however not specified in the FSR Act but the implication appears to be that it would relate to challenging the designation. Thereafter, the Governor of the SARB must make a final determination with regard to the confirmation or revocation of the designation, and duly notify the financial institution of the outcome.¹⁹⁹⁰

It is evident that the partial compliance and/or non-compliance with the designation process in the case of emergency designation exclusively depends on the happening of a systemic event. This emergency designation is event-driven warranting the SARB to mitigate systemic events swiftly so that financial stability may be safeguarded. Freixas aptly points out that there is a need for prompt macro-prudential intervention in cases of systemic threats considering the prohibitive costs that would be incurred for the inaction.¹⁹⁹¹

The FSR Act further states that the designation of an institution as a SIFI does not imply or entitle it to a guarantee or any form of credit or other support from any organ of state.¹⁹⁹² This provision is consistent with the objective of the *FSB SIFI framework* of ending the moral hazard problem linked to SIFIs that pre-GFC regarded themselves as “entitled” to be bailed out with taxpayers money when they encountered financial distress as they knew how systemically important they were and what havoc their demise would wreak on a financial system.¹⁹⁹³ The Governor of the SARB is entitled to revoke a designation of a SIFI, in writing.¹⁹⁹⁴ However, the FSR Act does not specify the circumstances under which the Governor of the SARB may revoke a designation of a SIFI. Designation of SIFI and revocation of such designation must be published.¹⁹⁹⁵

¹⁹⁸⁹ Section 29(4)(b) of the FSR Act.

¹⁹⁹⁰ Section 29(4)(c) of the FSR Act.

¹⁹⁹¹ Freixas X *et al* (2016) “Systemic risk, crises and macroprudential regulation” 92 *Economic Record* 313-314.

¹⁹⁹² Section 29(5) of the FSR Act.

¹⁹⁹³ See paragraph 1.3 of Chapter One for the discussion of the SIFI framework.

¹⁹⁹⁴ Section 29(6) of the FSR Act.

¹⁹⁹⁵ Section 29(7) of the FSR Act.

5.4 The South African D-SIB framework: implementing the Regulations relating to banks and section 29 of the FSR Act

Table 5.4 below illustrates the *SARB D-SIB framework* as discussed hereinafter.

Indicator-based measurement approach	
Category (and risk weight)	Systemic indicators (and weights)
Size (40%)	<ul style="list-style-type: none"> • Total assets and off-balance sheet items • Short-term contractual claims • Number of customers • Number of branches • Number of employees
Interconnectedness and substitutability	<ul style="list-style-type: none"> • Exposure to other financial institutions: <ul style="list-style-type: none"> ○ Interbank liabilities; ○ Interbank assets; ○ Cross-holdings funding non-bank financial institutions; ○ Loans to non-bank financial institutions; and ○ Wholesale funding. • Interconnectedness through market infrastructure: <ul style="list-style-type: none"> Share in value settled in SAMOS system; Value in money market settlement; Share in equity settlement; Value in bond settlement; and Participation in Strate custodian services for equities, bonds and money markets. • Interconnectedness through financial market participator: <ul style="list-style-type: none"> ○ Take-up ratio in primary bond auction;

	<ul style="list-style-type: none"> ○ Treasury bills and the SARB debenture auction participation; ○ Foreign exchange market activity; and derivatives activity.
Complexity	<ul style="list-style-type: none"> ● Notional value of OTC derivatives
Global activity	<ul style="list-style-type: none"> ● Foreign currency claims; ● Foreign currency liabilities.
Supervisory judgment indicators	
<ul style="list-style-type: none"> ● The reaction of investors, depositors and the broader financial markets in the event of a failure; ● geographical area serviced and a possibility of a suitable substitute; ● products provided and the possibility of a suitable substitute; ● services provided and the possibility of a suitable substitute; ● number of clients and employees of an institution; and ● possible negative perception from an international market perspective. 	

As elaborated below, the South African *D-SIB framework* was originally formulated in accordance with *the Regulations relating to banks*, effective from January 2013, and subsequently developed consistent with the FSR Act in 2019. As alluded to above,¹⁹⁹⁶ *the Regulations relating to banks* initially in 2016, required the then Registrar of Banks to identify South African banks as D-SIBs based on factors (assigned equal weights) such as size, interconnectedness, substitutability and complexity¹⁹⁹⁷ in order to implement the Basel D-SIB regime in South Africa with effect from 2013.¹⁹⁹⁸ As also pointed out above,¹⁹⁹⁹ this task of identifying D-SIBs is now performed by the PA, having assumed the role of the (then) BSD subsequent to coming into operation of the FSR Act.

¹⁹⁹⁶ See subparagraph 5.2.2.

¹⁹⁹⁷ Regulation 38(8)(e)(vi)(A) of *the Regulations relating to banks*, as amended by *the Amendment of the Regulations relating to banks of May 2016* available at https://www.gov.za/sites/default/files/gcis_document/201605/40002gen297.pdf (accessed 7 March 2017).

¹⁹⁹⁸ The Basel D-SIB regime is discussed in subparagraph 2.4.3 of Chapter Two and the South African D-SIB regime is discussed below in subparagraph 5.6.1.3.

¹⁹⁹⁹ See subparagraph 5.3.

To give effect to *the Regulations relating to banks*, the BSD published the South African D-SIB methodology (broadly based on the Basel indicator-based measurement approach, but with varied weights and additional criteria) in the *Financial Stability Review* of September 2013.²⁰⁰⁰ The South African methodology comprised the indicators of: size as measured by total exposure (weighted 20 per cent); interconnectedness which is indicative of exposures to and from other financial institutions and activity in the financial markets (weighted 20 per cent); substitutability which reflects participation in the financial market infrastructure (weighted 20 per cent); complexity which gauges the South African banks' engagement in complex activities (weighted 10 per cent); "the impact on confidence within the financial sector/social impact", being a unique indicator within the context of South Africa relating to the potential impact of a bank's failure on the public confidence, financial inclusion and the socioeconomic consequences arising from negative externalities to other banking institutions (weighted 20 per cent); and cross jurisdictional activity, which is indicative of the cross-border implications of South African banks (weighted 10 per cent).

Further, in order to implement section 29 of the FSR Act in the context of the South African banking sector, the SARB issued a framework, in June 2019, titled *A methodology to determine which banks are systemically important within the South African context* (the *SARB D-SIB framework*).²⁰⁰¹ The publication of the *SARB D-SIB framework* followed the release of a Discussion Paper on the SARB's proposed D-SIB framework earlier in February 2019, which is also titled *A methodology to determine which banks are systemically important within the South African context*.²⁰⁰² The

²⁰⁰⁰ Financial Stability Review (September 2013) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2013/5961> (accessed 3 April 2017); See further, Directive 6/2016 – Capital framework for South Africa based on the Basel III framework available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7573> (accessed 1 June 2017); Bank Supervision Department Annual Report 2015 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reports/pa-annual-reports/2016/7309> (accessed 3 April 2017).

²⁰⁰¹ A methodology to determine which banks are systemically important within the South African context (June 2019) available at [https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-stability/resolution-planning/A-methodology-to-determine-which-banks-are-systemically-important-within-the-South-African-context%20\(2\).pdf](https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-stability/resolution-planning/A-methodology-to-determine-which-banks-are-systemically-important-within-the-South-African-context%20(2).pdf) (accessed 9 July 2019).

²⁰⁰² A methodology to determine which banks are systemically important within the South African context – the SARB Discussion Paper (February 2019) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2019/9105> (accessed 30 July 2019).

current *SARB D-SIB framework* updated the earlier version that was published in accordance with the *Regulations relating to banks*. This current framework is similar to the original framework except that the former combines the categories of interconnectedness and substitutability. Further, the current framework eliminated the category of “the impact on confidence within the financial sector/social impact” relating to the potential impact of a bank’s failure on the public confidence, financial inclusion and the socioeconomic consequences arising from the negative externalities to other banking institutions.

The *SARB D-SIB framework* lays down the assessment methodology for the identification of banks as D-SIBs in South Africa, based on indicator-based measurement approach,²⁰⁰³ as supplemented by supervisory judgment.²⁰⁰⁴ The SARB’s indicator-based measurement approach adjusts the risk weights and customises the indicators of the Basel indicator-based measurement approach to best reflect the idiosyncrasies of South African banking sector.²⁰⁰⁵ The data that are used to derive the indicators for each of the categories are obtained from a variety of sources.²⁰⁰⁶ These include the banks’ returns in terms of section 75 of the Banks Act;²⁰⁰⁷ data from the South African Multiple Option Settlement (SAMOS) system;²⁰⁰⁸ data on participation in the domestic foreign currency market; data on participation in the primary bond and money market; and data on security settlement and custodian services in the secondary market.²⁰⁰⁹ The SARB has indicated that it will review its assessment methodology annually or at any time when there are relevant developments internationally or when the information that justifies the review is available.²⁰¹⁰

²⁰⁰³ It is discussed in subparagraph 5.4.1 below.

²⁰⁰⁴ It is discussed in subparagraph 5.4.2 below.

²⁰⁰⁵ See paragraph 2.2 of Chapter Two.

²⁰⁰⁶ Paragraph 4 of the *SARB D-SIB framework*.

²⁰⁰⁷ See subparagraph 5.6.8 below.

²⁰⁰⁸ See paragraph 4.2.1.2 below.

²⁰⁰⁹ Paragraph 4 of the *SARB D-SIB framework*.

²⁰¹⁰ Paragraph 8 of the *SARB D-SIB framework*.

5.4.1 The indicator-based measurement approach

The indicator-based measurement approach of the *SARB D-SIB framework* assesses the systemic importance of a bank based on the categories of size, interconnectedness and substitutability (combined), complexity, and global activity.²⁰¹¹ The SARB calculates the systemic score for each D-SIB by averaging twenty-one indicators under its indicator-based measurement approach across the four categories of size (40 per cent risk weight); the combination of interconnectedness and substitutability (40 per cent risk weight); complexity (10 per cent risk weight); and cross-jurisdictional activity (10 per cent risk weight).²⁰¹² The total systemic score for each D-SIB equals to the weighted average of the systemic scores of these four categories whose resulting value is then expressed in basis points.²⁰¹³ The SARB stated that it will update the calculations of banks' systemic importance quarterly.²⁰¹⁴

5.4.1.1 Size indicator

The category of size relates to the negative externalities that will be generated from the distress or failure of a large bank relative to a small bank, and it is indicative of greater loss that will be inflicted on a bank's financial customers and employees as well as the difficulty in replacement of its financial services and activities.²⁰¹⁵ The indicators of size are: total assets and off-balance sheet items; short-term contractual claims; number of customers; number of branches; and number of employees.²⁰¹⁶

The SARB noted that the category of size is relevant in the assessment of the South African banking sector given its dominance by large banks and high level of concentration,²⁰¹⁷ as the distress or failure of one bank may potentially jeopardise the financial system and cause adverse effects to the economy.²⁰¹⁸ Therefore, unlike the

²⁰¹¹ Paragraph 5 of the *SARB D-SIB framework*.

²⁰¹² Paragraph 5 of the *SARB D-SIB framework*.

²⁰¹³ *Ibid.*

²⁰¹⁴ Paragraph 8 of the *SARB D-SIB framework*.

²⁰¹⁵ Paragraph 5, subparagraph 5.1, of the *SARB D-SIB framework*.

²⁰¹⁶ Paragraph 7 of the *SARB D-SIB framework*.

²⁰¹⁷ IMF South Africa *Financial Sector Assessment Program – Financial System Stability Assessment* (February 2022) available at

https://www.treasury.gov.za/comm_media/press/2022/2022021701%20FSAP%20Financial%20System%20Stability%20Assessment%20Feb%202022.pdf (accessed 30 November 30 2022)

²⁰¹⁸ *Ibid.*

risk weighting of 20 per cent that is given in the *Basel G-SIB framework*,²⁰¹⁹ a risk weighting of 40 per cent is assigned to the category of size to recognise the concentrated nature of the South African banking sector.²⁰²⁰

5.4.1.2 Interconnectedness and substitutability indicators

The interconnectedness-category indicates the extent to which South African financial institutions are intertwined with banks, especially owing to the existence of financial conglomerates,²⁰²¹ raising the concerns for contagion risk.²⁰²² Consistent with the definition of the BCBS, “substitutability” in the South African context, demonstrates the extent to which the activities of a bank may be replaced by, or transferred to, other financial market participants should such a bank collapse.²⁰²³

The category of interconnectedness and substitutability is grouped into three indicators: interconnectedness through exposure to other financial institutions; interconnectedness through market infrastructure; and interconnectedness through the financial market participator. The sub-indicators of the indicator of interconnectedness through exposure to other financial institutions are: interbank liabilities; interbank assets; cross-holdings funding non-bank FIs; loans to non-bank FIs; and wholesale funding.²⁰²⁴ The sub-indicators of the indicator of interconnectedness through market infrastructure comprise: share in value settled in the SAMOS system;²⁰²⁵ the value in money market settlement; share in equity

²⁰¹⁹ See paragraph 2.2.1, subparagraph 2.2.1.1, of Chapter Two, on the discussion of the Basel G-SIB framework.

²⁰²⁰ Paragraph 5, subparagraph 5.1, of the *SARB D-SIB framework*.

²⁰²¹ Section 160 of the FSR Act stipulates that the PA may designate a financial institution as a financial conglomerate.

²⁰²² Paragraph 5, subparagraph 5.2, of the *SARB D-SIB framework*; The existence of financial conglomerates in the South African financial landscape is recognised in the IMF South Africa *Financial System Stability Assessment* (December 2014) available at <https://www.imf.org/external/pubs/ft/scr/2014/cr14340.pdf> (accessed 20 October 2016) and the FSB Peer Review of South Africa – Review Report (February 2013) available at http://www.fsb.org/wp-content/uploads/r_130205.pdf (accessed 1 March 2017).

²⁰²³ Paragraph 5, subparagraph 5.2, of the *SARB D-SIB framework*.

²⁰²⁴ Paragraph 7 of the *SARB D-SIB framework*.

²⁰²⁵ The South African Multiple Option Settlement (SAMOS) is the South African Real Time Gross Settlement (RTGS) system which is an automated interbank settlement system provided by the SARB, which settles large-value and retail payments on a real-time basis available at <https://www.resbank.co.za/en/home/what-we-do/payments-and-settlements/settlement-services> (accessed 13 April 2018).

settlement; the value in bond settlement; and participation in Strate,²⁰²⁶ custodian services for equity, bonds and the money market.²⁰²⁷ Lastly, the sub-indicators of the indicator of interconnectedness through financial market participator comprise: the take-up ratio in the primary bond auction; Treasury bills²⁰²⁸ and the SARB debenture auction participation;²⁰²⁹ foreign exchange market activity; and derivatives activities.²⁰³⁰

Under its *D-SIB framework*, the SARB combines the categories of interconnectedness and substitutability based on their common indicators,²⁰³¹ but unfortunately does not explain the overlap. Further, the SARB contends the said combination does not deviate from the *Basel G-SIB framework* considering that the combined category receives a weighting of 40 per cent because under the *Basel G-SIB framework* interconnectedness and substitutability each has a weighting of 20 per cent thus also adding up to 40 per cent.²⁰³²

5.4.1.3 Complexity indicator

The complexity of a bank's business model, operational model and its organisational structure, means that if such a bank encounters financial distress it will undergo a complex resolution process²⁰³³ and it also complicates the assessment of its systemic contribution.²⁰³⁴ The notional value of OTC derivatives is the indicator of complexity.²⁰³⁵ However, the SARB acknowledges the limited engagement of South African banking institutions in complex financial markets such as derivatives activities,

²⁰²⁶ Strate is a South African Central Securities Depository providing electronic settlement of equities, bonds and money market securities and provides collateral management services. Refer to Strate website available at <https://www.strate.co.za/> (accessed 10 October 2019).

²⁰²⁷ Paragraph 7 of the *SARB D-SIB framework*.

²⁰²⁸ Treasury bill is defined as "short-term debt instruments denominated in South African Rands (ZAR), which are sold at a discount to par and carry no coupon." For this, see *Treasury bill information memorandum of the Republic of South Africa* (October 2008) available at <http://www.treasury.gov.za/divisions/alm/Treasury%20Bills%20Information%20Memorandum.pdf> (accessed 10 October 2019).

²⁰²⁹ The SARB issues debentures to the market on auctions to receive liquidity. For this, see the SARB *Financial Markets Department Operational Notice* (June 2022) available at <https://www.resbank.co.za/content/dam/sarb/publications/financial-markets/notices/operational-notices/Operational-notice-Money-Market-Operations-June-2022.pdf> (accessed 10 October 2019).

²⁰³⁰ Paragraph 7 of the *SARB D-SIB framework*.

²⁰³¹ Paragraph 5, subparagraph 5.2, of the *SARB D-SIB framework*.

²⁰³² *Ibid.*

²⁰³³ See paragraph 1.7 of Chapter One for an overview of the resolution framework.

²⁰³⁴ Paragraph 5, subparagraph 5.4, of the *SARB D-SIB framework*.

²⁰³⁵ Paragraph 7 of the *SARB D-SIB framework*.

thus warranting the reduced risk weight of 10 per cent that is assigned to this indicator.²⁰³⁶

5.4.1.4 Global activity indicator

The global activity category indicates the systemic impact of a bank's failure that is correlated to the global market share of its cross-jurisdictional assets and liabilities, also causing spill-over effects²⁰³⁷ and complex resolution.²⁰³⁸ The SARB justified the inclusion of the global activity category in its *D-SIB framework* on grounds of the substantial presence of the South African banks in other jurisdictions, especially on the African continent, conducting cross-border activities, and whose systemic footprint may have negative spill-over effects to the South African financial system.²⁰³⁹ This approach is in line with the BCBS's view that the global cross-jurisdictional activity may be relevant for assessing the systemic importance of banks by capturing the regional perspective of systemic risk for jurisdictions that are home to internationally active banks with subsidiaries in other jurisdictions.²⁰⁴⁰

5.4.2 Supervisory judgment

The supervisory judgment approach allows the SARB to exercise its discretion to capture banks whose systemic importance is overlooked by the scoring methodology of the indicator-based measurement approach.²⁰⁴¹ This supervisory overlay methodology is consistent with the *Basel D-SIB framework* as it is designed to be principles-based in order to allow an appropriate degree of national discretion in assessing of the systemic importance of domestic banks.²⁰⁴² The SARB incorporates the following indicators to identify systemically important banks under the supervisory judgment approach, supplementing the indicator-based measurement approach:²⁰⁴³

²⁰³⁶ Paragraph 5, subparagraph 5.4, of the *SARB D-SIB framework*; See further, the Financial Stability Review (September 2013) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2013/5961> (accessed 3 April 2017).

²⁰³⁷ See paragraph 1.1 of Chapter One for the definition of spill-over effects

²⁰³⁸ Paragraph 5, subparagraph 5.3, of the *SARB D-SIB framework*.

²⁰³⁹ *Ibid*; See further, IMF South Africa Financial Sector Assessment Program – Detailed assessment of compliance on the Basel Core Principles for Effective Banking Supervision (March 2015) available at

<https://www.imf.org/external/pubs/ft/scr/2015/cr1555.pdf> (accessed 20 October 2016).

²⁰⁴⁰ See paragraph 2.2, subparagraph 2.2.2, of Chapter Two.

²⁰⁴¹ Paragraph 6 of the *SARB D-SIB framework*.

²⁰⁴² See paragraph 2.3 of Chapter Two, for the discussion of the Basel D-SIB framework.

²⁰⁴³ *Ibid*.

- (a) the reaction of investors, depositors and the broader financial markets in the event of a failure;
- (b) geographical area serviced and a possibility of a suitable substitute;
- (c) products provided and the possibility of a suitable substitute;
- (d) services provided and the possibility of a suitable substitute;
- (e) number of clients and employees of an institution; and
- (f) possible negative perception from an international market perspective.

5.5 South African D-SIBs/SIFI-banks

Consistent with section 29 of the FSR Act, the Governor of the SARB has designated six banks as SIFIs in South Africa as published in the *Financial Stability Review* of November 2019.²⁰⁴⁴ These South African SIFI-banks are: Absa Bank Limited; The Standard Bank of South Africa Limited; FirstRand Bank Limited; Nedbank Limited, Investec Bank Limited; and Capitec Bank Limited.²⁰⁴⁵

The Governor of the SARB notified the FSOC of the proposed designation and invited the financial institutions concerned to make submissions in line with the requirements of the FSR Act. These banks designated as SIFIs accepted their designation without contesting the decision of the Governor of the SARB.²⁰⁴⁶ While acknowledging that SIFI-banks have diversified business models and more sophisticated risk-management frameworks in place than smaller banks, the SARB indicated that it regards it necessary to monitor and regulate their potential systemic impact on the financial sector, in addition to their stringent prudential regulation by the PA.²⁰⁴⁷

What the *Financial Stability Review* of November 2019 however does not disclose is the methodology that was employed by the Governor of the SARB to designate each of the specified bank as a SIFI. As pointed out in Chapter Two,²⁰⁴⁸ the BCBS recommends the disclosure of the methodologies employed to identify banks as D-

²⁰⁴⁴ SARB Financial Stability Review – Second edition (November 2019) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2019/9606> (accessed 5 April 2020).

²⁰⁴⁵ *Ibid.*

²⁰⁴⁶ SARB Financial Stability Review – Second edition November 2019 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2019/9606> (accessed 5 April 2020).

²⁰⁴⁷ *Ibid.*

²⁰⁴⁸ Paragraph 2.2 of Chapter Two.

SIBs and the systemic scores that are obtained to encourage such banks to reduce their systemic importance.

5.6 The stringent prudential requirements for South African D-SIBs/SIFI-banks

To facilitate a better understanding of the discussions hereinafter, Table 5.6 below lists the prudential requirements for South African SIFI-banks/D-SIBs.

Prudential requirements	Specific requirements
CCvB	<ul style="list-style-type: none"> • 2.5% of a bank's RWAs
CCyB	<ul style="list-style-type: none"> • Ranges between 0-2.5%
D-SIB buffer	<ul style="list-style-type: none"> • The first 1% requirement of the D-SIB buffer, up to a maximum of 1% of a banks' RWAs, must be fully met with the CET1 capital • Any additional requirement, up to the first 1.5% of a bank's RWAs may be fulfilled by Tier 1 capital • And any additional requirement, up to 2.5% of a bank's RWAs, may be met with total capital and reserve funds
Pillar 2A	<ul style="list-style-type: none"> • 1% of a bank's RWAs • Pillar 2A combined application with the D-SIB buffer cannot exceed a maximum of 3.5% of a bank's RWAs • The aggregate requirement must not exceed 2 per cent for CET1 capital and 2.5 per cent for Tier 1 capital
Pillar 2B	<ul style="list-style-type: none"> • The level of its application may be based on a bank's regulatory and economic capital

Additional discretionary capital buffer	<ul style="list-style-type: none"> • It is constituted of CET1 capital, Tier 1 and tier 2 capital to a bank's RWAs, as may be determined by the board of directors and the senior management of a bank
Supplementary leverage ratio	<ul style="list-style-type: none"> • It should at no time be less than 4%, that is, the bank's leverage multiple, which is the inverse of the bank's leverage ratio, shall at no time exceed 25, • or such leverage ratio and multiple as may be determined by the PA in consultation with the Governor of the SARB, which leverage ratio shall in no case be less than 3% of a bank's RWAs
Risk-management requirements	Incorporated under Regulation 39 of the <i>Regulations relating to banks</i>
The framework for measuring and controlling large exposure	<ul style="list-style-type: none"> • 20% credit exposure limit of a D-SIB's Tier 1 capital, on an average daily balance basis for the month, for the period from 1 April 2022 to 31 December 2022 • 18% of a D-SIB's Tier 1 capital, on an average daily balance basis for the month, for the period from 1 January 2023 to 31 December 2024 • 15% of a D-SIB's Tier 1 capital, on an average daily balance basis for

	the month, from 1 January 2025 onwards
Sectoral and geographical exposures	<ul style="list-style-type: none"> The PA sets limits or conditions regarding the aggregate amount of credit concentration risk exposure to sectoral and geographical areas
Organisational structures	<ul style="list-style-type: none"> Incorporated under Regulation 41 of <i>the Regulations relating to banks</i> regarding the composition of the board of directors of a bank.
Required statistical returns	<ul style="list-style-type: none"> Banks are required to furnish required statistical returns pursuant to section 75 of the Banks Act for the PA to determine their compliance with the prudential standards
Recovery and resolution regimes	<ul style="list-style-type: none"> Implemented under the Financial Sector Laws Amendment Act No. 23 of 2021

It appears that the banks that have been identified as SIFIs by the Governor of the SARB and those that are identified by the PA as D-SIBs are subject to the same prudential standards, having observed that technically there will be no difference between South African SIFI-banks and D-SIBs. As pointed out in the IMF *FSAP Report* issued in June 2022, all banks that have been designated as SIFIs by the Governor of the SARB are classified as D-SIBs by the PA.²⁰⁴⁹

²⁰⁴⁹ IMF South Africa: Financial Sector Assessment Program – Technical Note on systemic risk oversight and macroprudential policy (June 2022) available at <https://www.imf.org/en/Publications/CR/Issues/2022/06/16/South-Africa-Financial-Sector-Assessment-Program-Technical-Note-on-Systemic-Risk-Oversight-519731> (accessed 3 October 2022).

Section 30 of the FSR Act refers to the following minimum stringent prudential requirements for SIFIs:

- (a) Capital requirements including counter-cyclical buffers;²⁰⁵⁰
- (b) Leverage ratio;²⁰⁵¹
- (c) Liquidity requirements;²⁰⁵²
- (d) Risk-management requirements including guarantee arrangements;²⁰⁵³
- (e) Large exposure limits;²⁰⁵⁴
- (f) Sectoral and geographical exposures;²⁰⁵⁵
- (g) Organisational structures;²⁰⁵⁶
- (h) Required statistical returns;²⁰⁵⁷ and
- (i) and any other matter in respect of which a prudential standard or regulator's directive may be made that is prescribed by Regulations on the recommendation of the Governor of the SARB.

Section 30 of the FSR Act previously further referred to resolution planning as part of the stringent prudential requirements for SIFIs. As discussed below,²⁰⁵⁸ this requirement has now been incorporated in the recently enacted *Financial Sector Amendment Laws Act No.23 of 2021* that introduces resolution regimes for South African banks.²⁰⁵⁹

5.6.1 The South African capital framework

The Banks Act and *the Regulations relating to banks* require all banks to hold minimum regulatory capital composed of 8 per cent of CET1 capital and reserve funds, AT1 capital and reserve funds and tier 2 capital and reserve funds, of which not less than 4.5 per cent of a bank's RWAs must comprise CET1 capital whereas the sum of CET1

²⁰⁵⁰ See subparagraphs 5.6.1 below.

²⁰⁵¹ See subparagraph 5.6.2 below.

²⁰⁵² See subparagraph 5.6.3 below.

²⁰⁵³ See subparagraph 5.6.4 below.

²⁰⁵⁴ See subparagraph 5.6.5 below.

²⁰⁵⁵ See subparagraph 5.6.6 below.

²⁰⁵⁶ See subparagraph 5.6.7 below.

²⁰⁵⁷ See subparagraph 5.6.8 below.

²⁰⁵⁸ See subparagraph 5.6.9 below.

