THE ROLE OF PRUDENTIAL REGULATION OF BANKS IN PROMOTING FINANCIAL STABILITY

By

MULALO TSHIKOVHELE

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Plagiarism Declaration

I, **MULALO TSHIKOVHELE**, declare that this mini-dissertation is my own work. It has not been submitted before to any other university or institution. Where work of other people is used, references have been provided. I hereby present this work in fulfilment for the award of the LLM degree in Mercantile Law.

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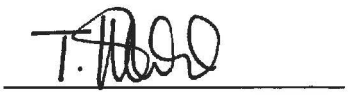

Mulalo Tshikovhele
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Summary

The financial crises of the past have proven that prudent and effective systems of bank regulation are crucial in preserving and maintaining a resilient financial system. Banks play a significant role in the economic environment and their stability and soundness is imperative to prevent financial crises. Changes in the market and developments in banking practices have increased the risk exposures of banks. Through the contagion effect, the failure of one bank may have far-reaching consequences for other banks and the financial system as a whole. Essentially, enhanced and effective banking regulation is pertinent to safeguard the financial system.

As a regulatory response to these financial crises, capital and liquidity requirements of banks have been developed and adopted internationally, over the years, with the purpose to preserve the integrity of the global financial system. These frameworks of international banking regulation have been adopted through the Basel Accords, which are premised on strengthening the resilience of banks to withstand financial pressures. The 2008 Global Financial Crisis prompted the need to revise the previous regulatory instruments, resulting in the introduction of the latest international regulatory framework known as Basel III. In South Africa, these international standards of banking regulation have been transposed into the relevant legislative instruments regulating banks in a proactive effort to enhance and preserve the stability of banks.

This dissertation discusses the aspect of bank regulation and how prudential regulation, as a regulatory tool, contributes to the promotion of financial stability. The study critically discusses the capital and liquidity requirements of banks as set out in the Basel Accords and analyses their ability, as mechanisms of prudential regulation, to preserve a resilient financial system.

The dissertation further considers how these international standards of banking regulation have been adopted into South African law. This is done by considering the legislative and regulatory instruments regulating banks and the role of the South African Reserve Bank in facilitating compliance by banks.

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Chapter One: Background to the study

1.1 Introduction

The understanding of the concept of 'regulation' is met with a plethora of interpretations and analysis.[1] Black explains that this notion is mainly aligned to a set of rules promulgated by a state, encompassing methods and mechanisms that will facilitate supervision by the relevant regulator and influence compliance by the regulated persons.[2] It is said that regulation aims to define standards with the purpose of achieving certain specified results and ultimately changing the behavior of institutions and persons by setting standards and mechanisms to achieve such behavioral change.[3] The process of regulation establishes norms, standards and mechanisms that facilitate the monitoring of the behavior of regulated persons within acceptable restrictions and is essentially a response by a state to any conduct or the lack thereof which is identified as a threat to the prevailing economic, political and social conditions within that state.[4] Essentially, regulation involves the processes of establishing certain rules and ultimately supervising compliance by regulated subjects with such rules.[5]

Regulations within the financial sector are constructed to restrict and supervise risk-taking behavior that is occasioned by the business of various financial institutions as a method to prevent financial crises.[6] The stability and soundness of a financial system requires asset and liability structures that effectively manage risk.[7] In particular, globalization and the fast-paced developments within banking operations on an international scale have led to increased integration and interdependence on the

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[1] Black "Critical Reflections on Regulation" 2002 *Australian Journal of Legal Philosophy* 11.

[2] Black 2002 *Australian Journal of Legal Philosophy* 11.

[3] Smith "What Is Regulation - A Reply to Julia Black" 2002 *Australian Journal of Legal Philosophy* 42.

[4] Gill "Policing and Regulation: What Is the Difference" 2002 *Social & Legal Studies* 527.

[5] Schooner "Top-Down Bank Capital Regulation" 2016 *Washburn Law Journal* 33.

[6] Zhou "Why the micro-prudential regulation fails? The impact on systemic risk by imposing a capital requirement" 2010 De Nederlandsche Bank Working Paper 1.