²⁰⁵⁹ Financial Sector Laws Amendment Act No.23 of 2021 available at https://www.gov.za/sites/default/files/gcis_document/202203/45825gen789.pdf (accessed 30 July 2022).

capital and AT1 capital must be 6 per cent of RWAs.²⁰⁶⁰ Additionally, all banks must maintain capital for systemic risk, otherwise known as Pillar 2A capital, as well as bank-specific individual capital (Pillar 2B), and also an additional discretionary internal capital buffer, as discussed below.²⁰⁶¹

Regarding the above-stated stringent prudential requirements, it is to be noted that the enhanced capital regime for all banks, including SIFI-banks, has already previously been implemented as now also required by section 30 of the FSR Act.²⁰⁶² It was implemented via *the Regulations relating to banks* incorporating the *Basel III capital framework*, which came into force from January 2013.²⁰⁶³ This enhanced capital framework consists of the CCvB²⁰⁶⁴ and the CCyB,²⁰⁶⁵ applying generally to all banks, and the D-SIB buffer²⁰⁶⁶ specifically applying to D-SIBs in line with the *Basel D-SIB framework*.²⁰⁶⁷ This capital regime for South African banks is captured in *Directive 5/2013* and *Directive 6/2016*.²⁰⁶⁸

5.6.1.1 The capital conservation buffer (CCvB)

Under the South African enhanced capital regime, the CCvB consisting of 2.5 per cent of the CET1 capital of a bank's RWAs,²⁰⁶⁹ ranges above the minimum regulatory

²⁰⁶⁰ Section 70 of the Banks Act, read with Regulation 38(d) and (e)(i) of *the Regulations relating to banks*.

²⁰⁶¹ See subparagraphs 5.6.1.4 and subparagraph 5.6.1.5.

²⁰⁶² BCBS RCAP Assessment of Basel III risk-based capital regulations – South Africa (June 2015) available at

<https://www.bis.org/bcbs/publ/d322.pdf> (accessed 17 July 2017).

²⁰⁶³ The Banks Act No.94 of 1990: Regulations Relating to Banks of December 2012 available at http://www.treasury.gov.za/legislation/35950_12-12_ReserveBankCV01.pdf (accessed 23 March 2017); *the Amendment of the Regulations relating to banks of May 2016* available at

https://www.gov.za/sites/default/files/gcis_document/201605/40002gen297.pdf (accessed 7 March 2017); Circular 6/2015 – Proposed amended Regulations relating to Banks available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2015/6872> (accessed 23 March 2017).

²⁰⁶⁴ See subparagraph 5.6.1.1 below.

²⁰⁶⁵ See subparagraph 5.6.1.2 below.

²⁰⁶⁶ See subparagraph 5.6.1.3 below.

²⁰⁶⁷ See subparagraphs 2.4.1, 2.4.2 and 2.4.3 of Chapter Two.

²⁰⁶⁸ Directive 5/2013 – Capital framework for South Africa based on the Basel III framework available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2013/5686> (accessed 23 March 2017); Directive 6/2016 – Capital

framework for South Africa based on the Basel III framework available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7573> (accessed 1 June 2017).

²⁰⁶⁹ Regulation 38(8)(e) (iv) of *the Regulations relating to banks*, read with Regulation 38(8)(f) thereof; See further, Circular 4/2016 – Matters relating to the implementation of the capital conservation buffer available at

capital to act as a cushion for systemic shocks, discussed above.²⁰⁷⁰ It is imposed on all banks, including SIFI-banks. The breach of this requirement restricts discretionary payments such as dividends and bonuses until there is capital restoration.²⁰⁷¹

In order to provide temporary relief measures enabling banks to continue their credit intermediation role while absorbing losses imposed on them by the global Covid19 pandemic, the PA, in April 2020, reduced the required minimum prudential requirements and directed banks to deploy the CCvB as a cushion against shocks, as part of these relief measures.²⁰⁷² Further, the PA issued a guidance recommending all banks to limit dividend and bonus payments to conserve capital for loss-absorption and continued funding.²⁰⁷³

In February 2021, the PA subsequently recommended the reinstatement of the CCvB requirement and provided guidance regarding the relaxation of the restriction on distribution of dividends and bonus payments for purposes of stable capital levels of banks.²⁰⁷⁴ The PA, nonetheless, cautioned that the distributions of dividends on ordinary shares and/or payments of cash bonuses should be prudent and commensurate with the banks' assessments of the Covid-19 conditions and potential

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2016/7251> (accessed 23 March 2017).

²⁰⁷⁰ See subparagraph 5.6.1.

²⁰⁷¹ Regulation 38(8)(e) (iv) of *the Regulations relating to banks*, read with Regulation 38(8)(f) thereof.

²⁰⁷² Directive 2/2020: Matters related to temporary capital relief in light of COVID 19 (resbank.co.za) (accessed 30 June 2020); See further, the Financial Stability Review – First edition (May 2020) available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2020/9956> (accessed 30 June 2020). In this *Financial Stability Review*, the SARB notes that when banks approach the required minimum capital requirements, they are likely to reduce risk-weighted exposures or the size of those exposures and this results in reduced lending. The SARB notes that reducing the required minimum capital requirements, thus enables banks to continue lending. As indicated in paragraph 2.6 of Chapter Two, Covid19 was characterised as a pandemic by the WHO. Following this, South Africa declared Covid19 outbreak as a national disaster, and as a result a national lockdown was imposed from that time throughout 2021. See Government Notice No. R 313 under the Disaster Management Act 57 of 2002 available at https://www.gov.za/sites/default/files/gcis_document/202003/43096gon313.pdf (accessed 30 November 2020); See further, Scott N (2022) "The banking Regulation Review: South Africa" available at <https://thelawreviews.co.uk/title/the-banking-regulation-review/south-africa> (accessed 12 September 2022).

²⁰⁷³ Guidance Note 4/2020 – Dividends-and-bonus-payments-in-response-to-Covid19.pdf available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2020/9845> (accessed 30 June 2020).

²⁰⁷⁴ Guidance Note 3/2021 – Distribution of dividends on ordinary shares and payment of cash bonuses to executive officers (resbank.co.za) (accessed 30 August 2021).

future uncertainty.²⁰⁷⁵ The CCvB requirement was subsequently reinstated by *Directive 5/2021*.²⁰⁷⁶ In the *Financial Stability Review*, published in May 2021, the SARB noted that South African banks remained adequately capitalised despite lower profitability.²⁰⁷⁷ In its first edition of the *Financial Stability Review* issued in May 2022, the SARB however indicated that the banking sector's regulatory capital in the form of CET1 capital increased steadily throughout 2021 to levels higher than the pre-Covid period.²⁰⁷⁸

5.6.1.2 The countercyclical capital buffer (CCyB)

The CCyB regime implements the *Basel III capital framework* to regulate the cyclical systemic risk posed by banks in the South African banking sector and it augments the CCvB.²⁰⁷⁹ The Financial Stability Committee (FSC) is the South African national designated authority²⁰⁸⁰ that is tasked with the setting of the CCyB rate comprising of CET1 capital of up to 2.5 per cent of RWAs, the breach of which subjects banks to constraints on capital distributions until their capital is restored to the required levels.²⁰⁸¹ This committee is a non-statutory body that forms part of the SARB Financial Stability Department that was established in 2000, and it formulated the *SARB macroprudential framework* as part of its duties.²⁰⁸² In line with internationally agreed principles, the FSC is guided by the credit-to-GDP ratio and other credit expansion indicators to assess the level of systemic risk build-up in the South African

²⁰⁷⁵ Guidance Note 2/2022 – Dividends and bonus payments in response to Covid19 available at <https://www.resbank.co.za/content/dam/sarb/publications/prudential-authority/pa-deposit-takers/banks-guidance-notes/2022/G2-2022%20-%20Dividends%20and%20bonus%20payments%20in%20response%20to%20Covid%2019.pdf> (accessed 20 April 2022).

²⁰⁷⁶ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

²⁰⁷⁷ Financial Stability Review first edition (May 2021) (resbank.co.za) (accessed 30 August 2021).

²⁰⁷⁸ Financial Stability Review first edition (May 2021) (resbank.co.za) (accessed 30 August 2021)

²⁰⁷⁹ Regulation 38(8)(e)(v), read in conjunction with Regulation 38(8)(g) of *the Regulations relating to banks*; See further, Circular 8/2015 – Countercyclical capital buffer for South Africa based on the Basel III framework available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2015/7005> (accessed 23 March 2017).

²⁰⁸⁰ Financial Stability Review first edition 2017 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2017/7786> (accessed 26 May 2017).

²⁰⁸¹ Directive 6/2016 – Capital framework for South Africa based on the Basel III framework available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7573> (accessed 1 June 2017).

²⁰⁸² In the Financial Stability Review – First edition 2020, the SARB notes that the Financial Stability Committee plays a pivotal role in helping the SARB to fulfil the financial stability functions on every day-to-day basis.

financial system.²⁰⁸³ Notably, the FSC reciprocates the CCyB in other jurisdictions based on the materiality principle by only recognising credit exposures exceeding a specified threshold.²⁰⁸⁴

It is mentioned in the first edition of the *Financial Stability Review* of 2019, that the Financial Stability Committee reported that the CCyB would, for the time being, remain at zero per cent because of the decreased rate of credit growth in South Africa.²⁰⁸⁵ According to the *Financial Stability Review* first edition of 2020, this rate of the CCyB remained unchanged as of May 2020.²⁰⁸⁶ Subsequently, the SARB reported in the *Financial Stability Review*, published in May 2021, that the FSC deemed it appropriate to maintain the CCyB at zero per cent given the (then) current economic downturn.²⁰⁸⁷ In April 2022, the FSC further maintained the CCyB at zero per cent on grounds of mild credit growth²⁰⁸⁸ and this rate remained unchanged as also mentioned in the October 2022 *Financial Stability Review*.²⁰⁸⁹

5.6.1.3 The D-SIB buffer

Consistent with the *Basel D-SIB framework, the Regulations relating to banks* subjects South African D-SIBs to a D-SIB buffer requirement.²⁰⁹⁰ According to *Directive 5/2021*, the combined total capital adequacy requirement in respect of Pillar 2A²⁰⁹¹ and the D-SIB buffer must not exceed 3.5 per cent of a bank's RWAs composed of qualifying

²⁰⁸³ Burra P *et al* (2015) "Implementing the countercyclical capital buffer in South Africa: Practical considerations" 18 *South Africa Journal of Economic and Management Sciences* 105 at 109.

²⁰⁸⁴ Directive 2/2018 – Materiality threshold in respect of exposure to a foreign jurisdiction in applying jurisdictional reciprocity in the countercyclical capital buffer calculation available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2018/8705> (accessed 8 October 2018).

²⁰⁸⁵ Financial Stability Review first edition of 2019 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2019/9276> (accessed 10 June 2019); See further, the Financial Stability Review second edition 2018 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2018/8904> (accessed 10 June 2019).

²⁰⁸⁶ Financial Stability Review second edition 2020 (resbank.co.za) (accessed 30 November 2020)

²⁰⁸⁷ Financial Stability Review first edition 2021 (resbank.co.za) (accessed 30 August 2021).

²⁰⁸⁸ Financial Stability Review (May 2022) available at [https://www.resbank.co.za/content/dam/sarb/publications/reviews/finstab-review/2022/financial-stability-review/FSR%20May%202022%201st%20edition.pdf](https://www.resbank.co.za/content/dam/sarb/publications/reviews/finstab-review/2022/financial-stability-review/first-edition-2022-financial-stability-review/FSR%20May%202022%201st%20edition.pdf) (accessed 30 July 2022).

²⁰⁸⁹ Financial Stability Review second edition 2022 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2022/second-edition-2022-financial-stability-review> (accessed 30 November 2022).

²⁰⁹⁰ Regulation 38(8)(e)(vi) of *the Regulations relating to banks*.

²⁰⁹¹ See subparagraph 5.6.1.4 below for the discussion of Pillar 2A.

CET1 capital and reserve funds, AT1 and reserve funds and Tier 2 capital and reserve funds.²⁰⁹² It is further stated that the aggregate requirement must not exceed 2 per cent for CET1 capital and 2.5 per cent for Tier 1 capital.²⁰⁹³ Specifically, the first 1 per cent requirement of the D-SIB buffer, up to a maximum of 1 per cent of a banks' RWAs, must be fully met with CET1 capital.²⁰⁹⁴ Any additional requirement, up to the first 1.5 per cent of a bank's RWAs may be fulfilled by Tier 1 capital. And any additional requirement, up to 2.5 per cent of a bank's RWAs, may be met with total capital and reserve funds. Excluding Pillar 2B²⁰⁹⁵ and the CCyB,²⁰⁹⁶ the highest minimum total capital adequacy requirement to be met by a bank receiving the highest possible D-SIB buffer must not exceed 14 per cent of its RWAs.²⁰⁹⁷

Most notably, the requirement that South African D-SIBs should meet the D-SIB buffer with 50 per cent of CET1 capital significantly departs from the Basel recommendation that the composition of the D-SIB buffer should be 100 per cent of CET1 capital to provide for the maximum loss-absorbing capacity of a D-SIB.²⁰⁹⁸ The PA does not explain the grounds for this deviation. It was noted that the approaches in the US and the Netherlands regarding the composition of the D-SIB buffer requirement are consistent with the *Basel D-SIB framework*.

The D-SIB buffer is applied to D-SIBs according to a bucketing approach and the PA determines the D-SIB buffer on a continuous basis. The buffer will vary between individual SIFI-banks corresponding to their systemic profile.²⁰⁹⁹

²⁰⁹² Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021). See further, Directive 6/2016 – Capital framework for South Africa based on the Basel III framework available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7573> (accessed 1 June 2017).

²⁰⁹³ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

²⁰⁹⁴ *Ibid.*

²⁰⁹⁵ Discussed in subparagraph 5.6.1.4 below.

²⁰⁹⁶ Discussed in subparagraph 5.6.1.2 above.

²⁰⁹⁷ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

²⁰⁹⁸ See subparagraph 2.3.2 of Chapter Two, for the discussion of the Basel D-SIB buffer requirement.

²⁰⁹⁹ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

The rules that apply to the contravention of the required amount of the CCvB also apply to the violation of the combined total CCvB and the D-SIB buffer, meaning that a D-SIB would be subject to capital constraints in the case of contravention of the D-SIB buffer requirement until such time when compliance is restored.²¹⁰⁰ The PA requires D-SIBs to disclose their D-SIB buffers to foster transparency of the D-SIB framework.²¹⁰¹

The Regulations implemented the D-SIB buffer regime parallel with the CCvB and the CCyB regime between January 2016 and December 2018, and the D-SIB buffer was then expected to have been fully implemented by January 2019.²¹⁰² To facilitate the smooth transition of the D-SIB buffer regime that had to take place by January 2016, D-SIBs have been informed of their different levels of applicable D-SIB buffers since January 2013.²¹⁰³

5.6.1.4 Pillar 2A and Pillar 2B capital

Beyond the enhanced capital framework discussed above,²¹⁰⁴ South African banks are required to maintain sufficient capital to address systemic risk, otherwise known as Pillar 2A.²¹⁰⁵ Pillar 2A generally applies to all banks from time to time to mitigate

²¹⁰⁰ Directive 6/2016 – Capital framework for South Africa based on the Basel III framework available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7573> (accessed 1 June 2017); Guidance Note 9/2012 – Capital framework for South Africa based on the Basel III framework available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2012/5154> (accessed 31 May 2017).

²¹⁰¹ Circular 3/2020 – Disclosure of capital related matters (resbank.co.za) (accessed 30 August 2020); See further, Prudential Authority Annual Report 2020/2021.pdf (resbank.co.za) (accessed 13 December 2021).

²¹⁰² The South African D-SIB buffer regime is implemented in Regulation 38(8)(e)(vi); See further, Circular 4/2016 – Matters relating to the implementation of the capital conservation buffer available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2016/7251> (accessed 23 March 2017); Directive 7/2017 – Submission of regulatory and economic information by domestic systemically important banks and controlling companies (D-SIBs) on a bi-annual basis available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2017/8113> (accessed 23 March 2017).

²¹⁰³ Financial Stability Review September 2013 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2013/5961> (accessed 3 April 2017); Bank Supervision Department Annual Report 2015 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reports/pa-annual-reports/2016/7309> (accessed 6 April 2017).

²¹⁰⁴ See subparagraph 5.6.1., subparagraphs 5.6.1.1, 5.6.1.2 and 5.6.1.3.

²¹⁰⁵ Regulation 38(8)e(ii) of *the Regulations relating to banks*.

macro-prudential risks emanating from the South African financial system.²¹⁰⁶ Whereas Pillar 2A is set to be a minimum of 1 per cent of a bank's RWAs, its combined application with the D-SIB buffer cannot exceed a maximum of 3.5 per cent of a bank's RWAs,²¹⁰⁷ as noted above.²¹⁰⁸ The rationale for this regulatory restriction is to prevent the excessive accumulation of capital requirements designed to address the systemic risk emanating from SIFI-banks.²¹⁰⁹ In other words, there is a need to reduce the rate of simultaneous application of Pillar 2A and the D-SIB buffer to avoid the double-counting of capital requirements. Notably, Pillar 2A is similar to the Dutch SyRB requirement to the extent that they are intended to address macroprudential risks.²¹¹⁰

In April 2020, the PA adjusted the Pillar 2A requirement from 1 per cent of RWAs to zero per cent to ease the capital requirements for banks amid the Covid19 pandemic.²¹¹¹ In February 2021, the PA subsequently recommended the reinstatement of Pillar 2A to 1 per cent of RWAs due to banks' strong capital ratios and the anticipated economic recovery.²¹¹² Pillar 2A, together with other capital requirements, were accordingly reinstated by *Directive 5/2021*.²¹¹³

Apart from Pillar 2A, the Regulations subjects all banks to bank-specific individual capital requirements, referred to as Pillar 2B, which addresses idiosyncratic risk, being

²¹⁰⁶ Regulation 38(8)(e)(ii) of the *Regulations relating to banks*; as amended by the *Amendment of the Regulations relating to banks of May 2016* available at https://www.gov.za/sites/default/files/gcis_document/201605/40002gen297.pdf (accessed 7 March 2017).

²¹⁰⁷ Circular 4/2016 – Matters relating to the implementation of the capital conservation buffer available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2016/7251> (accessed 28 May 2017).

²¹⁰⁸ See subparagraph 5.6.1.3.

²¹⁰⁹ Circular 4/2016 – Matters relating to the implementation of the capital conservation buffer available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2016/7251> (accessed 28 May 2017).

²¹¹⁰ See the discussion of the Dutch SyRB in paragraph 4.5.1, subparagraph 4.5.1.4, of Chapter Four.

²¹¹¹ Directive 4/2020: Capital framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 June 2020); Financial Stability Review first edition 2020 <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2020/9956> (accessed 30 June 2020).

²¹¹² Proposed directive issued in terms of section 6(6) of the Banks Act 94 of 1990: Capital framework for South Africa based on the Basel III framework Proposed directive - Capital Framework (resbank.co.za) (accessed 30 August 2021).

²¹¹³ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

the type of risk that affect each individual bank.²¹¹⁴ Pillar 2B forms part of the South African SREP,²¹¹⁵ addressing risks that are not covered under Pillar 1 requirements and the level of its application may be based on a bank's regulatory and economic capital.²¹¹⁶ Banks are not subject to public disclosure of compliance with the Pillar 2B requirement as it is based on qualitative and quantitative factors that vary across jurisdictions.²¹¹⁷

5.6.1.5 Additional discretionary capital buffer

Further, banks may maintain an additional discretionary internal capital buffer constituted of CET1 capital, Tier 1 and Tier 2 capital to their RWAs, as may be determined by the board of directors and the senior management of a bank.²¹¹⁸ A bank may hold this internal buffer to ensure that the execution of its internal business objectives or the occurrence of adverse external environmental factors do not prevent it from operating above the relevant specified minimum requirements.²¹¹⁹ The PA must continue to monitor and assess the adequacy of this internal buffer against factors such as a bank's strategy, risk profile and capital levels, future capital needs, stress-testing results and risk tolerance and appetite.²¹²⁰

²¹¹⁴ Regulation 38(8)(e)(iii) read in conjunction with regulation 38(4) of *the Regulations relating to banks*.

²¹¹⁵ See paragraph 2.5 of Chapter Two for the discussion of the Basel SREP.

²¹¹⁶ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021); Directive 7/2017 – Submission of regulatory and economic capital information by domestic systemically important banks and controlling companies (D-SIBs) on a bi-annual basis available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2017/8113> (accessed 20 August 2018). In line with Regulation 6(3) of *the Regulations relating to banks*, D-SIBs are required to electronically complete regulatory and economic capital data on a solo and consolidated basis bi-annually to evaluate compliance with the capital requirements, and if they are not compliant, D-SIBs are required to take remedial actions to restore capital requirement ratios to avoid distributions restrictions. See further, Directive 6/2016 – Capital framework for South Africa based on the Basel III framework available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7573> (accessed 1 June 2017).

²¹¹⁷ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

²¹¹⁸ Regulation 38(8)(e)(vii) of *the Regulations relating to banks*; See paragraph 2.5, subparagraph 2.5.1, of Chapter Two, for the definitions of risk appetite, risk tolerance and risk profile.

²¹¹⁹ Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

²¹²⁰ Regulation 38(8)(e)(vii) of *the Regulations relating to banks*; Directive 5/2021 - Capital Framework for South Africa based on the Basel III framework (resbank.co.za) (accessed 30 August 2021).

5.6.2 The supplementary leverage ratio

The South African supplementary leverage ratio framework generally applies to all banks to prevent a build-up of on-balance sheet and off-balance sheet exposure and to mitigate deleveraging in the banking system.²¹²¹ The leverage ratio is defined as the bank's qualifying capital relative to non-risk sensitive exposure.²¹²² The non-risk sensitive exposure comprises on-balance sheet exposures which include: gross exposure amounts; non-derivatives exposures; and securities financing transactions while the off-balance sheet exposures comprise: unsettled securities; acceptances; and standby letters of credit, amongst others items.²¹²³ In terms of *the Regulations relating to banks*, "a bank must manage its affairs in such a manner that its leverage ratio is at no time less than 4 per cent, that is, the bank's leverage multiple, which is the inverse of the bank's leverage ratio, must at no time exceed 25, or such leverage ratio and multiple as may be determined by the PA in consultation with the Governor of the SARB, which leverage ratio shall in no case be less than 3 per cent of a bank's total exposure".²¹²⁴ This means South African banks are subject to 4 per cent supplementary leverage ratio relative to 4 per cent Basel supplementary leverage ratio.²¹²⁵ Banks are required to comply with the Basel leverage framework and quarterly disclosure requirements.²¹²⁶

5.6.3 Liquidity requirements

Consistent with the *Basel LCR framework*, the *South African LCR framework* requires a bank to maintain sufficient unencumbered HQLA that can be converted into cash easily and immediately to meet its liquidity needs over a thirty calendar day period of

²¹²¹ Regulation 38(17)(a) of *the Regulations relating to banks*; See paragraph 1.5 of Chapter One for the definition of deleveraging.

²¹²² Regulation 38(17)(b)(i) and (ii) of *the Regulations relating to banks*.

²¹²³ Regulation 38(17)(b)(iii) of *the Regulations relating to banks*.

²¹²⁴ Regulation 13(17)(b)(iv) of *the Regulations relating to banks*.

²¹²⁵ IMF South Africa: Financial Sector Assessment Program – Technical Note on systemic risk oversight and macroprudential policy (June 2022) available at <https://www.imf.org/en/Publications/CR/Issues/2022/06/16/South-Africa-Financial-Sector-Assessment-Program-Technical-Note-on-Systemic-Risk-Oversight-519731> (accessed 3 October 2022).

²¹²⁶ Directive 4/2014 – Matters related to the Basel III leverage ratio framework and disclosure requirements available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2014/6424> (accessed 28 May 2017); Directive 1/2018 – Matters related to Pillar 3 disclosure requirements available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2018/8573> (accessed 6 February 2020); See subparagraph 2.4.4 of Chapter Two for the discussion of the Basel III leverage ratio framework.

a liquidity stress scenario to promote the short-term resilience of a bank's liquidity risk profile.²¹²⁷ In terms of section 72 of the Banks Act, the South African LCR encompasses HQLA that are composed of cash; gold coin and bullion; central banks cash reserves and marketable securities. Specifically, Level 1 assets constitute a minimum of 60 per cent of the HQLA and Level 2 assets are restricted to 40 per cent of the total HQLA.²¹²⁸

The following assets are classified as Level 1 assets: debt securities issued in foreign currency by the government, provided that the holding of such instruments matches the currency needs of a bank; debt securities issued in Rand by the SARB or the government; and marketable securities that are assigned zero per cent risk weight, which are traded in large and active repo or cash markets characterised by a low level of risk concentration, and have proven to be a reliable source of liquidity in all relevant markets and stressed economic conditions and do not constitute an obligation of a financial institution or any of its affiliates.²¹²⁹

Level 2 HQLA is a marketable security that meets the requirements of a marketable security of a Level 1 HQLA asset, as explained above, except that it is assigned a 20 per cent risk weight and its haircut²¹³⁰ must not exceed 10 per cent during significant liquidity stress events.²¹³¹ Further, Level 2 HQLA asset comprises a corporate bond meeting the following criteria: a credit rating of at least AA-; it is not issued by a bank; it is traded in large markets and has a proven reliability as a source of liquidity in

²¹²⁷ Regulation 26(12)(a) of *the Regulations relating to banks*; Regulation 24(c)(H)(i) of *the Amendment of the Regulations relating to banks of May 2016* available at https://www.gov.za/sites/default/files/gcis_document/201605/40002gen297.pdf (accessed 7 March 2017); See further, Directive 5/2022 – Matters related to liquidity risk available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D5-2022-Matters-relating-to-liquidity-risk> (accessed 30 July 2022).

²¹²⁸ Regulation 26(12) (a)(viii) of *the Regulations relating to banks*; See further, Circular 4/2015 – Matters related to banks' compliance with the prescribed requirements related to the liquidity coverage ratio (LCR) and high-quality liquid assets (HQLA) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2015/6688> (accessed 28 May 2017). It should be noted that Regulations 26 of *the Regulations relating to banks* implemented the BCBS *Principles for sound liquidity risk management and supervision*. See paragraph 2.4, subparagraph 2.4.5, of Chapter Two, for a discussion of the BCBS *Principles for Sound Liquidity Risk Management and Supervision* available at <https://www.bis.org/publ/bcbs144.pdf> (accessed 22 January 2019).

²¹²⁹ Regulation 26(12)(b)(i) of *the Regulations relating to banks*.

²¹³⁰ See paragraph 2.4, subparagraph 2.4.5.1 for the definition of a haircut.

²¹³¹ Regulation 26(12)(b)(ii) of *the Regulations relating to banks*.

significant liquidity stress periods during which it cannot be subject to more than 10 per cent haircut.

In April 2020, the PA reduced the LCR for banks from a 100 per cent requirement to 80 per cent of the full LCR as a result of the financial market stress caused by the Covid19-pandemic. This was done to permit banks to draw on the liquidity buffers built on during the begin market conditions.²¹³² The SARB noted that despite this reduction, South African banks significantly increased liquidity buffers and lending.²¹³³ After making a determination that the market conditions normalised, the PA issued *Directive 8/2021* withdrawing the temporary relief measure relating to the LCR and requiring banks to comply with 90 per cent LCR from the beginning of January 2022 and to reach 100 per cent LCR with effect from April 2022.²¹³⁴ Banks are required to disclose their compliance with the LCR on a quarterly basis.²¹³⁵ Further, banks are required to report to the PA their inability to comply with the LCR and disclosure requirements and the reasons for failure to comply.²¹³⁶

Notably, the SARB created a Committed Liquidity Facility (CLF) during 2013 at a committed fee, that is availed to South African banks to meet the Basel LCR.²¹³⁷ The SARB CLF is in line with paragraphs 55 and 58 of the *Basel LCR framework* which permits jurisdictions that have an insufficient supply of HQLA in their domestic

²¹³² Directive 1/2020: Temporary measures to aid compliance with the LCR during COVID-19 pandemic stress period (resbank.co.za) (accessed 30 June 2020).

²¹³³ Financial Stability Review second edition 2020 (resbank.co.za) (accessed 30 November 2020).

²¹³⁴ Directive 8/2021 - Withdrawal of the temporary relief measure related to the liquidity coverage ratio.pdf (resbank.co.za) (accessed 13 December 2021).

²¹³⁵ Directive 1/2019 – Matters related to Pillar 3 disclosure requirements framework available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2019/9261> (accessed 30 November 2020).

²¹³⁶ Directive 1/2022 – Liquidity coverage ratio _scope of application and matters related to calculation available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D1-2022-Liquidity-coverage-ratio-scope-of-application-and-matters-related-to-calculation-and-disclosure> (accessed 5 May 2022).

²¹³⁷ Guidance Note 5/2012 – Provision of a committed liquidity facility and utilisation of statutory cash reserves in terms of the Basel III liquidity framework available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2012/5036> (accessed 28 May 2017); Guidance Note 5/2015 – Provision of a committed liquidity facility by the South African Reserve Bank available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2015/6888> (accessed 31 May 2017); Guidance Note 6/2016 – Provision of committed liquidity facility by the South African Reserve Bank available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2016/7394> (accessed 31 May 2017).

currency to meet the aggregate demand of banks, to create a CLF. The SARB CLF, which is capped at 40 per cent of the total amount of HQLA that any given bank is required to maintain in Rand currency, is available to banks that comply with Level 1 HQLA and encounter a shortfall in Level 2 HQLA.²¹³⁸

During liquidity stress events, banks are permitted only to draw a CLF amount that is less than the amount of pledged collateral for reasons of credit risk protection.²¹³⁹ In addition, the “look-through approach”-principle²¹⁴⁰ requires banks to include, and quarterly report, assets which are transferred to a SPV for calculation of the required capital requirements.²¹⁴¹ This approach requires banks to maintain the amount of the required capital for credit risk that a bank would have been required to hold for CLF purposes had the assets not been transferred to the SPV.²¹⁴² Due to a continued decrease in HQLA within South Africa, resulting in banks’ inability to comply with the *Basel LCR framework*, the SARB decided to phase out the CLF over three years, which started in December 2018 and was expected to come to an end by November 2021.²¹⁴³ In the *Guidance Note 8/2020*, the PA confirmed that the CLF would have been fully phased out by 1 December 2021.²¹⁴⁴

²¹³⁸ Guidance Note 6/2013 – Provision of a committed liquidity facility by the South African Reserve Bank available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2013/5849> (accessed 31 May 2017).

²¹³⁹ Guidance Note 8/2014 – Provision of a committed liquidity facility by the South African Reserve Bank available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2014/6545> (accessed 31 May 2017);

²¹⁴⁰ See paragraph 2.4, subparagraph 2.4.6, of Chapter Two, on the concept of a look-through approach.

²¹⁴¹ Guidance Note 4/2018 – Continued provision of a committed liquidity facility by the South African Reserve Bank available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2018/8746> (accessed 19 August 2019).

²¹⁴² Guidance Note 5/2017 – Provision of committed liquidity facility by the South African Reserve Bank available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2017/7911> (accessed 3 March 2018).

²¹⁴³ Guidance Note 5/2019 – Continued provision of a committed liquidity facility by the South African Reserve Bank available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2019/9450> (accessed 5 November 2019).

²¹⁴⁴ Guidance Note 8/2020 – Continued provision of the CLF and the introduction of a restricted-use CLF (resbank.co.za) (accessed 30 November 2020).

The *Regulations relating to banks* further required South African banks to comply with the *Basel NSFR framework* with effect from January 2018.²¹⁴⁵ This framework requires banks to maintain the available stable funding to meet the required stable funding in line with the *Basel NSFR framework*.²¹⁴⁶ The stable funding is described as the types and amounts of equity and liabilities expected to be reliable sources of funds over a one year horizon under conditions of extended stress.²¹⁴⁷ The available stable funding comprises: amounts incorporating a bank's capital sources; preferred securities with maturity equal to or greater than one year; bank's liabilities with maturity greater than one year; non-maturity/term deposits with maturity of less than one year that the bank expects to remain with it for an extended period notwithstanding an idiosyncratic stress event;²¹⁴⁸ as well as wholesale funding with maturities of less than one year that the bank expects to remain with it for an extended period notwithstanding an idiosyncratic stress event.²¹⁴⁹

The amount of required stable funding comprises the liquidity characteristics of various types of assets held by a bank, the bank's off-balance sheet contingent exposures and the activities pursued by a bank.²¹⁵⁰ Required stable funding include: cash that is immediately available and is not encumbered as collateral; unencumbered short-term unsecured instruments with outstanding maturities of less than a year; short-term corporate or government bills; the SARB reserves; and unencumbered securities to financial institutions with less than a year maturity period.²¹⁵¹

²¹⁴⁵ Regulation 26(14)(a) of *the Regulations relating to banks*, as amended by the Banks Act No.94 of 1990: Amendment of Regulations of December 2020 available at https://www.gov.za/sites/default/files/gcis_document/202012/44003gen724.pdf (accessed 30 August 2021); Directive 8/2017 – Matters related to the net stable funding ratio available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2017/8161> (assessed 3 March 2018).

²¹⁴⁶ Directive 5/2022 – Matters related to liquidity risk available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D5-2022-Matters-relating-to-liquidity-risk> (accessed 30 July 2022). For the discussion of the Basel NSFR framework, see paragraph 2.4.5, subparagraph 2.4.5.2, of Chapter Two.

²¹⁴⁷ Regulation 10(14)(a)(iv)(A) of *the Amendment of the Regulations relating to banks of May 2016*.

²¹⁴⁸ In terms of Regulation 10(14)(a)(C) of *the Amendment of the Regulations Relating to Banks of May 2016*, an extended bank-specific stress scenario refers to a scenario in which a bank encounters stressed conditions and investors became aware of: significant decline in bank's profitability or solvency arising from heightened credit risk, market risk or operational risk and/or other risk exposures; a potential downgrade in a debt, counterparty credit or deposit rating issued by an eligible institution and/or a material event that calls into question the reputation or credit quality of a bank.

²¹⁴⁹ Regulation 26(b)(i) of *the Regulations relating to banks*.

²¹⁵⁰ Regulation (14)(a)(iv)(B) of *the Amendment of the Regulations relating to banks of May 2016*.

²¹⁵¹ Regulation 26(b)(ii) of *the Regulations relating to banks*.

All the South African internationally active banks are subject to the solo and consolidated application of the Basel LCR and the Basel NSFR, which were phased-in from January 2015 and were fully implemented in January 2019.²¹⁵² In June 2015, the BCBS assessed the *South African LCR framework* and found it to be compliant with the *Basel LCR framework*.²¹⁵³ Further, according to the *IMF Report on the South Africa Article IV Consultation*, published in January 2020, South African banks were assessed to be in compliance with Basel III solvency and liquidity requirements.²¹⁵⁴

5.6.4 Risk-management requirements

The Regulations require banks to put effective risk governance and management frameworks in place to monitor banks' compliance with prudential requirements²¹⁵⁵ in

²¹⁵² Regulation 26(12)(a) of the *Regulations relating to banks* relate to the South African LCR requirement; Regulation 10 (h) (14) thereof is in relation to the NSFR requirement. See further, Directive 6/2014 – Matters related to liquidity risk and the liquidity coverage ratio available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2014/6438> (accessed 28 May 2017); Directive 8/2014 – Matters related to compliance with liquidity coverage ratio available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2014/6474> (accessed 28 May 2017); the Directive 11/2014 – Liquidity coverage ratio: Scope of application and related disclosure requirements available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2014/6551> (accessed 28 May 2017); Circular 5/2016 – Matters of interpretation relating to the Liquidity Coverage Ratio available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-circulars/2016/7319> (accessed 28 May 2017). See also, Jacobs J et al (2012) “The regulatory treatment of liquidity risk in South Africa” 15 *South African Journal of Economic and Management Sciences* 294 at 295. See paragraph 2.4.5 of Chapter Two for the discussions on the Basel III LCR and the Basel III NSFR.

²¹⁵³ BCBS RCAP Assessment of Basel III LCR regulations – South Africa (June 2015) available at <https://www.bis.org/bcbs/publ/d323.pdf> (accessed 3 April 2017); See further, Financial Stability Review (September 2015) available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2013/5961> (accessed 28 May 2017).

²¹⁵⁴ IMF South Africa 2019 Article IV Consultation-Press Release; and Staff Report; and Statement by the Executive Director for South Africa; IMF Country Report No. 20/33; (January 2020) (treasury.gov.za) (accessed 30 November 2020); IMF South Africa Request for Purchase Under the Rapid Financing Instrument-Press Release; Staff Report; and Statement by the Executive Director for South Africa; IMF Country Report No. 20/226; (July 2020) (treasury.gov.za) (accessed 30 November 2020). The IMF notes that South Africa has implemented the Basel Committee on Banking Supervision Principles for Effective Banking Supervision.

²¹⁵⁵ Regulation 39(1), (2) and (3) of the *Regulations relating to banks*; Regulation 41 of the *Regulations relating to banks*; Section 1 (1) of the Banks Act; Sections 60, 60B, 64, 64A, 64B, and 64C of the Banks Act; Guidance Note 5/2016 – Corporate governance principles for banks available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2016/7323> (accessed 1 June 2017); Directive 4/2018 – Matters related to the promotion of sound corporate governance, and in particular in relation to the appointment of directors and executive officers available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2018/8825> (accessed 5 November 2019); Directive 9/2021- Principles for the sound management of operational risk available at

line with the BCBS *Corporate governance principles for banks*.²¹⁵⁶ The board of directors is responsible for the general oversight function of a bank's operations and risk-management framework²¹⁵⁷ and thus must possess sufficient knowledge to ensure that the bank's policies and risk monitoring controls are effective and appropriate and must further ensure that the bank has sufficient management information systems for management of risk.²¹⁵⁸

Senior management must ensure that the bank operates in accordance with its risk-management framework and has to put robust internal capital adequacy assessment process (ICAAP) in place to measure its risk exposure relative to its capital.²¹⁵⁹ The bank is required to form a risk committee whose functions include: assisting the board of directors in its evaluation of the adequacy and efficiency of the risk policies, procedures, practices, and controls applied within the bank; identifying the build-up and concentration of the various risks to which the bank is exposed; assisting the bank to develop a risk mitigation strategy; and assisting the board in ensuring that the risk assessment is undertaken at least annually.²¹⁶⁰

The risk-management framework must establish policies, processes, and procedures to identify, monitor, control and mitigate risks as well as to report such risks.²¹⁶¹ As a minimum, the risk-management framework must: be commensurate with the size and nature as well as a bank's activities relating to risk mitigation; be in alignment with a bank's risk appetite and risk tolerance; specify risk limits and allocate capital to a bank's risk exposures; be sufficiently robust to ensure that the bank maintains sufficient capital and liquidity buffers to remain solvent during stressed events; set

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2021/D9-2021-Principles-for-the-Sound-Management-of-Operational-Risk> (accessed 25 November 2020); See further, Vesala J "How to bring in systemic risk considerations into financial regulation and supervision?" -Chapter 3 – In Balling M *et al* (Eds.) (2010) *The quest for stability*:

Financial stability view 15 at 19 available at

http://www.suerf.org/docx/s_ec1f850d934f440cfa8e4a18d2cf5463_2733_suerf.pdf (accessed 31 May 2017); IMF South Africa: Detailed assessment of compliance on Basel Principles for Effective Banking Supervision (October 2010) available at <https://www.imf.org/external/pubs/ft/scr/2010/cr10353.pdf> (accessed 5 November 2019).

²¹⁵⁶ See paragraph 2.5, subparagraph 2.5.1, of Chapter Two.

²¹⁵⁷ Regulation 39 of *the Regulations relating to banks*.

²¹⁵⁸ Regulation 39(6)(a) of *the Regulations relating to banks*.

²¹⁵⁹ Regulations 39(6)(b) and 39(15)(v) of *the Regulations relating to banks*.

²¹⁶⁰ Section 64A of the Banks Act.

²¹⁶¹ Regulation 39(4) of *the Regulations relating to banks*.

systems in place to ensure that the bank conducts robust liquidity stress-testing; establish controls and systems for aggregation of a bank's risk exposure and risk exposure reporting as well as a timeous identification of material concentrations of the risk exposure, such as to a single counterparty; incorporate sound compensation practices;²¹⁶² and put a robust programme of stress-testing in place to assess the capital adequacy of a bank.²¹⁶³ A bank is further required to conduct periodic reviews of its risk-management processes to ensure their adequacy and reasonableness.²¹⁶⁴

As part of the risk-management requirement, the SARB introduced a stress-testing framework as a forward-looking measure for assessing the resilience of banks to withstand periods of adverse market stress events in South Africa.²¹⁶⁵ These stress tests are conducted once every two years or as, and when, it is deemed appropriate.²¹⁶⁶ During 2015/2016, the SARB conducted a supervisory-run stress test,²¹⁶⁷ and the results revealed that the banks concerned were adequately capitalised with CET1 capital to absorb losses from risky assets.²¹⁶⁸ In this regard, it is to be noted that the IMF made a recommendation during 2018 for the revision of the SARB stress-testing framework, including conducting stress tests annually to capture macro-prudential risks such as those arising from sources of short-term wholesale funding.²¹⁶⁹ The SARB's stress test results documented in the *Financial Stability*

²¹⁶² Regulation 39(5)(a)(b)(c)(d)(e), (f), (g), (i) and (k) of *the Regulations relating to banks*.

²¹⁶³ Regulation 39(7)(h) of *the Regulations relating to banks*.

²¹⁶⁴ Regulation 39(15)(d)(ii) of *the Regulations relating to banks*.

²¹⁶⁵ The SARB established a Stress Testing Division within the Financial Stability Department in January 2015. For this, see an address by Groepe F, Deputy Governor of the SARB, at the Actuarial Society Banking Seminar in

Sandton August 2, 2017 titled *Bank-wide stress testing as a risk management tool* available at <https://www.bis.org/review/r170814g.pdf> (accessed 14 February 2019); Guidance Note 9/2008 – Stress testing available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2008/3354> (accessed 3 April 2017); See further, Varotto S (2012) "Stress testing credit risk: the Great Depression scenario" 36 *Journal of Banking & Finance* 3133-3149.

²¹⁶⁶ See an address by Groepe F, Deputy Governor of the SARB, at the Actuarial Society Banking Seminar in

Sandton August 2, 2017 titled *Bank-wide stress testing as a risk management tool* available at <https://www.bis.org/review/r170814g.pdf> (accessed 14 February 2019).

²¹⁶⁷ Financial Stability Review second edition 2017 available (accessed 6 April 2017).

²¹⁶⁸ Financial Stability Review first edition 2016 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/finstab-review/2017/8073> (accessed 6 April 2017).

²¹⁶⁹ IMF South Africa 2018 Article IV Consultation – Press Release; Staff Report; and Statement by the Executive Director for South Africa (July 2018) available at <https://www.imf.org/en/Publications/CR/Issues/2018/07/30/South-Africa-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46132> (accessed 19 August 2019).

Review of November 2020 projected that the capital adequacy ratio of SIFI-banks was expected to remain above the minimum regulatory requirements even under a severe stress scenario that was anticipated over a medium-term and as such, banks would continue lending.²¹⁷⁰ The *SARB Financial Stability Review* issued in May 2022 confirmed that the capital ratios of banks remained high throughout 2021.²¹⁷¹

Further, SIFI-banks are subject to *Principles for effective risk data aggregation and risk reporting* to reinforce enhanced risk-management frameworks.²¹⁷² In 2015, the SARB reported that SIFI-banks were encountering a compliance challenge with the principle regarding data and IT infrastructure that is designed to adequately and effectively capture risk data aggregation and risk reporting because of its cumbersome nature and compliance costs.²¹⁷³ The *Prudential Committee's 2021 Annual Report* observed some progress in respect of the implementation of these principles but noted that full compliance remained a huge challenge for many banks.²¹⁷⁴

The compliance function forms part of the risk-management and governance framework for South African banks. In particular, *the Regulations relating to banks* stipulate that a bank must have in place, within its risk-management framework and governance structure, an independent compliance function. This independent compliance function must ensure that the bank continuously manages its regulatory and supervisory risks pertaining to non-compliance with applicable laws and regulations or supervisory requirements.²¹⁷⁵

²¹⁷⁰ Financial Stability Review - second edition 2020 (resbank.co.za) (accessed 30 November 2020).

²¹⁷¹ Financial Stability Review first edition (May 2021) (resbank.co.za) (accessed 30 August 2021).

²¹⁷² Guidance Note 3/2014 – Effective risk data aggregation and risk reporting available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2014/6114> (accessed 6 June 2017); See paragraph 2.5 of Chapter Two for the discussion of these principles.

²¹⁷³ Directive 2/2015 – Effective risk data aggregation and risk reporting available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2015/6629> (accessed 6 April 2017); Directive 5/2016 – Compliance with principles for effective risk data aggregation and risk reporting available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7465> (accessed 6 April 2017).

²¹⁷⁴ Prudential Authority Annual Report 2020/2021 (resbank.co.za) (accessed 13 December 2021).

²¹⁷⁵ Regulation 49(1) of *the Regulations relating to banks*.

5.6.5 The framework for measuring and controlling large exposures

In May 2019, the PA issued, for public comment, the *Proposed Directive for measuring and controlling large exposures*,²¹⁷⁶ which would implement the *Basel framework for large exposures limit* in the South African financial landscape.²¹⁷⁷ The PA initially envisaged implementing this proposed framework from January 2021²¹⁷⁸ but postponed the implementation date to April 2021 in light of the Covid19-developments.²¹⁷⁹ The PA subsequently moved this implementation date on to January 2022 to incorporate public comments that were received in July 2021.²¹⁸⁰ The final Directive specifying the large exposures limit was published in April 2022.²¹⁸¹

The Amendments to the Regulations in terms of Banks Act were published in March 2022, effective from April 2022,²¹⁸² to provide the PA with the enabling provisions to specify conditions or limits for measuring and controlling specific types of large exposures. The purpose thereof is to protect banks from losses incurred by the failure of a single counterparty or group of connected counterparties in order to prevent concentration risk in the highly concentrated South African financial sector.²¹⁸³ The group of counterparties that are connected through a control relationship or that are

²¹⁷⁶ Guidance Note 6/2019: Proposed implementation dates in respect of specified regulatory reforms (resbank.co.za) (accessed 30 June 2020).

²¹⁷⁷ See subparagraph 2.4.6 of Chapter Two.

²¹⁷⁸ Guidance Note 6/2019: Proposed implementation dates in respect of specified regulatory reforms (resbank.co.za) (accessed 30 June 2020).

²¹⁷⁹ Guidance Note 7/2020: Proposed implementation dates in respect of specified regulatory reforms (resbank.co.za) (accessed 30 August 2020).

²¹⁸⁰ Proposed Directive - Matters related to the requirements for measuring and controlling large exposures - July 2021.pdf (resbank.co.za) (accessed 13 December 2021); Proposed Directive - Matters related to the requirements for measuring and controlling large exposures (resbank.co.za) March 2021 (accessed 30 August 2021).

²¹⁸¹ Directive 3/2022 – Directive large exposure requirements available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D3-2022-Directive-Large-exposure-requirements> (accessed 11 August 2022).

²¹⁸² *Amendments to Regulations in terms of Banks Act of March 2022* available at <https://www.resbank.co.za/content/dam/sarb/publications/prudential-authority/pa-public-awareness/GG%20No%2046159%20LEX%20and%20TLAC%201%20April%202022.pdf> (accessed 11 August 2022).

²¹⁸³ Directive 3/2022 – Directive large exposure requirements available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D3-2022-Directive-Large-exposure-requirements> (accessed 11 August 2022).

economically interdependent²¹⁸⁴ are regarded as a single counterparty for purposes of calculating the large exposure limits.²¹⁸⁵

The Amendments to the Regulations in terms of Banks Act of March 2022 stipulate that a bank that is not a D-SIB must comply with an aggregate amount of credit concentration risk exposure to a single counterparty that does not exceed a percentage as may be specified in writing by the PA.²¹⁸⁶ These *Amendments to the Regulations* further provide that, following a period of twelve months after the date that a bank has been identified as a D-SIB, such D-SIB must equally comply with the aggregate credit concentration risk exposure as may be specified in writing by the PA.²¹⁸⁷

To give effect to *the Amendments to the Regulations*, the PA restricts the aggregate credit concentration risk exposure, on an average daily balance basis for the month, for a bank that is not designated as a D-SIB, to 25 per cent of the bank's Tier 1 capital. The application of such limit came into effect from 1 April 2022 and it will come to an end in 31 December 2024.²¹⁸⁸ From the beginning of 1 January 2025 onwards, such bank's aggregate credit concentration risk exposure limit will be set at 25 per cent of the bank's Tier 1 capital.²¹⁸⁹

Further, the PA sets the following aggregate credit concentration risk exposure limit and transitional periods for banks that have been identified as D-SIBs (following the twelve month period after the date that the bank has been identified as a D-SIB): 20 per cent credit exposure limit of a D-SIB's Tier 1 capital, on an average daily balance basis for the month, for the period from 1 April 2022 to 31 December 2022; 18 per cent

²¹⁸⁴ See subparagraph 2.4.6 of Chapter Two, for the discussion of the concepts of a control relationship and economic interdependent tests.

²¹⁸⁵ Regulation 24(6)(b)(i), read with Regulation 24(6)(b)(i)(A) and Regulation 24(6)(b)(B) of *the Regulations relating to banks*, as amended by *the Amendments to Regulations in terms of Banks Act of March 2022*.

²¹⁸⁶ Regulation 24(6)(c)(iv)(A)(i) of *the Regulations relating to banks*, as amended by *the Amendments to Regulations in terms of Banks Act of March 2022*.

²¹⁸⁷ Regulation 24(6)(c)(iv)(A)(ii) of *the Regulations relating to banks*, as amended by *the Amendments to Regulations in terms of Banks Act of March 2022*.

²¹⁸⁸ Directive 3/2022 – Directive large exposure requirements available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D3-2022-Directive-Large-exposure-requirements> (accessed 11 August 2022).

²¹⁸⁹ *Ibid.*

of a D-SIB's Tier 1 capital, on an average daily balance basis for the month, for the period from 1 January 2023 to 31 December 2024; 15 per cent of a D-SIB's Tier 1 capital, on an average daily balance basis for the month, from 1 January 2025 onwards.²¹⁹⁰ Where a bank within a banking group is identified as a D-SIB, the large exposure limit will be applied to the controlling company of the D-SIB and all its subsidiaries.²¹⁹¹

The Amendments to Regulations in terms of Banks Act of March 2022 further stipulate that in case of a foreign subsidiary required to report the aggregate credit concentration exposure on a solo basis, and where the PA supervises a controlling company of such subsidiary, the aggregate credit concentration exposure must not exceed 10 per cent of the relevant subsidiary's Tier 1 capital.²¹⁹² In case of a foreign subsidiary of a controlling company required to report the aggregate credit concentration exposure on a solo basis, the limit as may be specified by the PA, will be imposed on the controlling company's Tier 1 capital.²¹⁹³

Banks are further directed to ensure that their intragroup exposures with entities within the group comply with such limits or conditions as set out by the PA from time to time.²¹⁹⁴ Specifically, intragroup exposures risk-weighted at zero per cent are exempt from the large exposure limit.²¹⁹⁵ For intragroup exposures other than those risk-weighted at zero per cent, a bank will not be required to determine the interconnectedness of intragroup entities, however, the aggregate exposure to each intragroup must comply with the large exposure limit.²¹⁹⁶ Where a bank is of the opinion that the large exposure limit specified would not be appropriate for a certain entity, the bank must demonstrate to the satisfaction of the PA that, due to the

²¹⁹⁰ *Ibid.*

²¹⁹¹ *Ibid.*

²¹⁹² Regulation 24(7)(a)(iii) of *the Regulations relating to banks*, as amended by *the Amendments to Regulations in terms of Banks Act of March 2022*; Section 73(1) (a) of the Banks Act.

²¹⁹³ Regulation 24(7)(c)(iii) of *the Regulations relating to banks*, as amended by *the Amendments to Regulations in terms of Banks Act of March 2022*; Section 73(2) of the Banks Act.

²¹⁹⁴ Regulation 24(6)(c)(viii) of *the Regulations relating to banks*, as amended by *the Amendments to Regulations in terms of Banks Act of March 2022*.

²¹⁹⁵ Directive 3/2022 – Directive large exposure requirements available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2022/D3-2022-Directive-Large-exposure-requirements> (accessed 11 August 2022).

²¹⁹⁶ *Ibid.*

existence of certain circumstances, a different large exposure limit should be considered.²¹⁹⁷

Contravention of the credit concentration exposure limit must be reported to the PA immediately and must be rectified, and the PA must assess whether the limit breach should be allowed, and in such case, the bank will be subject to the conditions prescribed by the PA.²¹⁹⁸

5.6.6 Sectoral and geographical exposures

The Amendments to Regulations in terms of Banks Act of March 2022, requires banks to comply with the limits or conditions set by the PA regarding the aggregate amount of credit concentration risk exposure to sectoral and geographical areas.²¹⁹⁹ All South African banks, including D-SIBs, are required to bi-annually furnish information relating to their sectoral and geographical credit exposures on a banking group consolidated basis.²²⁰⁰ The sectoral credit exposure requirement restricts the amount of credit concentration in a specific sector while the geographical credit exposure requirement limits the credit exposures of parent banking groups and subsidiaries in other jurisdictions.²²⁰¹ This provision recognises the extent of the interconnectedness of the South African banking system with the financial markets together with the presence of large financial conglomerates, as stated in section 160 of the FSR Act, operating in other jurisdictions and making banks prone to concentration risk.²²⁰²

²¹⁹⁷ *Ibid.*

²¹⁹⁸ *Ibid.*

²¹⁹⁹ Regulation 24(6)(c)(v) of *the Regulations relating to banks*, as amended by *the Amendments to Regulations in terms of Banks Act of March 2022*.

²²⁰⁰ Directive 1/2021 -DSIBs submission of consolidated data.pdf (resbank.co.za) (accessed 15 November 2021); See further, Directive 2/2016 – Domestic systemically important banks (D-SIBs) to submit group consolidated information on a six-monthly basis available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7257> (accessed 6 April 2017); further, Bank Supervision Department Annual Report 2011 available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/reports/pa-annual-reports/2012/5048> (accessed 27 May 2017).

²²⁰¹ Vesala J “How to bring in systemic risk considerations into financial regulation and supervision?” – Chapter 3 – In Balling M *et al* (2010) “The quest for stability: Financial stability view” 15 at 19 available at http://www.suerf.org/docx/s_ec1f850d934f440cfa8e4a18d2cf5463_2733_suerf.pdf (accessed 31 May 2017).

²²⁰² Directive 2/2016 – Domestic systemically important banks (D-SIBs) to submit group consolidated information on a six-monthly basis available at

5.6.7 Organisational structures

The FSR Act in section 30 also refers to the organisational structure requirement for SIFIs. Regulation 41(1) and (2) of *the Regulations relating to banks* prescribes the organisational structure requirements which entails the composition of a bank's board of directors. Specifically, the chairperson of a bank's board of directors must not be an employee or a member of the audit committee of the bank, or a bank's subsidiaries, controlling company or any subsidiary of the controlling company. Similarly, the chairperson of a controlling company's board cannot be an employee or a member of the audit committee of the controlling company or any bank in respect of which the company is registered as a controlling bank.²²⁰³ An exception to these requirements may be made by the PA, in view of special circumstances pertaining to a particular bank, to allow two employees of a bank to be members of its board of directors upon application by such bank.²²⁰⁴

5.6.8 Required statistical returns

Section 75(1) of the Banks Act directs banks to furnish statistical returns to enable the PA to determine their compliance with sections 70, 71 and 72 of the Act regarding capital and liquidity standards²²⁰⁵ and the nature of a bank's assets and liabilities. The returns should also relate to the extent of management of risk exposures in a bank's business conduct.²²⁰⁶ These statistical returns must be prepared in conformity with generally accepted accounting practice and must be furnished to the PA in respect of such period, at such times and on such a form as prescribed.²²⁰⁷ The returns that coincide with the financial reporting of banks must be accompanied by a report by the

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2016/7257> (accessed 6 April 2017); IMF South Africa Financial System Stability Assessment (December 2014) available at <http://www.imf.org/external/pubs/ft/scr/2014/cr14340.pdf> (accessed 30 November 2016).

²²⁰³ Regulation 41(3) and (4) of *the Regulations relating to banks*.

²²⁰⁴ Regulation 41(5) of *the Regulations relating to banks*; See further, Gagne K (2022) "Banking regulation in South Africa: overview" available at [https://uk.practicallaw.thomsonreuters.com/w-007-6934?transitionType=Default&contextData=\(sc.Default\)&firstPage=true](https://uk.practicallaw.thomsonreuters.com/w-007-6934?transitionType=Default&contextData=(sc.Default)&firstPage=true) (accessed 14 December 2022).

²²⁰⁵ See subparagraph 5.6.1 and 5.6.2 above for a discussion of capital and liquidity standards.

²²⁰⁶ Section 75(3) of the Banks Act.

²²⁰⁷ Section 75(3A) of the Banks Act; See further, Guidance to the completion of statistical returns by public-sector institutions (April 2005) available at <https://www.resbank.co.za/en/home/publications/guides/guide-for-the-completion-of-statistical-returns-by-public-sector> (accessed 1 June 2017).

bank's auditor stating whether the returns fairly, and in compliance with the generally accepted accounting practice, present the affairs of the bank.²²⁰⁸

5.6.9 Recovery and resolution planning

In an endeavour to implement the *FSB Key Attributes* incorporating recovery and resolution regimes,²²⁰⁹ South Africa established, in August 2015, a policy framework titled *Strengthening the resolution frameworks for financial institutions* aimed at resolving the bail-out and the moral hazard issues of SIFIs.²²¹⁰ The Financial Sector Laws Amendment Bill was subsequently published for public comment in September 2018, *inter alia*, proposing bank recovery and resolution regimes and that the SARB be the resolution authority.²²¹¹ Further, the SARB's document, published in 2019, titled *Ending too big to fail: South Africa's intended approach to bank resolution* practically explained how the SARB intended to perform its resolution functions.²²¹²

The Financial Sector Laws Amendment Act No. 23 of 2021 was subsequently promulgated on 28 January 2022 but the provisions relating to the resolution regime are not yet in operation.²²¹³ The Act added a new Chapter 12A to the FSR Act titled "Resolution of designated institutions". Section 42 of the Financial Sector Laws

²²⁰⁸ Section 75(5) of the Banks Act.

²²⁰⁹ The Key Attributes were highlighted in paragraph 1.3 of Chapter One and paragraph 2.4, subparagraph 2.4.7, of Chapter Two.

²²¹⁰ Department of National Treasury of South Africa *Strengthening South Africa's resolution framework for financial institutions* (August 2015) available at

<http://www.treasury.gov.za/publications/other/RFFI/2015%20Resolution%20Framework%20Policy.pdf> (5 May 2016); Directive 1/2015 – Minimum requirements for the recovery plans, controlling companies and branches of foreign institutions available at

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2015/6602> (accessed 21 May 2017).

²²¹¹ Financial Sector Laws Amendment Bill of 2018 available at

<http://www.treasury.gov.za/twinpeaks/Financial%20Sector%20Laws%20Amendment%20Bill.pdf> (accessed 20 April 2020). In June 2020, the Cabinet approved the tabling of this Bill before the Parliament with the *Notice of intention to introduce Financial Sector Laws Amendment Bill, 2020 in the National Assembly and the publication of the explanatory summary of Bill* available at https://www.greengazette.co.za/notices/financial-sector-laws-amendment-bill-2020-notice-of-intention-to-introduce-financial-sector-laws-amendment-bill-2020-in-national-assembly-and-publication-of-explanatory-summary-of_20200617-GGN-43441-00672 (accessed 23 July 2020).

²²¹² *Ending too big to fail: South Africa's intended approach to bank resolution* (August 2019) available at

<https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-stability/resolution-planning/South%20Africa%27s%20intended%20approach%20to%20bank%20resolution%20-%202019.pdf> (accessed 4 November 2019);

²²¹³ Financial Sector Laws Amendment Act No.23 of 2021 available at

https://www.gov.za/sites/default/files/gcis_document/202203/45825gen789.pdf (accessed 30 July 2022).

Amendment Act further inserted a section 29A(1) into the FSR Act pertaining to “designated institutions” which include a bank; a SIFI; the payment system operator and market participants of a systemically important payment system; a holding company of a bank and a SIFI and a payment system operator and market participants of a systemically important payment system; and a bank or a SIFI that is a member of a financial conglomerate.²²¹⁴

In particular, section 166A(1) of the Financial Sector Laws Amendment Act establishes the SARB as the resolution authority for designated institutions and confers the SARB with a variety of resolution functions which are performed by the Governor of the SARB.²²¹⁵ The SARB will discharge this function to assist in maintaining financial stability and protecting the interests of depositors of banks through the orderly resolution of designated institutions that are in resolution.²²¹⁶ Further, section 166J stipulates that the SARB may recommend to the Minister of Finance to place a designated institution under resolution, if in the opinion of the SARB such designated institution may be unable to meet its obligations in terms of prudential standards, and when it is necessary to facilitate an orderly resolution to protect financial stability and depositors of a bank. The Minister of Finance may then make a written determination addressed to the Governor of the SARB placing the designated institution in resolution.²²¹⁷

Notably, section 31 of the FSR Act, which has now been repealed by section 166D of the Financial Sector Laws Amendment Act, prohibited winding-up or related measures being applied to an institution without the concurrence of the SARB, therefore, any such winding-up or related measures that would be taken without the SARB’s approval

²²¹⁴ Section 29A(1) of the Financial Sector Amendment Laws; Section 29A(e) of the Financial Sector Amendment Laws provides that the Governor may further designate a bank or a systemically important financial institution that is a member of a financial conglomerate in terms of section 160 of the FSR Act as a SIFI. Section 29A(2) thereof stipulates that the Governor may, by written notice to a bank or a SIFI that is termed a designated institution within a financial conglomerate, determine that such a bank or SIFI is not a designated institution.

²²¹⁵ Section 35 of the Financial Sector Amendment Laws includes the SARB, in section 1 of the FSR Act, as the financial sector regulator in terms of its functions relating to the execution of orderly resolution of designated institutions. The orderly resolution of a designated institution relates to the management of the affairs of the designated institution in a manner that preserves financial stability and designated institution continued performance of critical functions, and the protection of the depositors in the case of a bank.

²²¹⁶ Section 166A(1) of the Financial Sector Laws Amendment Act.

²²¹⁷ Section 166J of the Financial Sector Laws Amendment Act.

would be null and void.²²¹⁸ Accordingly, section 166D of the Financial Sector Laws Amendment Act has assimilated the said provision under the recovery and resolution regimes and it prohibits arrangements which include suspending, amending or cancelling a licence of a designated institution; adopting a special resolution to wind up a designated institution involuntarily; applying to a court for an order that a designated institution be wound up; appointing an administrator, statutory manager, trustee, liquidator, provisional liquidator or curator for or of a designated institution; adopting a business rescue proceedings; and placing a designated institution under supervision.

Section 166E of the Financial Sector Laws Amendment Act is pertinent to the stringent prudential regulation of SIFIs as it covers the resolution planning requirement. It stipulates that the SARB must, on the basis of the risk analysis conducted with a financial sector regulator, take adequate and appropriate steps to plan for the potential need for the orderly resolution of a designated institution. Accordingly, the SARB is responsible for developing resolution plans with the input that is provided by the banks.²²¹⁹ As pointed out by the SARB, resolution plans are integral to a bank's risk-management framework and focus on the strategies for resolution if a bank experiences financial distress.²²²⁰ Resolution planning is relevant given that the complexity category constitutes one of the grounds establishing the systemic importance of a bank under the *South African D-SIB framework*.²²²¹ It is expected that

²²¹⁸ Section 31(1) and (2) of the FSR Act.

²²¹⁹ Guidance Note 4/2012 – Further guidance on the development of recovery and resolution plans by South African banks available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2012/5034> (accessed 28 May 2017).

²²²⁰ Guidance Note 4/2012 – Further guidance on the development of recovery and resolution plans by South African banks available

<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2012/5034> (accessed 28 May 2017). This Guidance Note states that recovery plans should enable a bank to recover from a more severe financial stress condition, for instance, through structural changes or the sale of specific portfolios to facilitate recovery. See further, Zhou J *et al* "From bail out to bail-in: mandatory debt restructuring of systemic financial institutions" IMF Discussion Staff Note (April 2012) available at <https://www.imf.org/external/pubs/ft/sdn/2012/sdn1203.pdf> (accessed 27 May 2017); Maguze TC (2016) "EU bank recapitalisation and the bail-in option: An analysis of the effects of mandatory bail-in on creditors' property rights" 5 *UCL Journal of Law and Jurisprudence* 207 at 211; Schich S *et al* (2011) "Guarantee arrangements for financial promises: How widely should the safety net be cast?" 2011 *Organisation for Economic Co-operation and Development Journal* 1 at 6-8.

²²²¹ See paragraph 2.2, subparagraph 2.2.1.4, of Chapter Two.

the SARB will direct the PA to issue standards requiring SIFIs to comply with resolution planning regime.²²²²

In its first edition of the *Financial Stability Review* issued in May 2022, the SARB indicated that the resolution planning process entails an assessment of the extent to which designated institutions are resolvable and ready to execute the chosen resolution strategy.²²²³ The purpose of resolvability assessments that will be performed on banks is to evaluate the feasibility of resolution strategies and their credibility in light of the likely impact of a bank on a financial system and overall economy. These resolvability assessments include the identification of potential impediments to the resolvability of the designated institutions and plans made to address those impediments.²²²⁴ The SARB specified that resolution plans will be institution-specific analysing specific group and funding structures of a bank; identifying critical functions; and linkages with the financial sector and considering appropriate resolution strategies.²²²⁵

In its *FSAP Report* issued in June 2022, the IMF recommended that the SARB should initially focus on developing a comprehensive “resolution toolkit” that: sets out guidance on key resolution options; specify particular business functions and services to be included in the resolution process; identify critical functions; and specify resolution implementation steps and the structure and calibration of bail-in instruments.²²²⁶ The IMF further suggested that the SARB should then continue to focus on bank-specific resolution plans giving priority to SIFIs, given the amount of work required in developing a resolution plan, and then proceed to developing resolution plans for medium-sized banks.²²²⁷ It was further proposed that the

²²²² FSB Peer Review of South Africa – Review Report (March 2020) available at <https://www.fsb.org/wp-content/uploads/P160320.pdf> (accessed 21 May 2017).

²²²³ SARB Financial Stability Review (May 2022) available at <https://www.resbank.co.za/content/dam/sarb/publications/reviews/finstab-review/2022/financial-stability-review/first-edition-2022-financial-stability-review/FSR%20May%202022%201st%20edition.pdf> (accessed 30 July 2022).

²²²⁴ *Ibid.*

²²²⁵ *Ibid.*

²²²⁶ IMF South Africa *Financial Sector Assessment Program Technical Note on financial safety net and crisis management* (June 2022) available at <https://www.imf.org/en/Publications/CR/Issues/2022/06/16/South-Africa-Financial-Sector-Assessment-Program-Technical-Note-on-Financial-Safety-Net-and-519719> (accessed 5 October 2022).

²²²⁷ *Ibid.*

resolution plans for SIFIs should cover the main forms of “open bank” resolution, which refers to maintaining the continuity of critical functions and services in either the bank in resolution or in a successor bank, including re-capitalisation of a bank via bail-in instruments.²²²⁸ The IMF further recommended that the resolution plans should be: closely coordinated with the SARB and host authorities, especially in the African continent; subject to regular reviews (especially where a bank undergoes significant structural change or change in business mode); and subject to periodic testing by the SARB to help identify the practical capacity of the authorities to implement the resolution plan and different options within it.²²²⁹

On the other hand, recovery plans²²³⁰ are developed by banks as a measure to prevent their failure when they become distressed. They set out the details of the bank’s internal recovery strategy and identify the escalation procedures and the authorities that are responsible for the execution of the bank’s recovery plan and that of its branches and subsidiaries.²²³¹ Recovery plans should incorporate: governance requirements; group structure and key information on legal entities; stress scenarios; and recovery options. Governance requirements stipulate that: the development, maintenance, approval and annual review of recovery plans must be subject to appropriate governance process with clearly assigned roles and responsibilities for operational aspects, senior management and the board of directors; the board of directors must express its view on a bank’s recoverability from severe financial stress based on the recovery options identified in the recovery plan; and any material changes made since the previous recovery plan must be captured in the recovery plan.²²³²

²²²⁸ *Ibid.*

²²²⁹ *Ibid.*

²²³⁰ See paragraph 2.4, subparagraph 2.4.7 for the concept of recovery plans.

²²³¹ Guidance Note 4/2012 – Further guidance on the development of recovery and resolution plans by South African banks available <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-guidance-notes/2012/5034> (accessed 28 May 2017).

²²³² Directive 1/2015 – Minimum requirements for the recovery plans, controlling companies and branches of foreign institutions available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2015/6602> (accessed 21 May 2017).

The group structure and key information on legal entities provide that: the range of recovery options must be commensurate with a bank's risk profile, and SIFI-banks and banking groups are expected to have group-wide recovery plans covering the entire banking group, including banks, foreign branches and subsidiaries; details of a bank's strategy, business model, core business lines and main activities must be captured; mapping of the bank's legal and operational structures, together with the relevant information about its organisational structure, business units and activities should be provided; information on an identification of interdependences among group entities, including intra-group exposures and funding relationships, capital mobility within the group as well as intra-group guarantees that would apply in both business-as-usual and crisis times should be included (in order to identify interlinkages that may be a barrier to resolvability for a banking group); the significant legal entities within the group should be identified based on the criteria of their possible impact on the overall banking group and recovery plans should be developed for these entities to determine the extent of a banking group commitment to their recovery; and branches that are considered systemically significant in the country of operation should be included in the banking group's recovery plan.²²³³

Further, banks are to develop triggers that would activate the recovery plan for capital, liquidity and operational purposes that are considered having regard to a bank's risk profile. These triggers should be subject to the risk governance process and should be reviewed and approved by senior management and/or the board of directors.²²³⁴ The recovery plan stress-testing scenarios-requirement entails that banks must use stress tests including reverse stress tests as part of recovery plans to evaluate their key risks by identifying stress scenarios that could put a bank's business model at risk.²²³⁵ *Directive 4/2021* also requires D-SIBs to undertake liquidity stress simulations for early identification of a liquidity stress event and timely response thereto, and to put in place a robust recovery plan to sufficiently withstand unexpected market disruptions.²²³⁶ A bank must then identify appropriate recovery options for capital,

²²³³ *Ibid.*

²²³⁴ *Ibid.*

²²³⁵ *Ibid.*

²²³⁶ *Directive 4/2021 - Externally-facilitated liquidity stress simulation.pdf* (resbank.co.za) (accessed 15 November 2021).

liquidity and operational disruptions and the governance process that should be followed in the implementation of recovery options in a crisis situation.²²³⁷

While the *IMF FSAP Report* issued in June 2022 indicated that the South African recovery regime is in line with the *FSB Key Attributes*, the IMF observed that the PA has not yet developed a clearly structured early intervention²²³⁸ framework to respond to the deterioration in a bank's financial or risk condition. It thus recommended that the PA develop and implement a comprehensive early warning framework to support the early detection of emerging bank stress.²²³⁹

5.7 Legal remedies for challenging SIFI-designation

As pointed out above,²²⁴⁰ section 29 of the FSR Act states that the Governor of the SARB may, by a written notice to a financial institution, designate such financial institution as a SIFI, and this authority may not be delegated. Before exercising such authority, the Governor of the SARB must notify the FSOC and seek the FSOC's advice in respect of the proposed designation and provide grounds for the proposed designation. If after considering the FSOC's advice, the Governor of the SARB proceeds to designate a financial institution as a SIFI, the financial institution concerned must be afforded an opportunity to make submissions within a reasonable time. These provisions are consistent with section 228 of the FSR Act, in terms of which the Governor of the SARB would be enjoined to notify the financial institution concerned of its designation, furnish the grounds that underlie the decision for designation, and provide for the financial institution's right of reconsideration of the decision on designation. The financial institution is entitled to request for reasons

²²³⁷ Directive 1/2015 – Minimum requirements for the recovery plans, controlling companies and branches of foreign institutions available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2015/6602> (accessed 21 May 2017).

²²³⁸ Paragraph 2.4, subparagraph 2.4.7, of Chapter Two highlights that the concept of early-intervention measures constitutes an essential element of a recovery plan.

²²³⁹ IMF South Africa *Financial Sector Assessment Program Technical Note on financial safety net and crisis management* (June 2022) available at <https://www.imf.org/en/Publications/CR/Issues/2022/06/16/South-Africa-Financial-Sector-Assessment-Program-Technical-Note-on-Financial-Safety-Net-and-519719> (accessed 5 October 2022).

²²⁴⁰ See paragraph 5.3 above.

underlying its designation within one month after the date on which the decision was received, pursuant to section 229 of the FSR Act.

If a financial institution is aggrieved by its designation as a SIFI, it may apply to the Financial Services Tribunal (Tribunal), established in terms of section 219, to have the decision reconsidered.²²⁴¹ In terms of section 231(a) and (b) of the FSR Act, the application for a reconsideration of the designation may be lodged within sixty days after the receipt of the grounds for designation. The FSR Act states that the application for the reconsideration of a decision will have no suspensive effect.²²⁴² This means that the SARB's decision concerning designation will continue to be applied on the financial institution concerned pending the Tribunal's outcome of the application for reconsideration. The Tribunal may grant just and equitable relief including setting aside the designation of a SIFI and remitting the matter to the Governor of the SARB, or setting aside and substituting the decision, in exceptional cases.²²⁴³ Otherwise, the Tribunal may dismiss the application, and grant the costs order under exceptional circumstances.²²⁴⁴ In some cases, the Tribunal may order a summary dismissal on the ground that the application for reconsideration is frivolous, vexatious or trivial.²²⁴⁵

Under section 235 of the FSR Act, if a SIFI is dissatisfied with the order of the Tribunal, it may institute proceedings for a judicial review of such order in terms of *the Promotion of Administrative Justice Act No.3 of 2000 (PAJA)*.²²⁴⁶ The applicability of PAJA to administrative actions is extended by section 91 of the FSR Act. In terms of section 8 of the PAJA, the following remedies may be available for an aggrieved SIFI: directing that the grounds for the decision be given; setting aside the administrative action and remitting the matter for reconsideration; or granting interim relief or a temporary interdict.²²⁴⁷

²²⁴¹ Section 230(1)(a) of the FSR Act.

²²⁴² Section 231 of the FSR Act.

²²⁴³ Section 218 of the FSR Act, read in conjunction with section 7(2) of the PAJA; Section 234 (1) (a) and (b) of the FSR Act.

²²⁴⁴ Section 234(2)(b) and (c) of the FSR Act.

²²⁴⁵ Section 234(4) of the FSR Act.

²²⁴⁶ See section 6 of the PAJA.

²²⁴⁷ Section 8(a), (c) and (e) of the PAJA.

5.8 Conclusion

The South African Twin Peaks model features the financial stability mandate of the SARB, as well as the prudential and market conduct regulation of financial institutions by the PA and the FSCA, respectively, as laid down in the FSR Act. The macro-prudential oversight of the SARB concerns the systemic supervision of the South African financial system which is designed to prevent or mitigate systemic risks. The FSR Act establishes an institutional framework for the SARB's macro-prudential surveillance function. To execute this macro-prudential mandate, the SARB chiefly collaborates and cooperates with the PA and the FSCA, being the regulatory twin peaks created by the FSR Act. Further, the FSOC is an interagency body that is aided by the FSCF to support the SARB in the financial stability task in terms of the FSR Act. The SARB discharges its macroprudential mandate in collaboration with other financial sector regulators, and organs of state such as the Minister of Finance, being responsible for the development of the financial sector legislation.

Part of the SARB's financial stability mandate is captured under section 29 of the FSR Act which confers the Governor of the SARB with the discretion to designate financial institutions as SIFIs, and this task of designating banks as SIFIs may not be delegated. However, it was noted that the FSR Act does not set a timeframe within which financial institutions may be designated as SIFIs. The FSR Act sets forth a mandatory designation procedure entailing the sending of written notification of the proposed designation (together with grounds justifying such designation) by the SARB to the FSOC and the providing of advice thereof by the FSOC, as well as the hearing of submissions of the financial institution concerned regarding the proposed designation. Both the advice of the FSOC to the SARB and the submissions of the affected financial institution, respectively, must be provided, and made in reasonable time. Further, the FSR Act provides for an emergency designation in terms of which a financial institution may be designated as a SIFI in times of the occurrence or imminence of a systemic event, in which case the advice of the FSOC will not be sought and the financial institution will be only afforded a hearing post the designation process.

Consistent with section 29 of the FSR Act, the SARB developed a framework for designation of banks as SIFIs/D-SIBs as part of the broad ambit of its macroprudential mandate within the South African Twin Peaks model. The implementation of the *Base/*

D-SIB framework within the context of South Africa is well recognised to give effect to the *FSB SIFI framework* in line with the post-GFC G20 financial stability reforms. Broadly based on the BCBS approach, the *SARB D-SIB framework* comprises the indicator-based measurement approach, as supplemented by supervisory judgment. The indicator-based measurement approach evaluates the systemic significance of banks based on the categories of size, the interconnectedness and substitutability (combined), complexity and cross jurisdictional activity. The weightings for the categories of systemic importance under the SARB indicator-based measurement approach are either decreased or increased depending on the level of their presence in the unique structural characteristics of the South African jurisdiction.

The indicators that establish the size of a South African bank are: total assets and off-balance sheet items, short-term contractual claims, number of customers, number of branches and number of employees. The category of interconnectedness and substitutability is classified into three indicators, *to wit*, the interconnectedness through exposure to other financial institutions; the interconnectedness through market infrastructure and the interconnectedness through the financial market participant. These indicators are further assigned sub-indicators. The indicator of interconnectedness through exposure to other financial institutions consists of: interbank liabilities; interbank assets; cross-holdings funding non-bank FIs; loans to non-bank FIs; and wholesale funding. The indicator of interconnectedness through market infrastructure encompasses: share in value settled in the SAMOS system; the value in money market settlement; share in equity settlement; the value in bond settlement; and participation in Strate, custodian services for equity, bonds and money market. The indicator of interconnectedness through financial market participant covers: the take-up ratio in the primary bond auction; treasury bills and the SARB debenture auction participation; foreign exchange market activity; and derivatives activities. Note should be taken that the SARB combines the category of interconnectedness and that of substitutability on account that they share the indicators but does not describe the said overlap. Further, the category of complexity has the indicator of notional value of OTC derivatives. Lastly, the category of global activity covers cross-jurisdictional assets and liabilities.

Under the supervisory judgment methodology, a South African bank's systemic profile is assessed with the following indicators: the reaction of investors, depositors and the broader financial markets in the event of a failure; geographical area serviced and a possibility of a suitable substitute; products provided and the possibility of a suitable substitute; services provided and the possibility of a suitable substitute; number of clients and employees of an institution; and possible negative perception from an international market perspective.

The SARB list of SIFI-banks was released in the *Financial Stability Review* second edition of November 2019. This publication followed the issuance of the *SARB D-SIB framework* in June 2019 and the subsequent decision of the Governor of the SARB to exercise, for the first time, the discretion conferred under the FSR Act, to designate banks as SIFIs. The six banks that were designated as SIFIs are: Absa Bank Limited, the Standard Bank of South Africa Limited, FirstRand Bank Limited, Nedbank Limited, Investec Bank Limited and Capitec Bank Limited. Notably, these banks accepted their designation without making submissions. However, the methodology that was used to designate each of these banks as SIFIs was not disclosed.

It was further noted that, initially, the (then) Registrar of Banks in the Office of Banks in then Bank Supervision Department of the SARB identified banks as D-SIBs to implement the Basel D-SIB regime in South Africa subject to *the Regulations relating to banks* (and prior to the promulgation of the FSR Act) in response to the call by the BCBS to the G20 countries for timely and consistent implementation of *the Basel D-SIB framework*. This task has now been assumed by the PA. As pointed out, the *D-SIB framework* that was developed subject to *the Regulations relating to banks* is similar with the current *SARB D-SIB framework*. However, they contrast in two respects: first, the updated *SARB D-SIB framework* combines the categories of interconnectedness and substitutability. Second, the original *SARB D-SIB framework* had another category, which is now eliminated under the current framework, namely “the impact on the financial sector/social impact”, which relates to the potential impact of a bank's failure on the public confidence, financial inclusion and the socioeconomic consequences arising from the negative externalities posed to other banking institutions.

In terms of section 30 of the FSR Act, the PA imposes stringent prudential requirements in the form of prudential standards or regulator's directives on SIFI-banks/D-SIBs, as directed by the SARB. These prudential requirements relate to: capital requirements including countercyclical buffers; leverage ratio; liquidity requirements; risk-management requirements including guarantee arrangements; sectoral and geographical exposures; organisational structures; required statistical returns; and any other matter in respect of which a prudential standards or a regulator's directive may be made that is prescribed by Regulations on the recommendations of a Governor of the SARB.

The Regulations relating to banks implemented the *Basel III capital framework* incorporating: the CCvB; the CCyB; and the D-SIB buffer regime. However, the South African D-SIB buffer's composition with 50 per cent of CET1 capital departs from the Basel requirement for D-SIBs to maintain a D-SIB buffer composed of 100 per cent of CET1 capital, a deviation that may defeat the D-SIB buffer's overall objective of enhancing the loss-absorption of SIFI-banks to a maximum capacity. The capital regime for South African banks further includes Pillar 2A and Pillar 2B requirements as well as the discretionary internal capital buffer.

South African banks are also subject to the supplementary leverage ratio (which entails a non-risk capital measure that supplements the risk-based capital); the Basel liquidity standards encompassing the LCR and the NSFR; the risk-management requirements; and the large exposure framework. Additionally, the Financial Sector Laws Amendment Act incorporates the recovery and resolution planning requirements for South African designated institutions with the SARB as the resolution authority.

Notably, the *SARB D-SIB framework* is still being developed given that the Governor of the SARB has relatively recently designated banks as SIFIs for the first time in South Africa. Also, the PA, that took over the prudential regulation of financial institutions, including banks, from the then BSD, has also relatively recently been established in 2018 as the prudential regulator for financial institutions under the FSR Act. Thus, the PA's stringent prudential framework for SIFI-banks/D-SIBs is currently being developed and yet to be fully implemented and strengthened over time in accordance with the PA's regulatory strategies. Accordingly, the effectiveness of South African

SIFI-bank designation and the resultant application of the stringent prudential standards to SIFI-banks in pursuit of the financial stability objective under the FSR Act is yet to be tested.

It also remains to be seen whether banks will explore the provisions of the FSR Act pertaining to the legal remedies available to challenge their designation as SIFIs. This available recourse entails a reconsideration of designation before the Tribunal and the administrative review proceedings in terms of the PAJA.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This thesis sought to critically interrogate the newly introduced framework for designation and stringent prudential regulation of systemically important banks (D-SIBs or SIFI-banks) in South Africa to establish whether it is aligned with international best practice. The aim of the study was consequently to compare the South African approach to identifying and designating D-SIBs/SIFI-banks, as well as the imposition of stringent prudential requirements to enhance their safety and soundness in the interests of financial stability, to international best practice as captured in the *Basel D-SIB framework* and implemented in the US and the Netherlands as suitable comparative jurisdictions.

As pointed out in Chapter One, the South African D-SIB identification and regulatory framework is a relatively recent and very relevant development. It implements the *Basel D-SIB framework*²²⁴⁸ in South Africa in pursuit of the FSB financial stability mandate captured in its *SIFI framework*,²²⁴⁹ in alignment with the post-GFC G20 financial regulatory reforms that seek to end the Too-Big-To-Fail (TBTF) conundrum. Chapter Two consequently reviewed the BCBS's reforms regarding the identification of D-SIBs²²⁵⁰ and the resultant D-SIB buffer²²⁵¹ and other stringent prudential regulation measures²²⁵² and enhanced oversight.²²⁵³ Chapters Three, Four, and Five analysed the implementation of these reforms in the US, the Netherlands, as an EU Member State, and South Africa, respectively. To finalise the study, this Chapter seeks to draw insights for South Africa, as G20-member country, from the *Basel D-SIB framework* (as well as the BCBS and the FSB prudential regulatory and supervisory regimes), the US and the Netherlands on the best international standards and practices in respect of the identification and stringent prudential regulation of D-SIBs.

²²⁴⁸ See paragraph 2.3 of Chapter Two.

²²⁴⁹ See paragraph 1.7 of Chapter One.

²²⁵⁰ See paragraph 2.3, subparagraph 2.3.1, of Chapter Two.

²²⁵¹ See paragraph 2.3, subparagraph 2.3.2, of Chapter Two; and paragraph 2.4, subparagraph 2.4.3, of Chapter Two.

²²⁵² See paragraph 2.4, subparagraphs 2.4.1, 2.4.2, 2.4.4, 2.4.5, 2.4.6; and 2.4.7 of Chapter Two.

²²⁵³ See paragraph 2.5 of Chapter Two.

The purpose is to make recommendations for reform aimed at improving alignment with the aforesaid best standards and practices that will contribute to the heightened resilience of South African D-SIBs and that will thereby promote financial stability.

Accordingly, the issue of whether South Africa aligns with best international standards and practices should be measured in terms of the degree to which it has consistently and effectively implemented the BCBS's reforms on the identification as well as stringent prudential regulation and more intensive supervision of D-SIBs (as opposed to other banks), taking into consideration South Africa's financial system specificities. Further, South Africa's progress should be evaluated relative to other jurisdictions that are leading in the ongoing implementation of these reforms, hence the study critically analysed developments in the US and the Netherlands for comparative purposes, seeking guidance from these countries.

It is evident that the more intrusive prudential regulation of D-SIBs creates a greater regulatory burden for these banks and also imposes buffers that may impact on the amount of funds available for their business operations. The study thus also endeavoured to briefly interrogate the available legal remedies for challenging the identification of D-SIBs and the resultant stringent prudential regulation and enhanced supervision of these banks in the US, the Netherlands and South Africa.

6.2 Findings on the implementation of the Basel D-SIB identification and regulatory framework

It is submitted that the measures that are incorporated in the *FSB SIFI framework* regarding the elimination of the TBTF-conundrum that was notoriously associated with systemic risk and moral hazard posed by SIFIs, especially during the 2008 GFC, are a welcome post-GFC G20 financial stability goal. As indicated in this thesis, the *SIFI framework's* regulatory measures are designed to strengthen the resilience of systemically important financial institutions (SIFIs) to reduce their probability of default during material financial distress and avoid systemic bank failures. Where systemically important banks nevertheless encounter failure, it was pointed out (although not discussed in detail as such detailed analysis falls outside the scope of this study) that the resolution regimes that have been introduced post-GFC in alignment with the *FSB Key Attributes* focus on the orderly resolution of SIFIs. The aim is to mitigate the

systemic impact of the failure of SIFIs and to eliminate, or at least considerably mitigate, the bail-out²²⁵⁴ problem that dominated the scene during the 2008 GFC.

Accordingly, the BCBS's reforms in relation to implementing the *FSB SIFI framework* in the context of banking regulation and supervision are well-recognised for their pursuit of the financial stability objective. In pursuit of this objective, the study indicated that the BCBS formulated the *G-SIB framework*²²⁵⁵ which established a methodology for the identification of G-SIBs by the FSB, in consultation with the BCBS. Its purpose is to facilitate the application of the G-SIB surcharge to identified G-SIBs by means of a bucketing approach system. Albeit that it is not the focus of this research, a discussion of the *Basel G-SIB framework* was provided in this study to contextualize and facilitate a better understanding of the subsequent discussion of the *Basel D-SIB framework*, which extends the *Basel G-SIB framework* with the necessary modification, to domestic financial systems and economies.

6.2.1 The Basel assessment methodology

The *Basel G-SIB framework* is a rules-based approach which assesses the systemic importance of banks by applying an indicator-based measurement approach, as supplemented by supervisory judgment. The indicator-based measurement approach calculates the systemic importance of banks over five categories that are assigned one or more indicators that are equally risk-weighted at 20 per cent each. This means that under the Basel G-SIB indicator-based measurement approach, a bank's systemic score will then consist of the weighted average of thirteen indicators across the five categories of: size; interconnectedness; substitutability; complexity; and cross-jurisdictional activity.²²⁵⁶ As pointed out, the banks' overall systemic score is produced by averaging these systemic scores for all the five categories and rounding the resulting value to the nearest whole basis point. Banks that obtain a systemic score that is equal to or exceeds 130 basis points are identified as G-SIBs.

²²⁵⁴ See paragraph 1.7 of Chapter One; and paragraph 2.4, subparagraph 2.4.7 of Chapter Two.

²²⁵⁵ See paragraph 2.2 of Chapter Two.

²²⁵⁶ See paragraph 1.7 of Chapter One; and paragraph 2.2, subparagraph 2.2.1 of Chapter Two.

As indicated in this study, the size-category, as measured by:²²⁵⁷ the total exposure of a bank in accordance with the *Basel supplementary leverage ratio framework*,²²⁵⁸ is key to measuring a bank's systemic importance. However, and quite rightly so, the indicator-based measurement approach presumes that size alone is not sufficient to measure the systemic importance of banks. Therefore, it also incorporates the categories of interconnectedness, substitutability, complexity and cross-jurisdictional activity. It was pointed out that the degree of interconnectedness of a bank is evaluated with reference to three indicators, namely:²²⁵⁹ intra-financial system assets; intra-financial system liabilities; and securities outstanding. The extent to which a bank is substitutable is computed using:²²⁶⁰ the total value of payment transactions; assets under custody; underwritten transactions in the equity and debt market; and trading volume. The complexity category establishes a bank's systemic relevance with reference to:²²⁶¹ OTC derivatives; Level 3 assets; and trading and available-for-sale securities. The cross-jurisdictional activity-indicator assesses the systemic importance of a bank with cross-jurisdictional assets and cross-jurisdictional liabilities.²²⁶²

Generally, as pointed out, the indicator-based measurement approach is designed to capture banks whose size is huge enough to obtain a systemic score of the abovementioned prescribed cut-off score, namely, 130 basis points (the systemic score consists of a weighted average of thirteen quantitative indicators assigned to the five categories thereto). Although it is preferred for its objectivity, simplicity and transparency, the indicator-based measurement approach is however said to be limited by data availability owing to its quantitative assessment of the systemic importance of banks.²²⁶³ Therefore, in order to have an optimal outcome when assessing factors that contribute to banks' systemic footprint under the quantitative indicator-based measurement approach, it is submitted that jurisdictions should endeavour to enhance their risk data aggregation and risk data reporting capabilities

²²⁵⁷ See subparagraph 2.2.1.1 of Chapter Two.

²²⁵⁸ See paragraph 2.4, subparagraph 2.4.4, of Chapter Two.

²²⁵⁹ See subparagraph 2.2.1.2 of Chapter Two.

²²⁶⁰ See subparagraph 2.2.1.3 of Chapter Two.

²²⁶¹ See subparagraph 2.2.1.4 of Chapter Two.

²²⁶² See subparagraph 2.2.1.5 of Chapter Two.

²²⁶³ See subparagraph 2.2.2 of Chapter Two.

in accordance with the BCBS *Principles for effective risk data aggregation and risk reporting*.²²⁶⁴

Further, given that there is no “one-size-fits-all”-approach in the assessment of the systemic importance of banks, the study indicated that supervisory judgment may also be applied to identify banks whose systemic score falls below the cut-off score of the indicator-based measurement approach. As pointed out, the supervisory judgment-approach uses certain indicators that are not adequately captured under the indicator-based measurement approach or information that cannot be quantified in the form of an indicator. Such indicators used for purposes of applying supervisory judgment for purposes of identification of systemic banks include:²²⁶⁵ the total liabilities of a bank; retail funding; wholesale funding; total cross revenue; cross positive fair value of OTC derivatives; and cross value of cash provided and cross value of securities provided in securities financing transactions. Supervisory judgment is preferred for its flexibility in accommodating the structural features of different jurisdictions, however, its subjectivity is considered to lack transparency in the assessment of the systemic importance of banks. Despite raising transparency concerns, it is however submitted that the supervisory judgment approach constitutes a critical component in the assessment of banks’ systemic importance as it permits a reasonable degree of national discretion that accords with the *Basel D-SIB framework* principles-based approach so that jurisdictional differences are accommodated. For it to be conducted in a transparent fashion, it is imperative that supervisory discretion should be guided by the unique and relevant country-specific factors that provide sufficient justification for each banks’ systemic importance.

As explained in this study, the *Basel D-SIB framework* extends the *Basel G-SIB framework* to a domestic financial system and economy with twelve principles, seven of which are based on the assessment methodology for D-SIBs while five pertain to the implementation of the D-SIB buffer regime. These principles are intended to enable an appropriate degree of national flexibility in the identification of banks as D-SIBs in order to facilitate the application of the D-SIB buffer which is designed to raise the loss

²²⁶⁴ Discussed in paragraph 2.5, subparagraph 2.5.3, of Chapter Two.

²²⁶⁵ See subparagraph 2.2.3 of Chapter Two.

absorbency capacity of D-SIBs. Notably, the relevant national authorities are permitted to complement the D-SIB buffer with other prudential requirements.²²⁶⁶ This is crucial considering that the various prudential requirements are designed to target specific risks posed by banks and hence the relevant national authorities should put comprehensive prudential regulatory and supervisory measures in place that are aimed at enhancing the overall safety and soundness of banks as well as safeguarding financial stability.

Principles one to seven recommend that the national authorities evaluate the impact of a bank's failure on a domestic economy by applying the criteria of size, interconnectedness, substitutability and complexity, and cross-jurisdictional activity, if applicable. This is done by applying the consolidated and sub-consolidated unit of analysis for parent banks and subsidiaries, respectively, and thereafter the identification methodology used to identify such banks as D-SIBs is disclosed. The relevant national authorities are permitted to include additional criteria for assessing systemic importance of banks in the context of their domestic banking system and to adjust the risk weights of the indicators of the categories of systemic importance. Accordingly, different, but consistent approaches in the implementations of the Basel assessment methodology are required to facilitate a levelled playing field within various jurisdictions' financial systems because what may be suitable for one jurisdiction may not be appropriate for another - even under the same set of circumstances. The different levels of consolidation are employed in respect of the identification of D-SIBs because in some cases both a parent bank and a subsidiary may be identified as D-SIBs due to their criticality for the smooth functioning of a financial system.

6.2.2 The Higher Loss Absorbency requirement and other prudential requirements

Principles eight to twelve recommend that the relevant national authorities develop methodologies for calibrating the D-SIB buffer to be applied to D-SIBs on a consolidated or sub-consolidated basis by home and host authorities, respectively. The D-SIB buffer must be fully met by CET1 capital and should be commensurate with

²²⁶⁶ See paragraph 2.3, subparagraph 2.3.2, of Chapter Two.

the systemic profile of individual D-SIBs. The national authorities must also employ supervisory cooperation in cases in which a foreign bank is identified as a D-SIB in order to be kept apprised of the developments concerning their banks.

It is submitted that these analytical frameworks for the calibration of the HLA requirement are useful techniques that provide guidance for banks regarding their individual D-SIB buffers. Therefore, CET1 capital being considered as the most expensive form of regulatory capital that is used to fulfil the D-SIB buffer requirement can better achieve the goal of incentivising banks to take the necessary steps to decrease their systemic profile in pursuit of the financial stability objective. The consolidation level at which a D-SIB buffer may be imposed on a D-SIB is primarily informed by the level of consolidation in which such D-SIB was identified. Therefore, in some instances, it may be justifiable for a D-SIB to be subject to simultaneous application of a D-SIB buffer regime on different consolidated levels.

The relevant national authorities are primarily responsible for applying the D-SIB buffer to D-SIBs to enhance their loss absorbing capacity during material financial distress in order to prevent their systemic collapse. In addition to the D-SIB buffer, the relevant national authorities may apply other stringent prudential measures to D-SIBs and intensify their supervision.²²⁶⁷ In particular, the *Basel III framework* is critically instrumental to the prudential regulation and supervision of banks. It deploys micro-prudential and macro-prudential standards to address safety and soundness risks of banks and to prevent or mitigate the systemic risk posed by banks to a financial system in order to safeguard financial stability. These prudential standards include: the CCvB and the CCyB,²²⁶⁸ as augmented by the D-SIB buffer,²²⁶⁹ the supplementary leverage ratio;²²⁷⁰ the LCR and the NSFR;²²⁷¹ risk-management requirements;²²⁷² and the framework for large exposure limits.²²⁷³ Apart from the *Basel III framework*, the

²²⁶⁷ See paragraph 1.7 of Chapter One; paragraphs 2.4 and 2.5 of Chapter Two.

²²⁶⁸ See paragraph 1.7 of Chapter One; and paragraph 2.4, subparagraphs 2.4.1 and 2.4.2 of Chapter Two.

²²⁶⁹ See paragraph 2.3, subparagraph 2.3.2, of Chapter Two; and paragraph 2.4, subparagraph, 2.4.3 of Chapter Two.

²²⁷⁰ See paragraph 2.4, subparagraph 2.4.4, of Chapter Two.

²²⁷¹ See paragraph 2.4, subparagraph 2.4.5, of Chapter Two.

²²⁷² See paragraph 2.5, subparagraph 2.5.1, of Chapter Two.

²²⁷³ See paragraph 2.4, subparagraph 2.4.6, of Chapter Two.

recovery and resolution planning²²⁷⁴ incorporated in the *FSB Key Attributes* constitute part of the stringent prudential regime for D-SIBs. The enhanced supervisory oversight of D-SIBs is broadly based on the *FSB SIE Report*,²²⁷⁵ which heightens the stringency of the *Basel Core Principles for Effective Banking Supervision* (BCPs).²²⁷⁶

Given that the *Basel D-SIB framework* was formulated in the aftermath of the 2008 GFC, the implementation of the stringent prudential regime for D-SIBs is work in progress in the comparative jurisdictions and thus, its effectiveness in safeguarding financial stability and the domestic economy remains to be proven during future financial crisis. This D-SIB buffer regime and other stringent prudential requirements such as the capital buffer regime and liquidity standards, however, already proved to be effective as buffers that cushioned banks against systemic shocks that were caused by the Covid-19 pandemic.

6.3 The South African D-SIB framework: insights for South Africa from the US and the Netherlands experience

As part of the post GFC financial stability reforms, the US, the Netherlands and South Africa as G20-member countries, revamped their legislative frameworks to incorporate the BCBS's measures regarding the identification of banks as D-SIBs as well as the consequent stringent prudential regulation and enhanced supervision of D-SIBs. As elaborated below, the implementation of these reforms, however, vary to some extent according to the legislative and regulatory frameworks that are put in place in these jurisdictions.

6.3.1 The approach of the US

6.3.1.1 The US legal and regulatory framework: the Dodd-Frank Act, as amended by the EGRRCPA

The US has implemented the G20's financial stability reforms in the immediate aftermath of the GFC through the promulgation of *the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010* (Dodd-Frank Act), as amended by *the Economic Growth, Regulatory Relief and Consumer Protection Act* (EGRRCPA) in 2018. As

²²⁷⁴ See paragraph 2.4, subparagraph 2.4.7, of Chapter Two.

²²⁷⁵ See paragraph 1.7 of Chapter One; and paragraph 2.5 of Chapter Two.

²²⁷⁶ *Ibid.*

pointed out in Chapter Three, the US financial system is regulated by many financial regulators under the combination of the functional and institutional models and the US dual banking system is collectively supervised by the Office of the Comptroller of the Currency (OCC), the Federal Reserve and the Federal Deposit Insurance Corporation (FDIC).²²⁷⁷ As observed, the overhaul of the regulation of the US financial system was necessary since US TBTF financial institutions were among the key drivers of the GFC.²²⁷⁸

It is noted that the US led the implementation of the G20 financial regulation reforms because the Dodd-Frank Act was promulgated in 2010, being the same year that the *FSB SIFI framework* was published, and this was prior to the publication of the *Basel G-SIB and D-SIB frameworks* issued in 2011 and 2012, respectively. Thus, the US, commendably, took a lead role among the G20 jurisdictions in addressing the TBTF-conundrum caused by US financial institutions.

6.3.1.2 The macro-prudential supervisor of the US financial system: the Council

As part of its post-GFC financial stability reforms, the Dodd-Frank Act adopts a macroprudential approach to the supervision of the US financial system that is intended to end the TBTF-conundrum that gave rise to several bail-outs of large and highly interconnected financial institutions during the GFC.²²⁷⁹ The Council is the macroprudential supervisor of the US financial system and part of its duties entails monitoring systemic risk emanating from large and highly interconnected financial institutions consistent with the financial stability objective of the Dodd-Frank Act. The Council is a statutory authority that is constituted of financial regulatory agencies such as the US Treasury Secretary, the Chairman of the Federal Reserve, the Comptroller of the Currency, the Chairperson of the FDIC, the Director of the CFPB, the Commissioner of the SEC, the Chairperson of the CFTC, the Director of the FHFA, the Chairman of the NCUA Board, and one independent Presidential appointee with insurance expertise that are knowledgeable in the prudential regulation of financial institutions.²²⁸⁰

²²⁷⁷ See paragraph 3.2 of Chapter Three.

²²⁷⁸ See paragraph 3.2 of Chapter Three; and paragraph 1.8 of Chapter One.

²²⁷⁹ See paragraph 1.5 of Chapter One; and paragraph 3.3 of Chapter Three.

²²⁸⁰ See paragraph 3.3 of Chapter Three.

Being constituted with different financial regulatory agencies as members, the Council has the required competence drawn from different systemic perspectives to assess vulnerabilities and strengths in the US financial system. Further it is submitted that this composition is appropriate as the Council's financial stability role is augmented by the Federal Reserve as the US central bank since the Federal Reserve is responsible for evaluating the systemic risk posed by large, highly interconnected and complex bank holding companies (BHCs).

6.3.1.3 The authority for identifying US SIBs: the Federal Reserve

As the US central bank, it was indicated in Chapter Three that the Federal Reserve is responsible for automatically subjecting US BHCs maintaining minimum total consolidated assets of 250 billion USD to stringent prudential standards pursuant to section 165 of the Dodd-Frank Act, as amended by section 401 of the EGRRCPA. Additionally, the Federal Reserve may apply stringent prudential standards to US BHCs with an asset-size threshold that equals or exceeds 100 billion USD but less than 250 billion USD, upon making findings that are necessary to address the safety and soundness risks of these BHCs as well as financial stability concerns.

Accordingly, the Federal Reserve determines the applicability criteria for four categories of stringent prudential standards to US BHCs in accordance with the *Stringent Prudential Standards Categories Final Rule*. In terms of the *Stringent Prudential Standards Categories Final Rule*, Category I, Category II, Category III and Category IV stringent prudential standards are applied to Category I BHCs (US G-SIBs), Category II BHCs, Category III BHCs and Category IV BHCs, respectively.²²⁸¹ Clearly this type of tiered regulatory approach is suitable for the US because, as pointed out in Chapter Three, the US has very large banks (Wall Street firms) and also banks that are smaller in size (community banks). This proportionate approach is thus designed to differentiate BHCs by categories that are intended to tailor the application of stringent prudential standards to the level corresponding with their risk profile so that the most stringent prudential standards are applied to those categories that present elevated systemic risks while categories that pose decreased systemic concerns are subject to less stringent prudential standards.

²²⁸¹ See paragraph 3.7 of Chapter Three.

6.3.1.4 The US G-SIB framework

6.3.1.4.1 The indicator-based measurement approach

It was further noted in the discussion in Chapter Three on the US indicator-based measurement approach, that the Federal Reserve has implemented the *Basel G-SIB framework* and not the *Basel D-SIB framework*, but rather introduced criteria that subjects BHCs to stringent prudential standards based on their consolidated assets and risk indicators (with fixed size thresholds). In principle, US G-SIBs would also be identified as US D-SIBs (had there been a D-SIB framework in the US) as they would disrupt both the US financial system and the global financial system. US G-SIBs are “advanced approaches” US BHCs²²⁸² that have obtained a systemic score of 130 basis points or more, computed annually under the indicator-based measurement approach pursuant to the *US G-SIB Surcharge Final Rule* that was issued in August 2015.

It is evident that the *Federal Reserve G-SIB framework* addresses the systemic importance of BHCs on a global rather than on a domestic economy level. Thus, this framework only captures the systemic profile of G-SIBs (which would also be identified as D-SIBs if the D-SIB framework had been implemented). It is submitted that this is problematic because the framework does not capture the systemic footprint of all D-SIBs given that not all US D-SIBs would also be US G-SIBs. Another problematic issue concerns the assessment of BHCs only in exclusion to banks which do not have a holding company structure even if their sizes are comparable to that of these BHCs.

The Federal Reserve’s indicator-based measurement approach²²⁸³ reflects the *Basel G-SIB framework* (but it is *not* complemented by supervisory judgment) and further incorporates the short-term wholesale funding framework.²²⁸⁴ The indicator-based measurement approach evaluates the systemic importance of banks with the categories of size, interconnectedness, substitutability, complexity and cross-jurisdictional activity, which are further defined by indicators that mirror the indicators

²²⁸² See paragraph 3.7, subparagraph 3.7.1 of Chapter Three.

²²⁸³ See subparagraph 3.7.1.1 of Chapter Three.

²²⁸⁴ As indicated in subparagraph 3.7.1.1, the Federal Reserve employs the short-term wholesale funding framework to calibrate G-SIB surcharges after identifying G-SIBs with the indicator-based measurement approach because it considers this framework more stringent than the Basel indicator-based measurement approach.

that are contained in the *Basel G-SIB framework* and are equally risk-weighted at 20 per cent. Given this similarity, the systemic score for US G-SIBs under the Federal Reserve's method 1 score would thus be calculated consistently with the Basel indicator-based measurement approach.²²⁸⁵ The size of a bank is calculated using the bank's total exposure consisting of on-balance and off-balance sheet items in terms of the *Basel supplementary leverage ratio framework*.²²⁸⁶ The category of interconnectedness establishes the systemic importance of a bank with intra-financial system assets, intra-financial system liabilities and securities outstanding.²²⁸⁷ The substitutability of a bank is computed with the total value of payment transactions, assets under custody and underwritten transactions in the debt and equity market.²²⁸⁸ It should be noted that this substitutability-category does not incorporate trading volume featured in the Basel substitutability-category but both categories have the same risk weight. Further, OTC derivatives, trading and "available-for-sale"-securities and Level 3 assets are indicative of the level of complexity of a bank.²²⁸⁹ Finally, the cross-jurisdictional activity of a bank is indicated with cross-jurisdictional assets and cross-jurisdictional liabilities.²²⁹⁰

Given that the indicator-based measurement approach is suitable for identifying big banks, it is ideal for the US financial system, as it has been highlighted that this jurisdiction is composed of super-sized banks in terms of the asset-size. However, because of the complementary role to the indicator-based measurement approach that the supervisory overlay approach is intended to fulfil, it is submitted that there might actually exist US banks whose systemic importance may be only demonstrated by qualitative factors and as such banks may potentially pose systemic threats to the US financial system.

6.3.1.4.2 The US short-term wholesale funding framework

Under the *US G-SIB Surcharge Final Rule*, the short-term wholesale funding framework is utilised to also identify US G-SIBs and to calibrate the applicable G-SIB

²²⁸⁵ See paragraph 2.2, subparagraph 2.2.1, of Chapter Two.

²²⁸⁶ See subparagraph 3.7.1.1.1 of Chapter Three.

²²⁸⁷ See subparagraph 3.7.1.1.2 of Chapter Three.

²²⁸⁸ See subparagraph 3.7.1.1.3 of Chapter Three.

²²⁸⁹ See subparagraph 3.7.1.1.4 of Chapter Three.

²²⁹⁰ See subparagraph 3.7.1.1.5 of Chapter Three.

surcharges to them. The short-term wholesale funding framework is consistent with the indicator-based measurement approach, save that it replaces the category of substitutability with short-term wholesale funding sources. As pointed out in this study, the indicators of short-term wholesale funding are: secured funding transactions; unsecured wholesale funding; short positions; covered asset exchanges; and brokered deposits and brokered sweep deposits.²²⁹¹ The Federal Reserve's employment of the short-term wholesale funding framework is clearly vital as it augments its *LCR framework* to address the problem of systemic liquidity risk that may be posed by large US BHCs.

6.3.1.4.3 US G-SIBs

As pointed out, the Federal Reserve has currently identified eight US G-SIBs (that would also be identified as D-SIBs if the US had a D-SIB framework) with the *US G-SIB Surcharge Final Rule*, namely: JP Morgan Chase, Bank of America, Citigroup, Goldman Sachs, Morgan Stanley, Wells Fargo, State Street Bank and Bank of New York Mellon. These US G-SIBs also appear in the FSB's current list of G-SIBs.²²⁹² As mentioned above, targeting only the global economy (in exclusion to the domestic economy) in assessing the systemic importance of US BHCs would mean that banks that must be identified as D-SIBs are excluded from the identification process. This is not an optimal situation because countries are, first and foremost, supposed to assess the systemic importance of banks in relation to their own domestic economy in order to address systemic risks posed to their respective financial systems.

6.3.1.4.4 The assessment criteria for Category II, Category III and Category IV US BHCs

Category II stringent prudential standards apply to Category II US BHCs. These BHCs hold minimum total consolidated assets of 700 billion USD or 100 billion USD total assets and 75 billion USD in cross-jurisdictional activity and they are not US G-SIBs.²²⁹³ Category III stringent prudential standards apply to Category III US BHCs. This Category maintains 250 billion USD in minimum total consolidated assets or 100 billion USD total assets and 75 billion USD in any of the risk indicators of weighted

²²⁹¹ See subparagraph 3.7.1.2 of Chapter Three.

²²⁹² See subparagraph 3.7.1.3 of Chapter Three.

²²⁹³ See subparagraph 3.7.2.1 of Chapter Three.

short-term wholesale funding assets, off-balance sheet exposure or non-bank assets and these BHCs do not meet the criteria for Category I and Category II BHCs.²²⁹⁴ Category IV stringent prudential standards apply to Category IV US BHCs. Category IV BHCs hold minimum total consolidated assets of 100 billion USD and do not meet the criteria for Categories I, II and III BHCs.²²⁹⁵

It was submitted above that this tiered approach is relevant for the US financial system given that it distinguishes between BHCs that are of different sizes and that would thus require different levels of stringent prudential measures to contain the systemic risk that they pose. However, there are also a number of aspects that are important for consideration in this respect. First, this approach classifies BHCs based on the size criteria which, although it was shown to be a key indicator in measuring banks' systemic importance, was however, proven not to be sufficient by itself. This size-indicator is measured in terms of the total consolidated assets of US BHCs which obviously does not incorporate off-balance sheet items as it only covers on-balance sheet items. Second, this approach consists of the risk indicators of cross-jurisdictional activity, weighted short-term wholesale funding assets, non-bank assets and off-balance exposure. However, these indicators are not evaluated independently of the total consolidated assets criteria as it is tied to them, and they are also assigned fixed size thresholds. When taken together, it is submitted that these factors may limit the ability of the framework to appropriately assess the systemic importance of BHCs in order to perfectly reflect their risk profile.

6.3.1.5 The prudential regulator for US SIBs: the Federal Reserve

In accordance with section 165 of the Dodd-Frank Act, as amended by section 401 of the EGRRCPA, the Federal Reserve is the prudential regulator of US G-SIBs, Category II BHCs, Category III BHCs and Category IV BHCs. It could be concluded that this regulatory approach is well-placed considering that the Federal Reserve is equipped to execute the prudential toolkit, as the consolidated supervisor of BHCs under *the Bank Holding Company Act of 1956*.²²⁹⁶

²²⁹⁴ See subparagraph 3.7.2.2 of Chapter Three.

²²⁹⁵ See subparagraph 3.7.2.3 of Chapter Three.

²²⁹⁶ See paragraph 3.2 of Chapter Three.

6.3.1.6 The Federal Reserve's prudential regulatory and supervisory framework

US G-SIBs are subject to Category I stringent prudential standards, being the most elevated prudential standards that are intended to address safety and soundness concerns of G-SIBs and to prevent or mitigate the greatest risks to the US financial system. Since the Federal Reserve has implemented the *G-SIB framework* and not the *Basel D-SIB framework*, it has been highlighted that there is no D-SIB buffer regime in the US.²²⁹⁷ It is submitted that this may have an adverse impact on the US financial stability as it means that systemic risk emanating from US D-SIBs will not be addressed by the D-SIB buffer being a tool that is specifically designed to raise the loss absorbency capacity of D-SIBs.

Regarding the Federal Reserve's enhanced capital framework, the G-SIB surcharge is one of the most stringent prudential standards that are applied only to US G-SIBs. It is fully met with CET1 capital and it is calibrated in terms of the bucketing approach. According to the Federal Reserve, the short-term wholesale funding framework calculates the G-SIB surcharge more stringently than the *Basel G-SIB framework*. Further, the Federal Reserve's capital framework for US G-SIBs incorporates the CCvB and the CCyB, as augmented by the G-SIB surcharge. On the other hand, Category II BHCs and Category III BHCs are subject to the CCvB and the CCyB while Category IV BHCs are subject to "generally applicable capital" under *the Collins Amendment* that came into effect in 2010.²²⁹⁸ Subjecting US G-SIBs to more stringent form of G-SIB surcharges fully composed of CET1 capital is in line with the Basel Committee's approach regarding the maxima nature of prudential standards. Further, providing capital regulatory relief for Categories of BHCs that do not present as much heightened systemic risk as US G-SIBs is a sound approach that effectively deals with the TBTF-problem.

As further indicated in Chapter Three, US G-SIBs are subject to the enhanced supplementary leverage ratio which encompasses the supplementary leverage buffer, in addition to the supplementary leverage ratio requirement. Category II and Category III BHCs are subject to the supplementary leverage ratio and Category IV BHCs are

²²⁹⁷ See subparagraphs 3.7.1 and 3.8.1.3 of Chapter Three.

²²⁹⁸ See subparagraph 3.8.3 of Chapter Three.

subject to the “US leverage ratio” which is composed of a bank’s Tier 1 capital to its on-balance sheet exposure.²²⁹⁹ Just as with its capital framework, the Federal Reserve’s supplementary leverage ratio framework is tailored to BHCs’ risk profile and it is reasonable that US G-SIBs should be subject to an enhanced supplementary leverage ratio due to the elevated risks of high leverage they may potentially pose to the US financial system. However, it is submitted that the off-balance sheet exposure that is lacking in the “US leverage ratio” would restrict its ability to address leverage concerns arising from BHCs to which it is applied.

It was also indicated in Chapter Three that under the liquidity regulations, US G-SIBs, Category II BHCs, and Category III BHCs with 75 billion USD or more in average weighted short-term wholesale funding, are subject to the full requirement of the LCR. A reduced LCR requirement is applicable to Category III BHCs that fall below the specified average weighted short-term wholesale funding threshold of 75 billion USD and Category IV BHCs with average weighted short-term wholesale funding of 50 billion USD or more.²³⁰⁰ Further, US G-SIBs, Category II BHCs, and Category III BHCs with average weighted short-term wholesale funding of 75 billion USD or more, are subject to the full requirement of the NSFR. Category III BHCs with average weighted short-term wholesale funding that is less than 75 billion are subject to a reduced NSFR requirement calibrated at 85 per cent of the full NSFR requirement.²³⁰¹ The reduced requirement of the NSFR calibrated at 70 per cent of the full NSFR requirement is imposed on Category IV BHCs with average weighted short-term wholesale funding that is above 50 billion USD or more, to take into account their decreased risk profile.

In respect of the US liquidity regulation, the Federal Reserve has not provided a clarification for the differentiated treatment, imposed on Category III and Category IV BHCs, of setting further thresholds in terms of the average weighted short-term wholesale funding-indicator. This treatment is in terms of applying a reduced LCR and a reduced NSFR to Category III BHCs that fall below 75 billion USD in weighted short-term wholesale funding and to Category IV BHC that maintain an average short-term wholesale funding of 50 billion USD or more. It is understood that all these BHCs are

²²⁹⁹ *Ibid.*

²³⁰⁰ See subparagraph 3.8.4.1 of Chapter Three.

²³⁰¹ See subparagraph 3.8.4.2 of Chapter Three.

already classified based on their risk profile, which justifies the application of Category III and Category IV stringent prudential standards.

It was further indicated in Chapter Three that, in respect of large exposure limits, a more stringent single counterparty credit limit (SCCL) of 15 per cent composed of CET1 is imposed on US G-SIBs to combat credit exposures emanating from major counterparties to address the elevated credit risk among SIFIs. Further, the Federal Reserve applies the SCCL not exceeding 25 per cent of Tier 1 capital to US G-SIBs, Category II BHCs and Category III BHCs to restrict credit extension to counterparties.²³⁰² The restrictive SCCL for G-SIBs in terms of the aggregate exposure limit and the composition of CET1 capital is appropriate as it gives effect to the objective of the Dodd-Frank Act that seeks to address the elevated risk of credit exposures amongst SIFI-banks relative to non-bank SIFIs.

Further, it was indicated that US G-SIBs are biennial filers, meaning that they submit resolution plans to the Federal Reserve and the FDIC every other year.²³⁰³ Category II BHCs and Category III BHCs (triennial full filers) are required to file resolution plans every three years. US G-SIBs are also subject to the Total Loss Absorbing Capacity (TLAC) requirements, which were implemented to complement Regulation Q in respect of capital requirements.²³⁰⁴ It is commendable that the US has not only implemented the BCBS prudential standards but has also implemented the *FSB Key Attributes* incorporating recovery and resolution regimes, and the TLAC requirements.

It was also indicated in Chapter Three that, under the Federal Reserve's enhanced supervisory framework, US G-SIBs, Category II BHCs and Category III BHCs are subject to annual supervisory-run stress-testing and periodic company-run stress-testing as well as the *capital plan rule*, facilitated by the FR Y – 14-reporting while Category IV BHCs are subject to supervisory-run stress-testing every other year and also to the capital plan rule.²³⁰⁵ Category IV BHCs are not subject to company-run stress tests.²³⁰⁶ The Federal Reserve imposes the stress capital buffer (SCB) on US

²³⁰² See subparagraph 3.8.7 of Chapter Three.

²³⁰³ See subparagraph 3.8.6 of Chapter Three.

²³⁰⁴ See subparagraph 3.8.8 of Chapter Three.

²³⁰⁵ See subparagraph 3.8.5.1 of Chapter Three.

²³⁰⁶ *Ibid.*

G-SIBs, Category II BHCs, Category III BHCs and Category IV BHCs. The SCB is calculated using the supervisory-run stress test results and it is intended to integrate the capital framework and stress-testing regime in order to eliminate the redundant elements of capital requirements.²³⁰⁷ Overall, the Federal Reserve's capital framework is comprehensive because the capital planning and stress-testing buffer regimes seek to supplement the Basel capital frameworks.

In addition, US G-SIBs, Category II BHCs and Category III BHCs are subject to risk-management and risk committee requirements, monthly calculation of liquidity stress-testing and buffer requirements as well as daily liquidity calculation.²³⁰⁸ Category IV BHCs are subject to risk-management and risk committee requirements, quarterly calculation of liquidity stress-testing and buffer requirements and monthly liquidity data reporting.²³⁰⁹ Similarly, the Federal Reserve's liquidity framework is enhanced as the liquidity stress-testing and buffer requirements and the daily and monthly liquidity calculations for these BHCs Categories are complementary to the Basel LCR and the NSFR.

Beyond its stringent prudential regulatory and enhanced supervisory regime, the Federal Reserve may prescribe additional prudential standards that are aimed at preserving financial stability in the US, which additional standards comprise: contingent capital; enhanced public disclosures including credit exposure report; a short-term debt requirement; and a debt-to equity ratio requirement.²³¹⁰ This degree of flexibility is required to address US financial stability risks when it is deemed appropriate.

6.3.1.7 Legal remedies for challenging designation of SIBs in the US

It was indicated in Chapter Three that US SIBs may institute judicial review proceedings in terms of section 8 of *the Administrative Procedure Act of 1946* if they are aggrieved by the decision of the Federal Reserve regarding their identification as SIBs for purposes of the imposition of the stringent prudential regime.²³¹¹ The relief

²³⁰⁷ *Ibid.*

²³⁰⁸ See subparagraphs 3.8.5.2 and 3.8.5.3 of Chapter Three.

²³⁰⁹ *Ibid.*

²³¹⁰ See paragraph 3.9 of Chapter Three.

²³¹¹ See paragraph 3.10 of Chapter Three.

that may be granted by the reviewing court includes setting aside the agency action, and to hold such action to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law. It is submitted that the US SIBs have not yet explored this legal remedy because it would be difficult to find grounds for challenging the Federal Reserve's criteria for the applicability of stringent prudential standards to BHCs Categories, which criteria is based on the total consolidated asset threshold.

6.3.2 The experience of the Netherlands

6.3.2.1 The Dutch legal and regulatory framework: the CRD IV package; the SSM Regulation; the Financial Supervision Act

The study of the Dutch SIFI reforms in Chapter Four indicated that the Netherlands implemented the *Basel D-SIB framework* as part of the EU-wide measures incorporating the G20's post-GFC financial stability reforms. The EU-wide financial system is regulated under *the Capital Requirements Regulation (CRR)* and *the Capital Requirements Directive (CRD) IV*, (collectively termed the CRD IV package), as amended by *the Capital Requirements Regulation II (CRR II)* and *the Capital Requirements Directive V (CRD V)*. As per the CRD IV package, the European System of Financial Supervision (ESFS) is the financial regulatory architecture that is constituted of the European Systemic Risk Board (ESRB), the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA), the European Securities and Markets Authority (ESMA) and the national competent authorities.²³¹²

The ESRB is a non-statutory body tasked with the macro-prudential oversight role in the Union tasked with coordinating the macro-prudential frameworks of the various national competent authorities. The EBA is responsible for promoting consistent regulation across the EU banking sector while the EIOPA and the ESMA are required to promote consistent regulation of insurance and securities sectors, respectively. The European Central Bank (ECB) is another crucial role player that was subsequently established as a competent authority under the ESFS charged with supervising significant credit institutions pursuant to *the Single Supervisory Mechanism (SSM) Regulation*. Accordingly, the Dutch financial system is consistently regulated with *the*

²³¹² See paragraph 4.2 of Chapter Four.

CRD IV package and *the SSM Regulation* under the *Financial Supervision Act* that came into operation in 2007, as revised by the *Financial Markets Amendment Act of 2014*, amongst other amendments, as the Netherlands is both an EU Member State and an Eurozone country.²³¹³

Being the second jurisdiction whose TBTF banks collapsed as a result of the Twin Crises (the GFC and the Eurozone crisis), the European Union followed the example of the US by implementing the G20 financial regulation reforms incorporating the SIFI-regulatory reforms through the enactment of the CRD IV package. The Netherlands's implementation of the EU O-SII framework pursuant to the Financial Supervision Act is consistent with the CRD IV package and the SSM Regulation.

It was indicated that under the ESFS, the ESRB's macro-prudential responsibility is limited by the ESRB's inability to issue binding recommendations as it is a non-statutory authority. It is submitted that the ECB as the European central bank, is well-positioned to conduct its comprehensive macro-prudential task. However, the EBA cannot be able to fully address macro-prudential risks in the EU as it is statutorily constrained to conduct this role within the Eurozone. As the Union legislative bodies, the EBA, the EIOPA and the ESMA are empowered to execute their roles across EU Member States and this is appropriate given the EU-wide regulation of financial system.

6.3.2.2 The macro-prudential supervisor of the Dutch financial system: DNB in coordination with the ECB

It was indicated in Chapter Four that the Financial Supervision Act sets out the Dutch Twin Peaks model that was adopted in 2002 establishing the Dutch central bank, De Nederlandsche Bank (DNB), as the prudential regulator of financial institutions and the Authority for Financial Markets (AFM) as the market conduct regulator of financial institutions. Consistent with the SSM Regulation, DNB shares prudential regulation of credit institutions with the ECB. DNB is also responsible for the supervision of the Dutch financial system. As the Dutch central bank that had always discharged the financial stability role during the pre-Twin Peaks era and subsequently within the Dutch

²³¹³ See paragraph 4.3 of Chapter Four.

Twin Peaks model, it is submitted that DNB has over time developed the necessary tools and possesses the required technical capacity to conduct the macro-prudential function of promoting the stability of the Dutch financial system.

6.3.2.3 The national competent authority responsible for identifying O-SIIs: DNB in consultation with the ECB

Similar to the Federal Reserve, DNB as the Dutch central bank, is the national competent authority responsible for identifying banks as “other systemically important institutions” (O-SIIs) (thus bank-SIFIs) pursuant to section 3:62a of the Financial Supervision Act to give effect to Article 133(1) of the CRD IV that requires the EU Member States to establish the relevant authorities charged with the identification of O-SIIs.²³¹⁴ As the Eurozone central bank, DNB designates O-SIIs in consultation with the ECB.²³¹⁵ Just as with the Federal Reserve, DNB’s identification of O-SIIs is relevant to its financial stability role, part of which entails the prevention and mitigation of systemic risk originating from financial institutions.

6.3.2.4 The Dutch O-SII framework

6.3.2.4.1 The indicator-based measurement approach

DNB undertakes an annual assessment of the systemic importance of banks to facilitate their identification as O-SIIs consistent with the *EBA guidelines on O-SIIs assessment* published in December 2014, as stipulated in Article 131(3) of the CRD IV. Banks with a size not exceeding 0.02 per cent of the Member State’s total banking sector may be excluded from the assessment process as they are considered to be unlikely to pose systemic risk – however, they must be continually monitored to evaluate the level of their risk profile.

The *EBA guidelines on O-SIIs assessment* consist of the indicator-based measurement approach, which is supplemented by a supervisory judgment methodology. The indicator-based measurement approach gauges the systemic importance of banks over the categories of size, the importance for the economy of the relevant Member State and the Union that captures substitutability or financial

²³¹⁴ See paragraph 4.4, subparagraphs 4.4.1 and 4.4.3 of Chapter Four.

²³¹⁵ Subparagraph 4.4.1 of Chapter Four.

institution infrastructure, the complexity (including the additional complexity from cross-border activity) and the interconnectedness of the institution or sub-group within the financial system.²³¹⁶

It was pointed out in Chapter Four that the category of size is measured by considering the total exposure of a bank consisting of its on-balance and off-balance sheet items. The category of “importance for the economy of the relevant Member State and the Union capturing substitutability” captures the value of domestic payment transactions, private sector deposits from depositors in the EU and private sector loans to recipients in the EU. The category of interconnectedness has the indicators of intra-financial system assets, intra-financial system liabilities and debt securities outstanding. Complexity is measured with cross-jurisdictional claims, cross-jurisdictional liabilities and OTC derivatives. These indicators are weighted at 25 per cent each to facilitate a collective score. The total systemic score for each O-SII is then derived by averaging the systemic scores for all of these four categories and then converting the resulting value into basis points. Banks whose systemic score equals or exceeds 350 basis points are identified as O-SIIs. EU Member States that are characterised by a highly concentrated banking sector are permitted to adjust the systemic score threshold to 425 basis points to capture some huge O-SIIs with a bigger asset-size while Member States that are defined by a dispersed banking system may decrease the systemic score to 275 basis points to identify several O-SIIs that may be small in terms of size.

The *EBA Guidelines on O-SIIs assessment* are designed to assess the systemic importance of banks with reference to the domestic financial system of individual EU Member States and in respect of the Union financial system. These guidelines are consistent with the most fundamental principle of the *Basel D-SIB framework*, namely, that banks’ systemic importance should be evaluated in respect of the potential impact their failure would have on the domestic economy. Further, it is appropriate for banks’ systemic importance to be evaluated at Union level considering that the EU financial system regulation occurs at Union level.

²³¹⁶ See subparagraph 4.4.1 of Chapter Four.

It is further noted that the *EBA Guidelines on O-SIIs assessment* are in line with the Basel indicator-based measurement approach with regard to size, substitutability, complexity and interconnectedness. The EBA, however, captures some indicators that are relevant to the EU financial system to define aspects that renders EU banks systemically important (such as private sector deposits from depositors in the EU and private sector loans to recipients in the EU). Also, the indicators are risk-weighted at 25 per cent and the systemic score in terms of the basis points is 350 (which may be varied to 275 or 425 basis points having regard to national specificities). It is submitted that this variation is appropriate as it allows a degree of flexibility that takes into account the Union financial system.

6.3.2.4.2 Supervisory judgment

Consistent with the EBA supervisory judgment approach, it was pointed out in Chapter Four that DNB further identifies banks that are deemed to be systemically relevant to the Dutch financial system but whose systemic importance is underestimated by the mandatory scoring methodology of the indicator-based measurement approach. In assessing the systemic importance of banks under the supervisory overlay, DNB deploys certain optional indicators that are relevant for the Dutch banking system:²³¹⁷ the total exposure to default is categorised under the size-category. The indicators of types of customers of a bank and number of retail deposit accounts are classified under the substitutability category. The indicators of the potential contagion through shareholders and deposits guaranteed under Deposit Guarantee Scheme (DGS) are dealt with under the category of interconnectedness. Further, the indicators of the potential reputational contagion and contagion through entities in a conglomerate fall under a separate category called “behavioural effects of a bank”. Fifth, another optional indicator called the degree of resolvability of a bank evaluates any impediments to the resolution of banks that are no longer viable.²³¹⁸

The DNB supervisory approach complies with the EBA supervisory framework as it deploys some of the optional indicators that are considered to be relevant for the Dutch financial and banking system. One of the O-SIIs, De Volksbank, has indeed, been

²³¹⁷ See subparagraph 4.4.2 of Chapter Four.

²³¹⁸ Annex 1, Table 2 of the *EBA Guidelines on O-SIIs assessment*.

assessed to be systemically relevant subject to this supervisory approach under the optional indicator of deposits guaranteed under the DGS.

The EBA recommends a number of best international practices regarding the identification of O-SIIs.²³¹⁹ First, the EBA recommends the annual press release or having a devoted webpage indicating how the identification process will be conducted, the general awareness of the exercise encompassing the main features and consequences of O-SII-identification. This conforms to best international practice that ensures that banks are well informed of the essential steps incorporated in the assessment of a bank's systemic footprint to facilitate a smooth identification process. Second, the assessment of the systemic relevance of banks should be conducted at the consolidated level as a starting point, and subsequently, the deployment of the sub-consolidated level in appropriate cases, is considered as a best international practice. It is submitted that this is a good practice as in some instances both a parent bank and its subsidiary may pose systemic risk justifying the application of the O-SII buffer on the parent bank and the subsidiary alike to enhance their loss absorbency capacity. Third, the EBA recommends the inclusion of branches of foreign banks in the assessment process owing to their systemic significance in the Dutch financial system and information sharing in cases where a foreign bank is identified as an O-SII. It is submitted that this is proper given that the GFC revealed that branches of foreign banks created negative externalities for host jurisdictions. Fourth, the publication of systemic scores obtained by each O-SII in each category together with the applicable O-SII buffer is recommended. This is also commendable since it fosters market discipline as O-SIIs may take steps to minimise their systemic footprint. Fifth, the notification of identification to banks that have been identified as O-SIIs, in an open and transparent fashion such as sending out an official email or letter, is recommended. Proper communication channels are clearly vital for the general information exchange between banks and regulators.

6.3.2.4.3 Dutch O-SIIs

As pointed out in Chapter Four, DNB has identified five banks as Dutch O-SIIs, namely, ING, Rabobank, ABN, BNG and De Volksbank. ING, Rabobank, ABN and

²³¹⁹ Subparagraph 4.4.3.3 of Chapter Three.

BNG have been automatically identified as O-SIIs under the indicator-based measurement approach. Also, ING, Rabobank and ABN are the largest O-SIIs in terms of size and are ranked excessively significant to the Dutch financial system. In addition, DNB has further identified ING as a G-SII, and it is also captured in the FSB's recent list of G-SIBs. De Volksbank has been identified under the supervisory overlay's optional indicator of interconnectedness relating to payment made under the Deposit Guarantee Scheme (DGS), of up to a maximum of 100 000 euros, per depositor, per bank, when a bank fails. DNB publishes its list of O-SIIs, on its website and outlines methodologies that have been employed to identify O-SIIs and the applicable O-SII buffer. At the Union level, the EBA publishes the list of all EU O-SIIs throughout the Member States on its website.

DNB is thus compliant with the *Basel D-SIB framework* recommendation in terms of the disclosure requirements pertaining to the assessment methodologies utilised to assess banks' systemic importance as well as the applicable buffers and the list of O-SIIs. As pointed out above, DNB disclosed that it identified the abovementioned four banks with the indicator-based measurement approach and the fifth bank with the supervisory judgment overlay.

6.3.2.5 The prudential regulator for O-SIIs: DNB in coordination with the ECB

DNB is the prudential regulator of O-SIIs in accordance with section 3:62a of the Financial Supervision Act and discharges the prudential regulation of O-SIIs in coordination with the ECB under the SSM Regulation.²³²⁰ As the prudential regulator of financial institutions within the Dutch Twin Peaks model, it is appropriate for DNB to be the suitable national competent authority for imposing prudential requirements to O-SIIs.

6.3.2.6 DNB stringent prudential regulation and supervision

As stated in Chapter Four, the CRD V has amended the CRD IV, which originally set the O-SII buffer of up to 2 per cent of risk-weighted assets (RWAs), to require O-SIIs to hold the O-SII buffer of up to 3 per cent of RWAs that are composed of 100 per cent

²³²⁰ See paragraph 4.5 of Chapter Four.

of CET1 capital.²³²¹ Consistent with the Basel approach, the O-SII buffer augments the CCvB and the CCyB.²³²² It was pointed out that, prior to the entering into force of the CRD V, BNG and SNS were subject to the O-SII buffer of 2 per cent and 1 per cent of RWAs, respectively. After the CRD V entered into force in 2020, DNB currently applies the O-SII buffer of 2.5 per cent, 2 per cent, and 1.5 per cent of RWAs to ING, Rabobank, and ABN, respectively. BNG and De Volksbank are each subject to 1 per cent of the O-SII buffer on account of their decreased systemic relevance.

The EBA recently issued a Report recommending the employment of the “floor”-methodology to uniformly calibrate an O-SII buffer across the EU Member States.²³²³ This floor methodology will provide much needed guidance on the applicable buffers that are commensurate with each O-SII’s systemic footprint as it would also rank O-SIIs in terms of their systemic scores. This approach will further harmonise the various and inconsistent approaches that are adopted across the EU Member States for calibrating the O-SII buffer, which also result in banks of comparable systemic footprint being subjected to different O-SII buffers.

In addition to the O-SII buffer, O-SIIs were initially subject to the now abolished SyRB. ING, Rabobank, and ABN were previously subject to SyRB of 3 per cent of RWAs.²³²⁴ The Dutch SyRB, which used to be the highest requirement, overrode the application of the O-SII buffer when they were both applied to O-SIIs. When the CRD V entered into force, the SyRB became additive with the O-SII buffer in the EU.²³²⁵ Since the SyRB and the O-SII buffers respectively address macro-prudential and systemic risks, (which pose different risks) it is prudent that their application should have a cumulative effect. Based on these grounds, it is submitted that the Netherlands should re-consider its abolishment of the SyRB requirement as this would mean that macro-prudential risks may be unaddressed.

Other prudential requirements such as the supplementary leverage ratio, the LCR, the NSFR, the risk-management requirements and the large exposure limits are applied

²³²¹ See subparagraph 4.5.1.3 of Chapter Four.

²³²² See subparagraphs 4.5.1.1, 4.5.1.2 and 4.5.1.3 of Chapter Four.

²³²³ See subparagraph 4.5.1.3 of Chapter Four.

²³²⁴ See subparagraph 4.5.1.4 of Chapter Four.

²³²⁵ *Ibid.*

to Dutch banks in general including O-SIIs.²³²⁶ Further, O-SIIs are classified as Category I institutions in the Netherlands and thus, are subject to the most stringent supervisory review and evaluation process (SREP) consistent with Article 97 of the CRD IV.²³²⁷ Outside the CRD IV package, all Dutch banks inclusive of O-SIIs are subject to national flexibility measures designed to deal with systemic risk originating from the Dutch mortgage industry to deal with the cyclical systemic risk in line with Article 458 of the CRR.²³²⁸ O-SIIs are further subject to recovery and resolution planning regimes.²³²⁹

The Dutch regulatory and supervisory regime is thus in line with the BCBS standards. In addition, DNB's deployment of the national flexibility measures in the form of LTI and LTV ratios effectively addresses risks that are posed by high leverage arising from the Dutch mortgage industry. This is significant in light of the fact that one of the Dutch O-SIIs, De Volksbank, is regarded a substantial mortgage lender.

6.3.2.7 The legal remedies for challenging O-SII identification in the Netherlands

For O-SIIs that seek to oppose their identification, the *General Administrative Law Act of 1992* avails the legal recourse in the form of an objection against a decision of an administrative body, as well as judicial review proceedings or a right of appeal.²³³⁰ What may be challenging for O-SIIs is that the *Dutch O-SII framework* identifies banks that obtain a prescribed systemic score. Thus, O-SIIs may lack the basis for opposing their identification which results in the application of the stringent prudential regime to them. Whether O-SIIs will exercise this statutory right in future remains to be seen.

6.3.3 Guidance for South Africa from the US and the Netherlands

6.3.3.1 The South African legal and regulatory framework: the Financial Sector Regulation Act and the Banks Act

The South African financial system is regulated under *the Financial Sector Regulation Act of 2017* (FSR Act) within the Twin Peaks model. It was pointed out in Chapter Five that, since the South African Twin Peaks model is currently being implemented, *the*

²³²⁶ See subparagraphs 4.5.2, 4.5.3, 4.5.4 and 4.5.5 of Chapter Four.

²³²⁷ See subparagraph 4.5.4 of Chapter Four.

²³²⁸ See subparagraph 4.5.6 of Chapter Four.

²³²⁹ See subparagraph 4.5.7 of Chapter Four.

²³³⁰ See paragraph 4.6 of Chapter Four.

Banks Act of 1990, as amended by *the Regulations relating to banks*, is the dedicated legislation for the South African banking sector.²³³¹

It was pointed out in this thesis that the South African jurisdiction is comparable to the Netherlands insofar as they both implemented a Twin Peaks model for the regulation of their financial systems. The US financial system regulation, which is composed of the institutional and functional approaches, is thus quite different from the South African and the Dutch regulatory approaches. As pointed out in Chapter Three, the US has a dual banking system composed of national banks and state banks. These different legal and regulatory frameworks are reflected in the various implementations of the *Basel D-SIB framework* in these jurisdictions.

Although their legal and regulatory frameworks are similar, it is pointed out in the observations below that South Africa's Twin Peaks model has been implemented with some slight variation from the Dutch Twin Peaks model in order to suit the unique characteristics of the South African financial system.

6.3.3.2 The macro-prudential supervisor of the South African financial system: the SARB

The FSR Act sets out the architecture for the South African Twin Peaks model, establishing the Prudential Authority (PA) as the prudential regulator of financial institutions and the Financial Sector Conduct Authority (FSCA) as the market conduct regulator of financial institutions. In contrast to the Dutch Twin Peaks model that creates DNB and the AFM as the only two peak regulators, the South African Twin Peaks model has a variant that establishes the South African Reserve Bank (SARB), often referred to as the “third peak”, as the systemic regulator of the South African financial system which has an overall financial stability mandate.²³³² Another point of contrast is that the PA is an independent juristic person although it is housed within the SARB as the central bank of South Africa²³³³ whereas the Dutch central bank,

²³³¹ See paragraph 5.2 of Chapter Five.

²³³² See subparagraph 5.2.1 of Chapter Five.

²³³³ See paragraphs 5.2.1 and 5.2.2 of Chapter Five.

DNB has the overall financial stability mandate and is also the prudential regulator of Dutch Banks and other financial institutions.²³³⁴

Because each jurisdiction's implementation of the Twin Peaks model is peculiar, it explains the differences in the established regulatory architecture. The valuable insights offered by the Netherlands reveal that systemic regulation entrusted to a central bank is appropriate within the Twin Peaks model. This expertise in systemic regulation is derived from the primary functions that have been customarily performed by central banks even in the pre-Twin peaks era. As the South African central bank, the SARB duly performs the function of assessment of financial stability threats by preventing systemic events from occurring and mitigating such systemic events if they do occur, as part of its financial stability mandate under the FSR Act. Thus, the SARB is suitable to be the South African systemic supervisor. Further, unlike DNB which is responsible for both systemic regulation and prudential regulation of financial institutions, the PA is responsible for prudential regulation of South African financial institutions. It is submitted that the PA is well-placed as the prudential regulator because it assumed its functions from the (then) BSD which used to perform these functions and as such was knowledgeable in that regard. Regarding market conduct regulation, it could be observed that South Africa took some guidance from the Netherlands as the FSCA is the counterpart of the Dutch AFM.

Further, unlike in the US, where the Council is the macroprudential supervisor that is composed of various financial regulators,²³³⁵ the SARB and DNB, as national central banks with best expertise in the dynamics of their domestic financial systems, are systemic supervisors of the South African and the Dutch financial systems, respectively.²³³⁶ To execute the financial stability mandate, it was pointed out in Chapter Five that the SARB is assisted by the Financial Stability Oversight Committee (FSOC), which is an apex committee constituted of the top executives of the various financial regulators, which is in turn supported by the Financial Stability Contingency Forum (FSCF) that assist with identifying emerging systemic risks in the financial

²³³⁴ See paragraph 4.3 of Chapter Four.

²³³⁵ See paragraph 3.3 of Chapter Three.

²³³⁶ See paragraph 5.2 of Chapter Five; and paragraph 4.3 of Chapter Four.

system.²³³⁷ On the other hand, DNB is aided by the Financial Stability Committee (FSC), being a non-statutory committee that is composed of the representatives of DNB and the AFM, and the Minister of Finance.²³³⁸ Notably, DNB shares the macro-prudential supervision of the Dutch financial system with the ECB as the central bank for the Eurozone. Further, DNB's macro-prudential framework must be in line with that of the ESRB as the non-statutory authority responsible for macro-prudential supervision at the Union level.²³³⁹

A lesson learnt from the study of the US in Chapter Three is that it is not uncommon for the financial stability mandate to be discharged by statutory bodies that are constituted of financial regulatory agencies (which are assisted by central banks) as they are experienced in the regulation of systemic risk from different perspectives. It is therefore fitting for the Council to be conducting systemic regulation of the US financial system especially as it is also assisted by the US central bank, the Federal Reserve, which is knowledgeable in the regulation of systemic risk posed by US BHCs. Another guidance from the Netherlands is that central banks execute macro-prudential functions with the aid of committees that are tasked with assisting in financial stability matters. This approach is accordingly ideal for South Africa as the SARB, being the South African central bank, is assisted by the FSOC, being the statutory body charged with assisting the SARB in the financial stability mandate role.

6.3.3.3 The relevant authority charged with the identification/designation of D-SIBs/SIFI-banks: the PA and the Governor of the SARB

It was indicated in Chapter Five that in South Africa, the PA has the authority to identify banks as D-SIBs to implement the D-SIB buffer regime in accordance with *the Regulations relating to banks*.²³⁴⁰ However, the Governor of the SARB has the discretion to designate financial institutions as SIFIs by written notice, (this authority may not be delegated) as part of the financial stability mandate of the SARB articulated under section 29(1) of the FSR Act.²³⁴¹ As pointed out in Chapters Three and Four respectively, the Federal Reserve (with the recommendation of the Council) and DNB

²³³⁷ See subparagraph 5.2.1 of Chapter Five.

²³³⁸ See paragraph 4.3 of Chapter Four.

²³³⁹ *Ibid.*

²³⁴⁰ See subparagraph 5.2.2 of Chapter Five.

²³⁴¹ See paragraph 5.3 of Chapter Five.

(in consultation with the ECB), being the central banks in the US and the Netherlands, respectively, are charged with the identification of SIBs and O-SIBs, respectively.²³⁴²

Guidance taken from the US and the Netherlands in this context is that the authorities that are responsible for assessing the systemic importance of banks may receive advice from authorities that are responsible for executing macro-prudential tasks. The South African's approach differs from these approaches to the extent that the SARB itself is responsible for financial system stability and it is aided by the FSOC (being a committee that aids the SARB in financial stability matters). It observed that each of these approaches indeed yields the intended results of preserving financial stability. However, it is opined that the PA is not the competent authority to identify D-SIBs as its task is only focused on the prudential regulation of financial institutions.

Notably, *the Regulations relating to banks* do not specify the timeframe within which the South African PA may identify banks as D-SIBs and neither does the FSR Act specify such interval for the designation of financial institutions as SIFIs by the Governor of the SARB.²³⁴³ However, the BCBS is of the opinion that an annual assessment of the systemic importance of banks is ideal for capturing significant developments in the banking system or structural changes that may impact upon the systemic profile of banks, such as mergers.²³⁴⁴ Further the BCBS notes that an annual assessment of D-SIBs is consistent with the frequency of the identification of G-SIBs given that G-SIBs may also be identified as D-SIBs, as it is the case in the US. As pointed out in this thesis, the Federal Reserve and DNB however conduct an annual assessment process in respect of systemic importance of banks.²³⁴⁵ Guidance for South Africa in this regard is that the annual assessment of banks' systemic importance is the average frequency that is recommended as a best international practice with which D-SIBs may be identified across jurisdictions.

As is also evident from the comparative study undertaken in this thesis, the South African approach differs from the US and the Netherlands approaches as it provides

²³⁴² See subparagraphs 6.3.1.3 and 6.3.2.3 above.

²³⁴³ See paragraph 5.3 of Chapter Five.

²³⁴⁴ See paragraph 2.2 of Chapter Two; and subparagraph 2.3.2 of Chapter Two.

²³⁴⁵ Sees subparagraphs 6.3.1.4 and 6.3.2.3 above.

for specific designation (not merely identification) of SIFI-banks and sets out a designation process in the FSR Act that must be complied with. As indicated, section 29(2) of the FSR Act stipulates a designation procedure mandating the Governor of the SARB to notify the FSOC of the proposed designation of a financial institution as a SIFI and to afford a financial institution concerned the opportunity to make submissions to challenge its designation. These provisions are regarded as fundamental considering the FSOC's centrality in assisting the SARB in executing its financial stability mandate. It was further indicated that the FSR Act provides that the advice of the FSOC and the submissions by the affected bank must respectively be provided and made within a reasonable time, without specifying what a reasonable time would amount to. Section 29(3) of the FSR Act outlines the factors that should inform the Governor of the SARB's decision when designating a financial institution as a SIFI, namely: size, interconnectedness, complexity, substitutability, the recommendations of the FSOC and the submissions that are made by the affected financial institution.²³⁴⁶

With the exception of factors that relate to the recommendations of the FSOC and the submissions of the financial institution concerned, the FSR Act's criteria for designation of SIFIs generally reflects the criteria that is stipulated in *the Regulations Relating to Banks* and the *Basel D-SIB framework*. However, it is submitted that the designation process relating to the submissions by a financial institution may not fit properly in the context of assessing the systemic importance of banks. This is because the Basel assessment methodology is designed to identify banks that reach a specified threshold as D-SIBs and it does not allow room for submissions by banks prior to their identification as D-SIBs. It was noted in Chapters Three and Four respectively, that the Federal Reserve and DNB methodologies do not incorporate this designation process. Rather, this process is deployed by the Council when designating US non-bank financial institutions as SIFIs under section 113 of the Dodd-Frank Act which also provides for judicial review of the Council's determination regarding designation, as discussed in Chapter Three.²³⁴⁷ Notably, this designation process that the Council adopts to identify non-bank SIFIs is obviously similar to a designation procedure

²³⁴⁶ See paragraph 5.3 of Chapter Five.

²³⁴⁷ See paragraph 3.10 of Chapter Three.

provided for under the FSR Act in respect of the hearing provided to financial institutions that are designated as SIFIs. Further, just like in the Dodd-Frank Act, the FSR Act provides the right of judicial review of SIFI-designation. The difference is that section 113 of the Dodd-Frank Act addresses non-bank SIFI-designation while the FSR Act deals with designation of financial institutions including banks. It is believed that the designation procedure that the Council follows to designate non-bank SIFIs may probably be intended to afford non-banking financial institutions an opportunity to prove to the Council that due to the nature and extent of their financial activities, they are unlikely to pose as much financial stability threats that would justify a bank-like stringent prudential regulation.

Notably, it was pointed out that section 29(4)(a) of the FSR Act authorises the Governor of the SARB to designate a financial institution as a SIFI without first having notified the FSOC and allowing the submissions by a financial institution if a systemic event has occurred or is imminent under section 14 of the Act. In terms of section 29(4)(b) and (c) of the FSR Act, a financial institution may make submissions within thirty days post-designation, and thereafter, the Governor of the SARB may either confirm or abandon the proposed designation and accordingly notify the bank concerned. This proactive approach may be optimal in addressing cases in which the systemic importance of a financial institution may be triggered by systemic crisis.

Importantly, in alignment with the regulatory sentiment against bail-outs of systemically important financial institutions post GFC, the FSR Act does not promote the bail-out of SIFIs although it does not prohibit it given that some public funding may in some instances inevitably be necessary to support resolution actions in respect of a particular D-SIB. Section 29(5) of the Act thus provides that the designation of a financial institution as a SIFI does not imply, or entitle the financial institution concerned to a guarantee or any form of credit or other support from an organ of state. This provision is commendable considering that eliminating, or at least substantially mitigating, the TBTF-conundrum of bail-outs associated with SIFIs is paramount to the financial stability objective. As per section 29(6) of the FSR Act, the Governor of the SARB has the discretion to revoke a designation of a SIFI. However, this provision is silent on the issue of which factors may underscore the exercise of such discretion. It is submitted that this non-justification creates a lacuna relating to the status of SIFIs.

6.3.3.4 The South African D-SIB framework

6.3.3.4.1 The original SARB D-SIB assessment methodology

It was indicated in Chapter Five that the (then) Bank Supervision Department (BSD) of the SARB as bank supervisor in the pre-Twin Peaks era, formulated the *D-SIB framework* to identify D-SIBs in order to implement the D-SIB buffer regime pursuant to *the Regulations relating to banks*. As pointed out, this task has been assumed by the PA. The BSD published, in *the Financial Stability Review* of September 2013, the D-SIB methodology for South African banks, comprising the indicator-based measurement approach, as supplemented by supervisory judgment.²³⁴⁸ This framework was updated by the current *SARB D-SIB framework* in 2019 and these two frameworks are generally consistent except that the current *SARB D-SIB framework* combines the categories of interconnectedness and substitutability. Further, the updated version of the *SARB D-SIB framework* issued in 2019 eliminated a category that featured in the original framework, namely, “the impact on confidence within the financial sector/social impact” relating to the potential impact of a bank’s failure on the public confidence, financial inclusion and the socio-economic consequences arising from the negative externalities to other banking institutions.²³⁴⁹

Just as with the Netherlands, South Africa has consistently implemented the *Basel D-SIB framework* by assessing the systemic importance of banks in relation to the South African financial system and domestic economy. However, it is observed that the eliminated category that featured in the original framework may still be relevant in establishing a bank’s systemic importance in terms of the adverse impact of its failure associated with socio-economic factors.

6.3.3.4.2 The SARB indicator-based measurement approach

In order to provide guidance to the Governor of the SARB when designating banks as SIFIs, the SARB formulated the *D-SIB framework* in 2019 which establishes the criteria for the identification of banks as SIFIs based on the indicator-based measurement approach, as supplemented by supervisory judgment. Consistent with the BCBS’s approach, the *Federal Reserve G-SIB framework*, the *DNB O-SII*

²³⁴⁸ See paragraph 5.4 of Chapter Five.

²³⁴⁹ *Ibid.*

framework and the *SARB D-SIB framework* consist of the indicator-based measurement approach. However, as pointed out above, the Federal Reserve did not implement the *Basel D-SIB framework*. Notably, all these three frameworks incorporate the category of size which is indicated by the total exposure of a bank consisting of on-balance and off-balance sheet items.²³⁵⁰ However, additional indicators that reflect the size of South African banks include: short-term contractual claims; the number of customers; the number of branches; and the number of employees.²³⁵¹ Further, the risk weight of the size of a bank is adjusted to 40 per cent to account for the high concentration of the South African banking system.²³⁵²

The South African D-SIB framework is thus consistent with the Basel indicator-based measurement approach as it further defines the size of South African banks in relation to the indicators that are peculiar to the South African financial system. As noted by the Basel Committee, the additional indicators can also be the size of a bank compared to the GDP of the country or the concentration of a banking system. But it is concerning that the size-indicator in the South African approach is risk-weighted at 40 per cent considering that even the largest banks in the US are risk weighted at 20 per cent in line with the Basel approach. Another concern is that, unlike in the US, the definitions of these indicators are not provided by the SARB. Guidance can be taken from the US framework as it has provided detailed definitions of all the indicators of the categories of the indicator-based measurement approach.

Besides the category of size, the category of interconnectedness of a bank is common to the *Federal Reserve G-SIB framework* and the *DNB O-SII framework* and both frameworks evaluate this category with intra-financial system assets, intra-financial system liabilities and securities outstanding.²³⁵³ As pointed out, the *SARB D-SIB framework* however differs from the frameworks of the Federal Reserve and DNB to the extent that the SARB combines the categories of interconnectedness and substitutability on the basis that their indicators overlap and thus, their combined risk weight is 40 per cent.²³⁵⁴

²³⁵⁰ See subparagraphs 6.3.1.4 and 6.3.2.3 above.

²³⁵¹ See subparagraph 5.4.1.1 of Chapter Five.

²³⁵² *Ibid.*

²³⁵³ See subparagraphs 6.3.1.4 and 6.3.2.3 above.

²³⁵⁴ See subparagraph 5.4.1.2 of Chapter Five.

The indicators of the combined categories of interconnectedness and substitutability are broadly broken down as: interconnectedness through exposures to other financial institutions; interconnectedness through financial market infrastructure; and interconnectedness through financial market participant.²³⁵⁵ The interconnectedness through the exposures to other financial institutions is indicated by: interbank assets; interbank liabilities; cross-holdings funding in non-bank financial institutions; loans to non-bank financial institutions; and wholesale funding. The indicators of interbank assets and liabilities, cross-holdings funding and loans to non-bank financial institutions generally emulate the indicators of intra-financial system assets and intra-financial system liabilities featuring the category of interconnectedness of the Federal Reserve and DNB indicator-based measurement approaches.²³⁵⁶

The interconnectedness through financial market infrastructure is measured by: the value settled in the SAMOS system; the value in money market settlement; the share in equity settlement; the value in bond settlement; and the participation in the Strate custodian services for equity, the bonds and money market.²³⁵⁷ Lastly, the interconnectedness through financial market participant is calculated with: the take-up ratio in the primary bond auction; Treasury bills and the SARB debenture auction participation; foreign exchange market activity; and derivatives activities.²³⁵⁸

Unlike in the *SARB D-SIB framework*, the *Federal Reserve G-SIB framework* and the *DNB O-SII framework* do not combine the categories of interconnectedness and substitutability. The Federal Reserve evaluates the substitutability of banks with: the total value of payment transactions; assets under custody; and transactions underwritten in the debt and equity markets.²³⁵⁹ The category of the *DNB O-SII framework* referred to as “the importance for the economy of the Union including substitutability and financial system infrastructure”,²³⁶⁰ resembles the Federal Reserve’s substitutability-category with the indicator of the total value of payment transactions. In addition to the indicator of the total value of payments transactions,

²³⁵⁵ *Ibid.*

²³⁵⁶ See subparagraphs 6.3.1.4 and 6.3.2.3 above.

²³⁵⁷ See subparagraph 5.4.1.2 of Chapter Five.

²³⁵⁸ See subparagraph 5.4.1.2 of Chapter Five.

²³⁵⁹ See subparagraph 6.3.1.4 above.

²³⁶⁰ See subparagraph 6.3.2.3 above.

the *DNB O-SII framework* incorporates the indicators of private sector deposits from depositors in the EU and private sector loans to recipients in the EU under the category of substitutability reflecting the importance of a bank in the economy of the Union and that of the Netherlands.²³⁶¹

Notably, the indicators that are classified under the indicator of interconnectedness through financial market infrastructure under the *SARB D-SIB framework*, such as the share in equity settlement, the value in bond settlement, the value settled in the SAMOS system and the participation in the Strate custodian services for equity, the bonds market and money market, are generally similar to the indicators of the total payment activity, the underwritten equity and bond transactions and assets under custody that are incorporated under the substitutability-category of the *Federal Reserve G-SIB framework*.²³⁶² Notably, this degree of overlap is however in respect of only one indicator of the total payment activity categorised under the substitutability category of the *DNB O-SII framework*.

The international practice observed from the Basel methodology discussed in Chapter Two of this thesis and that of the Federal Reserve and DNB as examined in Chapters Three and Four respectively, is that the categories of interconnectedness and substitutability are evaluated and risk-weighted separately from each other because their definitions are different and their indicators are distinct. Accordingly, it appears that the SARB's practice does not accord with the Basel Committee standards. Further, the SARB does not explain the overlap of these categories and their indicators are not defined.

As is evident from this study, the category of complexity is contained in the *Federal Reserve G-SIB framework*, the *Dutch O-SII framework* and the *SARB D-SIB framework*. Under this category, the Federal Reserve assesses the systemic importance of banks with OTC derivatives transactions, Level 3 assets and trading and available-for-sale securities while DNB utilises cross-jurisdictional claims and liabilities, in addition to OTC derivatives transactions.²³⁶³ This means that the notional

²³⁶¹ *Ibid.*

²³⁶² See subparagraph 5.4.1.2 of Chapter Five and subparagraph 6.3.1.4 above.

²³⁶³ See subparagraphs 6.3.1.4 and 6.3.2.3 above.

value of OTC derivative transactions is the only one common indicator between the indicator-based measurement approach of the Federal Reserve and that of DNB.²³⁶⁴ As with the Federal Reserve and DNB, the SARB measures the complexity of banks with OTC derivatives. It is the SARB's only indicator under the category of complexity and, as pointed out in this thesis, its risk weight has been adjusted to 10 per cent to take into consideration the limited engagement of South African banks in complex financial services and products.²³⁶⁵

South Africa is thus compliant with the Basel approach in terms of the indicator of OTC derivatives, just like the US and the Netherlands. However, the SARB does not define this indicator and its relevance to the systemic importance of banks. Further, there is no justification for the exclusion of the indicator of Level 3 assets and trading and available-for-sale securities as the Basel Committee considers them to be relevant for assessing systemic importance due to potentially causing a complex resolution. However, it is submitted that the adjustment of the risk weight is proper in this respect due to the minimal engagement of South African banks in these complex derivatives activities.

The category of cross-jurisdictional activity is contained in *the Federal Reserve G-SIB framework*²³⁶⁶ and the *SARB D-SIB framework*²³⁶⁷ but, as pointed out in Chapter Four, it is excluded in the *DNB O-SII framework*.²³⁶⁸ Given that the Federal Reserve indicator-based measurement approach broadly aligns with the *Basel G-SIB framework*, the cross-jurisdictional activity category is measured with cross-jurisdictional assets and cross-jurisdictional liabilities.²³⁶⁹ Similarly, the SARB evaluates the systemic importance of banks with cross-jurisdictional activity, as measured by foreign currency claims and foreign currency liabilities.²³⁷⁰ However, the SARB has assigned this category a risk weight of 10 per cent due to the negligible cross-jurisdictional activity of South African banks that are located mainly across the

²³⁶⁴ See subparagraph 6.3.2.3 above.

²³⁶⁵ See subparagraph 5.4.1.3 of Chapter Five.

²³⁶⁶ See subparagraph 6.3.1.4 above.

²³⁶⁷ See subparagraph 5.4.1.4 of Chapter Five.

²³⁶⁸ See subparagraph 6.3.2.3 above.

²³⁶⁹ See subparagraph 6.3.1.4 above.

²³⁷⁰ See subparagraph 5.4.1.4 of Chapter Five.

African continent.²³⁷¹ The *DNB O-SII framework* excludes the cross-jurisdictional activity but incorporates its indicators of cross-jurisdictional claims and cross-jurisdictional liabilities under the category of complexity (as noted above), in addition to OTC derivatives transactions.²³⁷²

South Africa is thus compliant with the Basel indicator-based measurement approach in respect of this category, except that the indicators of this category are also not defined. The reduction of the risk weighting of this category is deemed appropriate given the minimal cross-border activity of South African banks.

6.3.3.4.3 The SARB Supervisory judgment methodology

Whereas the indicator-based measurement approach of the Federal Reserve is consistent with that of the *Basel G-SIB framework*, the Federal Reserve, as pointed out above, does not complement it with supervisory judgment. Rather, the Federal Reserve deploys the short-term wholesale funding framework, in addition to the indicator-based measurement approach.²³⁷³ Instead of utilising the *Basel D-SIB framework*, the Federal Reserve has, as pointed out, established another assessment methodology that subjects Category II, Category III and IV BHCs to Categories II, III and IV stringent prudential standards, respectively, based on the criteria of total consolidated assets and risk indicators of cross jurisdictional activity, average weighted short-term wholesale funding and non-bank assets (with fixed thresholds).²³⁷⁴

As discussed in Chapter Five, the SARB supervisory judgment methodology encompasses the following indicators:²³⁷⁵ the reaction of investors, depositors and the broader financial markets in the event that a bank collapses; the geographical area serviced and a possibility of a suitable substitute; products provided and the possibility of a suitable substitute; services provided and the possibility of a suitable substitute; number of clients and employees of an institution; and possible negative perceptions from an international market perspective.

²³⁷¹ *Ibid.*

²³⁷² See subparagraph 6.3.2.3 above.

²³⁷³ See subparagraph 6.3.1.4 above.

²³⁷⁴ *Ibid.*

²³⁷⁵ See subparagraph 5.4.2 of Chapter Five.

The indicator of “the number of clients and employees of an institution” appear to complement the category of size of the indicator-based measurement approach of the *SARB D-SIB framework*. This is because these indicators are similar to those of the size-category under the SARB indicator-based measurement approach.²³⁷⁶ For the DNB supervisory judgment methodology, size is complemented by total exposure to default comprising a bank’s off-balance sheet items.²³⁷⁷ Guidance that can be taken from the Netherlands in this regard is that DNB specifically specifies which of the optional indicators of the supervisory judgment methodology are intended to augment each of the categories of its indicator-based measurement approach.

Seemingly, the indicators of the geographical area serviced and the possibility of a suitable substitute, products provided and the possibility of a suitable substitute and services provided and the possibility of a suitable substitute, supplement the category of substitutability of the indicator-based measurement approach of the *SARB D-SIB framework*.²³⁷⁸ The DNB supervisory judgment approach complements the substitutability-category with the indicators of “the number of customers” and “types of retail accounts”.²³⁷⁹ Similarly to the insights gained from the Netherlands regarding the size-indicator, the guidance provided by DNB is that the classification of these indicators under the categories of its indicator-based measurement approach provides a better understanding of the supervisory judgment methodology.

The indicators of “the reaction of investors, depositors and broader financial markets if a bank fails” and “possible negative perception from an international market perspective” seemingly signal the potential loss of public confidence in the financial system resulting from the distress or failure of a bank. This indicator does however not seem to compliment any of the indicators of the SARB indicator-based measurement approach. As observed from the Dutch supervisory methodology, there are additional indicators of the supervisory judgment approach that do not complement those that fall under the indicator-based measurement approach. This is particularly the case with the optional indicators of the potential reputational contagion and contagion

²³⁷⁶ See subparagraph 5.4.1.1 of Chapter Five.

²³⁷⁷ See subparagraph 6.3.2.3 above.

²³⁷⁸ See subparagraph 5.4.1.2 of Chapter Five.

²³⁷⁹ See subparagraph 6.3.2.3 above.

through entities in a conglomerate which fall under a separate category called “behavioural effects of a bank”. Further, this SARB supervisory overlay indicator resembles the indicator of “the impact on confidence within the financial sector or social impact” relating to the potential impact of a bank’s failure on the public confidence, financial inclusion and the socioeconomic consequences arising from the negative externalities to other banking institutions, which featured in the original SARB *D-SIB framework*.²³⁸⁰ It is however submitted that due to its qualitative nature, this indicator can be ideally categorised under the supervisory overlay.

6.3.3.4.4 The South African D-SIBs/SIFI-banks

As indicated in Chapter Five, section 29(7) of the FSR Act provides that a designation of a financial institution as a SIFI or a revocation thereof must be published. Accordingly, it was pointed out in this thesis that the Governor of the SARB has designated six South African banks as SIFIs, and their names have been published in the *Financial Stability Review* of November 2019. These D-SIBs/SIFI-banks are: Absa Bank Limited; the Standard Bank of South Africa Limited; FirstRand Bank Limited; Nedbank Limited; Investec Bank Limited; and Capitec Bank Limited.²³⁸¹ The Governor of the SARB made this designation after notifying the FSOC of the proposed designation and affording the opportunity to the banks concerned to make submissions. However, these SFI-banks accepted the Governor of the SARB’s decision without opposing their designation.²³⁸² It is submitted that this may be the case due to the nature of the methodology that gives little room for such opportunity as SIFI-banks are automatically identified as such on reaching a specified systemic score.

Notably, the SARB is silent on the question of the assessment methodology that guided the Governor of the SARB’s discretion in designating these individual banks as SIFIs. That is, it is not specified which methodology was employed to assess each banks’ systemic importance, and whether it was the indicator-based measurement approach or supervisory judgment methodology. It was observed in Chapters Three and Four respectively, that the Federal Reserve and DNB disclose the assessment

²³⁸⁰ See paragraph 5.4 of Chapter Five.

²³⁸¹ See paragraph 5.5 of Chapter Five.

²³⁸² *Ibid.*

methodology in line with the Basel approach. Thus, South Africa is not in alignment with this best practice.

It was also noted in this study that six banks were identified as G-SIBs in the US and they would also be identified as D-SIBs if the US had such a framework. For these banks, their designation as G-SIBs automatically imply that they are D-SIBs also even though no D-SIB framework has been implemented by the US. However, because the *Federal Reserve G-SIB framework* assesses the systemic importance of banks at the global reference system, not all US D-SIBs would be US G-SIBs. Therefore, it could be concluded that Categories II, III and IV BHCs do not have a global systemic footprint but are nevertheless subject to stringent prudential standards corresponding to their systemic importance on the US financial system and domestic economy.²³⁸³ However, as pointed out above, these Category I US BHCs (US G-SIBs) are identified in accordance with the *Basel G-SIB framework* and this does not take into account systemic risks posed to the US domestic economy.

In the Netherlands, DNB has identified five banks as O-SIIs, one of which has also been identified as a G-SII.²³⁸⁴ This provides good guidance as ING's systemic importance has been evaluated in relation to the domestic as well as the global reference systems in terms of both the O-SII and G-SII assessment methodologies.

6.3.3.5 The prudential regulator of South African D-SIBs/SIFI-banks: the PA

As indicated in Chapters Three and Four respectively, in the US and the Netherlands, the Federal Reserve and DNB are responsible for both identifying banks as SIBs and O-SIIs, respectively, as well as imposing stringent prudential requirements on such SIBs and O-SIIs.²³⁸⁵ In South Africa, the PA is the prudential regulator of SIFIs in terms of section 30 of the FSR Act, and as such imposes stringent prudential requirements on D-SIBs/SIFI-banks.²³⁸⁶ The SARB is responsible for directing the PA to impose these stringent prudential requirements on SIFIs in the form of directives or standards in terms of section 30(1) and (2) of the FSR Act. In addition, the PA is required to notify

²³⁸³ See subparagraph 3.7.2 of Chapter Three.

²³⁸⁴ See subparagraph 4.4.3.3 of Chapter Four.

²³⁸⁵ See paragraphs 3.7 and 3.8 of Chapter Three; and paragraphs 4.4 and 4.5 of Chapter Four.

²³⁸⁶ See subparagraph 5.2.2 and paragraph 5.6 of Chapter Five.

the SARB and the FSOC of the intention to enforce its stringent prudential standards or directives as well as the effect of those prudential standards and directives, pursuant to section 29(3) of the FSR Act.²³⁸⁷ It is submitted that the PA is the authority that is competent to regulate SIFI-banks because it is the prudential regulator of financial institutions within the Twin Peaks model. The BSD from which the PA assumed its duties was also equipped with the prudential toolkit for banks in the pre-Twin Peaks regime.

6.3.3.6 The PA stringent prudential requirements for D-SIBs/SIFI-banks

South Africa has implemented the *Basel capital framework* consisting of the CCvB, the CCyB and the D-SIB buffer.²³⁸⁸ South African D-SIBs/SIFI-banks are subject to a D-SIB buffer composed of 50 per cent of CET1 capital.²³⁸⁹ Specifically, the first 1 per cent requirement of the D-SIB buffer, up to a maximum of 1 per cent of a banks' RWAs, must be fully met with the CET1 capital. Any additional requirement, up to the first 1.5 per cent of a bank's RWAs may be fulfilled by Tier 1 capital. And any additional requirement, up to 2.5 per cent of a bank's RWAs, may be met with total capital and reserve funds. The D-SIB buffer regime is calibrated with the bucketing system and the PA notifies individual D-SIBs of their varying applicable D-SIB buffers. It is evident that the D-SIB buffer composed of 50 per cent of a D-SIB's CET1 capital marks a significant departure from the BCBS's recommendation of 100 per cent CET1 capital requirement that is intended to effectively absorb losses to a maximum capacity when a D-SIB is in financial distress. The rationale for such deviation is however not provided. South Africa's approach in this regard is not consistent with the Basel approach and the approaches of US and the Netherlands. This non-compliance might undermine the ability of the South African D-SIB buffer regime to effectively address systemic risks posed by D-SIBs.

Other than the abovementioned components of the capital buffers, the PA applies Pillar 2A capital and Pillar 2B capital to banks to address idiosyncratic and systemic risks, respectively.²³⁹⁰ To avoid the double counting of matters relating to systemic

²³⁸⁷ See subparagraph 5.2.2 of Chapter Five.

²³⁸⁸ See paragraph 5.6.1, subparagraph 5.6.1.1, 5.6.1.2 and 5.6.1.3, of Chapter Five.

²³⁸⁹ See subparagraph 5.6.1.3 of Chapter Five.

²³⁹⁰ See paragraph 5.6.1, subparagraph 5.6.1.4, of Chapter Five.

risk, the combined application of the D-SIB buffer and Pillar 2B must not exceed 3.5 per cent of a D-SIB's RWAs.²³⁹¹ As indicated, the aggregate requirement must not exceed 2 per cent for CET1 capital and 2.5 per cent for Tier 1 capital. Further, banks may maintain an additional discretionary internal capital buffer that is constituted of CET1 capital, Tier 1 and Tier 2 capital to RWAs, as may be determined by the board of directors and the senior management of a bank.²³⁹² The South African capital framework is thus robust and largely complies with the Basel capital regime. However, South Africa is only partially compliant with the Basel D-SIB buffer regime.

Notably, the Dutch enhanced capital framework is similar to that of South Africa insofar as they both incorporate the CCvB, the CCyB and the D-SIB buffer/O-SII buffer.²³⁹³ The PA's Pillar 2B requirement is similar to DNB's SyRB requirement, which both seek to attain the similar objective of addressing macro-prudential risks. However, DNB has abolished the SyRB subsequent to the implementation of the CRD V.²³⁹⁴ Pillar 2B capital is a required tool that seeks to address macro-prudential risks posed by banks in order to strengthen the resilience of the South African financial system and banking sector. Thus, it is submitted that the Netherlands has unfortunately not set a good example in abolishing the SyRB.

Further, South Africa and the Netherlands have both implemented the following BCBS standards:²³⁹⁵ the supplementary leverage ratio; the LCR and the NSFR; risk-management requirements; and the large exposure limits. Both South African and Dutch banks are further subject to recovery and resolution planning regimes incorporated in the *FSB Key Attributes*.²³⁹⁶ Additionally, as indicated, the FSR Act provides for the following prudential requirements for SIFIs:²³⁹⁷ sectoral and geographical exposures; organisational structures; and required statistical returns. The Netherlands has implemented LTV and LTI ratios as part of national flexibility

²³⁹¹ See subparagraphs 5.6.1.3 and 5.6.1.4 of Chapter Five.

²³⁹² See subparagraph 5.6.1.6 of Chapter Five.

²³⁹³ See paragraph 4.5.1, subparagraphs 4.5.1.1, 4.5.1.2 and 4.5.1.3 of Chapter Four; and See paragraph 5.6.1, subparagraph 5.6.1.1, 5.6.1.2 and 5.6.1.3, of Chapter Five.

²³⁹⁴ See subparagraph 4.5.1.4 of Chapter Four; and subparagraph 5.6.1.4 of Chapter Five.

²³⁹⁵ See subparagraphs 5.6.2, 5.6.3, 5.6.4 and 5.6.5 of Chapter Five; and subparagraphs 4.5.2, 4.5.3, 4.5.4 and 4.5.5 of Chapter Four.

²³⁹⁶ See subparagraph 5.6.9 of Chapter Five; and subparagraph 4.5.7 of Chapter Four.

²³⁹⁷ See subparagraph 5.6.6, 5.6.7 and 5.6.8 of Chapter Five.

measures designed to address mortgage industry risks in accordance with Article 458 of the CRR.²³⁹⁸

The PA's prudential and supervisory framework is in line with the Basel standards as incorporated in *the Regulations relating to banks* (amending the Banks Act). In its *2021-2024 Regulatory Strategy*, the PA indicated it will incorporate the BCBS post Crisis reforms in *the Regulations relating to banks*. It is submitted that this will constitute an appropriate step taken towards enhancing the South African SIFI-banks regulatory regime. It is also important for the SARB to enhance the South African resolution regime that the PA will apply to SIFI-banks/D-SIBs in accordance with the Financial Sector Laws Amendment Act pursuant to the *FSB key Attributes*.

Importantly, the study undertaken in this thesis revealed that the US adopts a relatively different prudential regulatory approach to that of the Netherlands and South Africa. The Federal Reserve's stringent prudential regime is tiered and tailored to the risk profile of the US G-SIBs, Category II BHCs, Category III BHCs and Category IV BHCs. Obviously, the most rigorous prudential requirements are imposed on US G-SIBs²³⁹⁹ while the less stringent prudential standards are imposed on Categories II, III and IV BHCs depending on the degree of their risk profile.²⁴⁰⁰ Some of the stringent prudential standards that apply to US G-SIBs are also applied to Category II and III BHCs in some meriting cases.²⁴⁰¹ The prudential standards that are applied to Category IV BHCs correspond to their lower systemic footprint and this category is exempted from the application of some of the stringent prudential standards.²⁴⁰²

Specifically, as discussed in Chapter Three, US G-SIBs are subject to the G-SIB surcharge that is applied alongside with the CCvB and the CCyB, and there is no D-SIB buffer regime.²⁴⁰³ Category II and Category III BHCs are subject to the CCvB and the CCyB²⁴⁰⁴ while Category IV are subject to "generally applicable capital".²⁴⁰⁵ US G-

²³⁹⁸ See subparagraph 4.5.6 of Chapter Four.

²³⁹⁹ See paragraph 3.7, subparagraph 3.7.1, of Chapter Three.

²⁴⁰⁰ See 3.7, subparagraph 3.7.2, of Chapter Three.

²⁴⁰¹ See subparagraph 3.7.2.1 and 3.7.2.2 of Chapter Three.

²⁴⁰² See subparagraph 3.7.2.3 of Chapter Three.

²⁴⁰³ See subparagraphs 3.8.1.1, 3.8.1.2 and 3.8.1.3 of Chapter Three.

²⁴⁰⁴ See subparagraphs 3.8.1.1 and 3.8.1.2 of Chapter Three.

²⁴⁰⁵ See subparagraph 3.8.3 of Chapter Three.

SIBs are further subject to the enhanced supplementary leverage ratio²⁴⁰⁶ while the supplementary leverage ratio is applied to Category II and Category III BHCs.²⁴⁰⁷ Category IV BHCs are subject to the “US leverage ratio”.²⁴⁰⁸ The full LCR and the NSFR requirements are applied to the US G-SIBs, Category II BHCs, and Category III BHCs that meet a specified threshold, whereas Category III BHCs that are below this threshold are subject to a reduced LCR and NSFR requirement, together with Category IV BHCs that are above a prescribed threshold.²⁴⁰⁹

To augment its capital framework, it was pointed out in Chapter Three that the Federal Reserve subjects all US BHCs that have total consolidated assets that equals or exceeds 100 billion USD to capital planning and stress capital buffer regime.²⁴¹⁰ In this regard, US G-SIBs, Category II and Category III BHCs are subject to the capital plan rule and annual supervisory stress-testing and periodic company-run stress-testing whereas Category IV BHCs are subject to the capital plan rule, and supervisory stress-testing every other year and are not required to conduct company-run stress tests.²⁴¹¹ To complement the LCR and the NSFR, US G-SIBs, Category II and Category III BHCs are subject to the most stringent liquidity risk-management and liquidity stress-testing and buffer requirements and these requirements are less stringent for Category IV BHCs.²⁴¹² US G-SIB and Categories II, II and IV BHCs are subject to risk-management and risk committee requirements,²⁴¹³ given that these requirements constitute safety and soundness standards for well-regulated banks in pursuit of financial stability.

Notably, it was also pointed out in Chapter Three that US G-SIBs submit resolution plans to the Federal Reserve and the FDIC every other year while Category II and Category III BHCs are required to file them every three years.²⁴¹⁴ Thus, category IV BHCs are not subject to a resolution planning regime. Further, US G-SIBs are subject to the most stringent SCCL as well as less stringent SCCL which is further applied to

²⁴⁰⁶ *Ibid.*

²⁴⁰⁷ See subparagraph 3.8.2 of Chapter Three.

²⁴⁰⁸ See subparagraph 3.8.3 of Chapter Three.

²⁴⁰⁹ Subparagraphs 3.8.4 of Chapter.

²⁴¹⁰ See paragraph 3.8.5, subparagraph 3.8.5.1, of Chapter Three.

²⁴¹¹ *Ibid.*

²⁴¹² See paragraph 3.8.5, subparagraph 3.8.5.3 of Chapter Three.

²⁴¹³ See paragraph 3.8.5, subparagraph 3.8.5.2, of Chapter Three.

²⁴¹⁴ See paragraph 3.8.6 of Chapter Three.

Category II and Category III BHCs.²⁴¹⁵ Category IV BHCs are also exempt from the application of the SCCL. The TLAC and Long-term debt (LTD) requirements form part of the stringent prudential requirements incorporated under the recovery and resolution regime applied only to US G-SIBs.²⁴¹⁶

It is observed from the above discussions that the most stringent prudential standards to which only the US G-SIBs are subjected to are the G-SIB surcharge, enhanced supplementary leverage ratio and the TLAC and LTD requirements. It is further noted that the other stringent prudential standards that apply to US G-SIBs are also applied (with lesser stringency in some instances) to Categories II, III and IV BHCs. It is further clear that the resolution planning, SCCL and TLAC requirements do not apply to Category IV BHCs due to their decreased risk profile.

The discussion in Chapter Three also indicated that the Federal Reserve may prescribe additional prudential standards to address financial stability in the US and these comprise: a contingent capital-requirement; enhanced public disclosures including a credit exposure report; a short-term debt requirement; and a “debt-to-equity” ratio requirement.²⁴¹⁷

Overall, it appears that the US has a more developed and progressive stringent prudential regime, relative to the Netherlands and South Africa. It is evident that the Federal Reserve has a robust and comprehensive stringent prudential regulatory and supervisory framework for SIBs insofar as it has implemented most of the BCBS’s stringent prudential requirements. The PA’s prudential regime for D-SIBs/SIFI-banks is less developed relative to the Federal Reserve’s framework because the PA, as newly established prudential regulator in the recently introduced South African Twin Peaks model, is yet to strengthen its stringent prudential regime in respect of D-SIBs/SIFI-banks over the coming years.

²⁴¹⁵ See paragraph 3.8.7 of Chapter Three.

²⁴¹⁶ See paragraph 3.8.8 of Chapter Three.

²⁴¹⁷ See paragraph 3.9 of Chapter Three.

6.3.3.7 The available legal remedies for challenging SIFI-bank designation in South Africa

Just like in the US and the Netherlands, South Africa avails legal remedies for SIFI-banks that seek to oppose their designation. In line with section 230 of the FSR Act, a financial institution that has been designated as a SIFI may apply to the Financial Services Tribunal to have its designation reconsidered.²⁴¹⁸ Further, a judicial review of an order of the Tribunal may be instituted pursuant to section 235 of the FSR Act in terms of *the Promotion of Administrative Justice Act of 2000*.²⁴¹⁹

Notably, the SIBs in the US, the Netherlands and South Africa have not yet explored these legal remedies partly due to the relatively recent implementation of the *Basel D-SIB framework*, and as such, there is currently no precedent set in this field. In view of the quantitative nature of the Basel assessment methodology, it would also be interesting to see whether South African banks will explore this legal recourse.

6. 4 Recommendations for South Africa

The comprehensive framework created in South Africa for assessing the systemic importance of banks is commendable as it is largely aligned with the Basel approach. However, it is submitted that the South African D-SIB regime can be suitably amplified by introducing the following recommendations:

6.4.1 Recommendations on legislative amendments of key terminology

Recommendation One: Definition of SIFIs

Section 1 of the FSR Act describes financial institutions that the Governor of the SARB may designate in terms of section 29(1) as SIFIs without providing a definition of the term itself. It is recommended that the FSR Act should define this term as it is key to this provision.

Recommendation Two: SIFI-banks and non-bank SIFIs

The Financial Sector Laws Amendment Act 23 of 2021 has amended the FSR Act to classify banks and SIFIs among the “designated institutions” that the SARB may

²⁴¹⁸ See paragraph 3.7 of Chapter Five.

²⁴¹⁹ *Ibid.*

exercise resolution powers over in case they encounter financial distress or failure. It is suggested that the Act should rather classify such designated institutions as “SIFI-banks” and “non-bank SIFIs” given that banks fall under the category of SIFIs in terms of section 1 of the FRS Act, read in conjunction with section 29 thereof.

6.4.2 Recommendations on legislative amendments on designation process

Recommendation Three: Annual designation of SIFI-banks

Consistent with the BCBS’s approach, as adopted by the Federal Reserve and DNB, it is recommended that the FSR Act should set an annual timeframe for the identification of banks as SIFIs in order to regularly review the systemic footprint of banks that have previously been designated as SIFIs as well as the changes that may generally affect the systemic profile of banks in order to keep a current list of SIFI-banks. It is submitted that this annual timeframe will be ideal as it will correspond with the SARB’s annual review of its *D-SIB framework*.

Recommendation Four: Thirty days timeframes on proposed designation

It is proposed that the FSR Act should set a thirty days timeframe within which the FSOC may provide advice to the SARB on proposed SIFI-designation as well as on the hearing of submissions by an institution concerned in order to guard against unnecessary delay regarding the finality of the decision that is to be made by the Governor of the SARB in respect of SIFI-designation.

Recommendation Five: Written submissions of an institution

It is recommended that the FSR Act should specify that the submissions of a financial institution opposing SIFI-designation should be made in writing for purposes of legal certainty.

Recommendation Six: The change of SIFI-designation status

It is proposed that the FSR Act should list the factors that may be taken into account by the Governor of the SARB to either confirm or revoke SIFI-designation as well as the considerations underlying the revocation of SIFI-designation to enable financial institutions to determine the steps that they can take to reduce their systemic importance.

Recommendation Seven: The authority for D-SIB-identification

It is proposed that the authority for D-SIB identification should be vested in the SARB in consultation with the FSOC because, as respectively being the central bank and macroprudential supervisor and being the apex committee that takes decisions on financial stability, the SARB and the FSOC are knowledgeable regarding the systemic dynamics of financial institutions. This submission is also based thereon that the SARB initially formulated the D-SIB identification methodology, and it is submitted that it did rightly so, because part of its duties assigned to the (then) Bank Supervision Department (BSD) entailed the assessment of system-wide risks including those risks posed by financial institutions, and this duty still remains under the SARB's jurisdictional remit.

It is further proposed that the *Regulations relating to banks* should be amended to eliminate the PA from identifying D-SIBs because that identification was practically made by the (then) BSD of the Office of the Registrar of the SARB in line with *the Regulations relating to banks*. The purpose of such identification was for the implementation of the D-SIB buffer regime as the BSD was also responsible for prudential regulation of banks under the erstwhile South African micro-prudential regulatory approach in terms of the Banks Act. Notably, when *the Regulations relating to banks* were amended to incorporate the changes introduced by the South African Twin Peaks model under the FSR Act, the PA assumed the tasks of the BSD. However, it is argued that there is now a clear distinction between the SARB's and the PA's respective roles regarding financial stability and prudential regulation under the Twin Peaks model in line with the FSR Act. Notably, the SARB is the systemic regulator whereas the PA is now the prudential regulator of financial institutions (inclusive of SIFIs). The Twin Peaks model introduced a major regulatory shift as the PA is now assigned the prudential regulatory task only and not the systemic supervisory role albeit that through the execution of its prudential regulation mandate it is also mandated by the FSR Act to assist the SARB in the maintenance of financial stability. This is distinguishable from the (then) micro-prudential regime in terms of which the BSD was conferred with the systemic supervisory powers (which also covered the macroprudential analysis part of which entailed the identification of banks as D-SIBs) as well as the prudential regulatory authority. It is therefore submitted that the legislature could not have purposely intended to charge the PA with the authority

to identify D-SIBs while the PA itself is not vested with the systemic supervisory authority which would usually constitute a required competence for assessing systemic risks emanating from financial institutions inclusive banks. Based on this analysis, it is concluded that the legislature unwittingly authorised the PA to identify D-SIBs when *the Regulations relating to banks* were modified because it was necessary to substitute the BSD with the PA wherever the BSD appeared in the Regulations in order to give effect to the then newly established Twin Peaks model regulatory architecture under the FSR Act.

Recommendation Eight: The interplay between designation and identification

A clarification should be provided on whether there is a difference between the phrases “designation” of banks as SIFIs and “identification” of banks as D-SIBs, as they appear in the FSR Act and the *SARB D-SIB framework*, respectively, and whether SIFI-banks and D-SIBs are subject to the same or different prudential requirements, and the basis for such similarity or distinction should be provided.

It is submitted that the FSR Act SIFI-designation process in respect of banks, which is based on the Governor of the SARB’s discretion is superfluous, given that banks that obtain a systemic score that is above the prescribed threshold are mandatorily identified as D-SIBs under the *SARB D-SIB framework*. Therefore, it is recommended that the Governor of the SARB’s discretion in respect of SIFI-bank identification should be eliminated.

Recommendation Nine: The application of prudential standards and regulator’s directives

It is submitted that it is not necessary for the SARB to direct the PA to impose stringent prudential requirements because the FSR Act specifies that the PA is responsible for prudential regulation of financial institutions and as such it is statutorily mandated to impose such stringent prudential standards without having to receive directives from the SARB. Notably, the PA is an independent juristic person even though it is housed within the SARB. Thus, it is proposed that this requirement should be eliminated and it is recommended that the SARB should instead “recommend” to the PA to impose stringent prudential standards on SIFI-banks.

6.4.3 Recommendations regarding the D-SIB assessment methodology

Recommendation Ten: The publication of important information on D-SIB identification

In order to foster transparency and facilitate an in-depth understanding of how the assessment of systemic importance of banks is conducted, as well as public confidence in the integrity of the process, it is proposed that the SARB should annually publish the following information on its website and in the *Financial Stability Review* prior to the identification process: the assessment methodology employed for identification of D-SIBs/SIFI-banks; a detailed description of the indicators of the indicator-based measurement approach- categories and how they would establish a bank's systemic importance; and the grounds that would substantiate the supervisory overlay methodology.

Further, it is recommended that the publication by the SARB, post the identification process, should incorporate: the names of SIFI-banks; the methodology that was deployed to identify each bank as a D-SIB/SIFI-bank; the systemic score obtained by each SIFI-bank under the indicator-based measurement approach; the applicable D-SIB buffers; and the considerations underlying the calibration of the applicable D-SIB buffers for each SIFI-bank.

In respect of the emergency designation invoked under section 14 of the FSR Act, the SARB should provide a description of the systemic event that had occurred or was imminent justifying such emergency designation of a bank as a SIFI.

Recommendation Eleven: The overlap between the interconnectedness and substitutability category

It is recommended that the SARB should elaborate on the extent of the overlap of the indicators of interconnectedness and substitutability and how such overlap justifies the combination of these two categories of systemic importance.

Recommendation Twelve: Derivatives indicator

It is recommended that the indicator of derivatives that falls under the combination of the categories of interconnectedness and substitutability (falling under the indicator of

interconnectedness through financial market participator) should be eliminated because it is already captured under the category of complexity.

Recommendation Thirteen: Complexity indicator

It is recommended that the indicators of Level 3 assets, trading and available-for-sale securities and financial market infrastructure should be included under the category of complexity.

Recommendation Fourteen: Supervisory overlay indicators

It is proposed that the SARB should classify the indicators of the supervisory overlay to specify those that are designed to complement the indicator-based measurement approach and those that constitute qualitative information. It is further recommended that these indicators should be defined and the considerations underlying the qualitative judgment must be sufficiently documented.

Recommendation Fifteen: Inclusion of the eliminated indicator

Given its significance to the banks' systemic importance relating to socio-economic factors, it is recommended that the SARB should consider including, under its supervisory approach, the eliminated indicator of "the impact on confidence within the financial sector/social impact" relating to the potential impact of a bank's failure on the public confidence, financial inclusion and the socio-economic consequences arising from the negative externalities to other banking institutions.

Recommendation Sixteen: The inclusion of foreign branches and subsidiaries in the assessment process

Given the presence of foreign branches and subsidiaries of banks in South Africa, it is recommended that these entities should be included in the annual assessment of a bank's systemic importance and there should be home and host supervisory cooperation in a case where a foreign entity is identified as a D-SIB.

Recommendation Seventeen: The official notification for D-SIB identification

It is recommended that it would be ideal for the FSR Act to oblige the SARB to officially notify banks that have been identified as D-SIBs and explain the legal implications of such identification.

6.4.4 Recommendations regarding the D-SIB buffer regime and other stringent prudential toolkit

Recommendation Eighteen: The full CET1 capital requirement for D-SIB buffer

It is recommended that the South African D-SIB buffer regime should be composed of 100 per cent CET1 capital to ensure that it achieves its intended objective of enhancing the resilience of D-SIBs because the current 50 per cent of Tier 1 capital with which the D-SIB buffer is complied with may reduce the loss-absorbing capacity of SIFI-banks and thus they may be prone to collapse during material financial distress.

Recommendation Nineteen: The calibration of the commensurate D-SIB buffer

It is proposed that the PA should provide a justification for the applicable D-SIB buffer corresponding to each D-SIB's systemic importance to encourage banks to reduce their systemic importance.

Recommendation Twenty: D-SIB buffer disclosure

It is recommended that the D-SIB buffers that apply to individuals D-SIBs should be disclosed to facilitate the transparency of the SARB D-SIB regime.

Recommendation Twenty-one: The tailored application of stringent prudential standards

It is recommended that it would also be ideal for the PA to tailor the application of other stringent prudential standards (not only the D-SIB buffer) to each D-SIB's systemic profile.

6.4.5 Recommendations on challenging SIFI-designation

Recommendation Twenty-two: Legal recourse for SIFI-designation

It is recommended that, as part of the designation procedure, banks that are proposed for SIFI-designation should be advised of the available legal remedies for challenging their designation. This will serve to ensure that they are sufficiently informed of their rights given that the imposition of more stringent prudential requirements may limit the amount of capital they have to engage in their operations and may thus impact on their profit margins.

6.4.6 Other recommendations

Recommendation Twenty-three: The formation of an Expert group on D-SIB identification and regulation

Since South Africa's implementation of the BCBS's reforms regarding the identification of D-SIBs and the resultant stringent prudential regulation and intensive supervision is relatively recent, it is recommended that a body that will be constituted of relevant stakeholders knowledgeable in the banking industry and having an understanding of the systemic risk posed by financial institutions, should be established in South Africa. This body should draw from their expertise in respect of systemically important financial institutions to inform policy decisions. The composition of this proposed institution should, amongst others, consist of: bank regulators; bankers; academics; researchers; economists; lawyers; risk analysts; risk model developers; and bank customers.

6.5 Concluding remarks

The implementation of the *Basel D-SIB framework* in South Africa, as a G-20-member jurisdiction, is well-recognised to give effect to the G20 financial regulation reforms incorporating the measures of the *FSB SIFI framework* regarding the elimination of the TBTF conundrum of SIFIs. The *SARB D-SIB framework* has been implemented in the context of the South African banking sector as part of the SARB's financial stability mandate set out within the Twin Peaks model pursuant to section 29 of the FSR Act. It is generally in alignment with the Basel indicator-based measurement approach, and some necessary modifications have been made to it in respect of the indicators and risk weights to reflect the idiosyncrasies of the South African domestic banking sector. The SARB's supervisory overlay approach is tailored to accommodate the South African financial system specificities.

Finally, it can be observed that it is indeed commendable that the SARB has timeously responded to the Basel Committee's call to develop an assessment methodology to determine which banks are systemically important within the South African banking system in order to safeguard financial stability. Also commendable is the swift designation of SIFI-banks by the Governor of the SARB to operationalize the prudential SIFI-regime envisaged in the FSR Act.

The *SARB D-SIB framework* has also broadly emulated best international practices in the selected jurisdictions. It is however, observed that neither the SARB's indicator-based measurement approach nor its supervisory overlay approach can alone perfectly capture banks' systemic importance due to the inadequacies that are inherent in each of these assessment frameworks. The SARB should further endeavour to provide detailed and comprehensive definitions of the indicators of the categories that establish South African banks' systemic importance to facilitate a better understanding of its assessment methodology and to make it more consistent with the Basel approach and the practices in the selected jurisdictions.

As pointed out, the PA is in the process of further developing its prudential regime to strengthen the regulation of SIFI-banks/D-SIBs in accordance with section 30 of the FSR Act. Notably, the PA has already made a significant progress in terms of its forward-looking regulatory approach as it has already published the two of its *Regulatory Strategies* indicating that it will incorporate the BCBS post-GFC reforms into *the Regulations relating to banks*. The implementation of the Basel D-SIB regime in South Africa which occurred in 2013, some time before the FSR Act was promulgated, was quite timely and relevant. It was also noted in thesis that the PA's capital framework is robust. However, while laying down its regulatory frameworks, the PA should consider requiring SIFI-banks to fully meet the D-SIB buffer regime with CET1 capital, being the effective tool in increasing the loss absorbency capacity of D-SIBs to minimise their probability of default during material financial distress in order to safeguard financial stability. Further, the PA's regulatory frameworks should clearly establish and specify the prudential requirements that are applied to D-SIBs/SIFI-banks.

South African banks have not yet explored the legal remedies for challenging SIFI-bank designation. It will be intriguing to see if SIFI-banks will exercise these legal remedies in future, and if so, further what will constitute the basis for their designation challenge, given the quantitative nature of the Basel assessment methodology that is designed to automatically identify banks that reach a specified threshold as D-SIBs.

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