[7] Classens "Capital and Liquidity Requirements: A Review of the Issues and Literature" 2014 *Yale Journal* on *Regulation* 742.

economic and financial system as a whole.[8] This international financial integration means that banks across the global economy are exposed to more operational risks when dealing with foreign jurisdictions and foreign currencies.[9]

The business of banks involves unique services, which includes, *inter alia*, the acceptance and taking of deposits from the general public, the provision of liquidity and generally performing payment, clearing and settlement functions within the economic environment.[10] Effective bank regulation and supervision is thus important for the protection of the interests of the public in this regard because unsafe and flawed bank practices result in bank failures and this detrimentally affects the customers, other interconnected banks[11] and the economy at large.[12] There is increasing favor for the promotion of public interest as a basis for bank regulation, as opposed to the more traditional view that bank regulation is necessitated by the specialized services that banks provide and the economist's approach that banks need to be regulated because of their role in an economy that is predominantly market-based. [13]

As alluded to above, bank failures spark threats to various banking and credit relationships which affect the interests of various stakeholders and may ultimately cause broader economic disruptions.[14] A bank collapses when, *inter alia*,, it is unable to meet its payment obligations to its customers in the ordinary course of business as a result of its liabilities being greater than its assets as valued from a market

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[8] Kapstein "Resolving the Regulator's Dilemma: International Coordination of Banking Regulations" 1989 *International Organization* 324.

[9]Teeters and Terrell "The Role of Banks in the International Financial System" 1983 *Federal Reserve Bulletin* 663.

[10] South African National Treasury et al *Strengthening South Africa's Resolution Framework For Financial Institutions* 2015 1.

[11] A contagion is predominantly related with financial crises and this occurs usually when disturbances from one market penetrate to another market and these may occur globally or domestically.

[12] Leavitt "The Philosophy of Financial Regulation" 1973 *Banking Law Journal* 623- 633.

[13] Schooner *Washburn Law Journal* 2016 330 – 332.

[14] Kandrac "Bank Failure, Relationship Lending, and Local Economic Performance" 2014 FEDS Working Paper 1.

perspective.[15] In this regard, the rationale behind banking regulation is mainly based on prudential concerns and market-related perspectives.[16]

In earlier times, the regulation of banks was predominantly attributed to confining the activities of banks and imposing regulatory capital.[17] However, in more recent times, the focus has been more on enhancing the stability of the banks or safeguarding the interests of their various customers.[18] As Brighton submits,[19] bank regulation and bank supervision are two separate concepts that are necessary for the development of a stable banking structure and while bank regulation refers to the establishment of rules by the relevant authorities, bank supervision entails the function of continuously assessing bank activities and conformity with 'regulation' and the relevant legislative instruments to achieve safe and sound banking activities. Simply put, bank regulation focusses on creating rules for all banks whilst bank supervision is based on monitoring an individual bank.[20]

Prudential regulation (also known as regulation of "safety and soundness") is a system of regulation which focusses on macroeconomic stability by safeguarding financial soundness of institutions on an individual basis and especially post the 2008 Global Financial Crisis (GFC), with the objective of maintaining stability within the global economy.[21] Essentially, prudential regulation stems from the need to ensure financial stability across multiple financial sectors in the global economy and in a collaborative effort with prudential regulation frameworks, bank supervision assists in this quest.[22]

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[15] Kaufman "Bank Failures, Systemic Risk, and Bank Regulation" 1996 *Cato Journal* 19.

[16] Panourgias *Banking Regulation and World Trade Law GATS, EU and Prudential Institution Building* (2006) 5.

[17] Rodriguez "Banking Stability and the Basel Capital Standards" 2003 *Cato Journal* 116.

[18] Rodriguez 2003 *Cato Journal* 116.

[19] Leavitt 1973 *Banking Law Journal* 632.

[20] Schooner 2016 *Washburn Law Journal* 335.

[21] Leape and Thomas "Prudential regulation of foreign exposure for South African institutional investors" 2011 Centre for Research into Economic and Finance in Southern Africa London School of Economics and Political Science (iii).

[22] "Regulation and Supervision" <https://www.resbank.co.za/RegulationAndSupervision/Pages/RegulationAndSupervision-Home.aspx> (last accessed on 12 February 2018)

Goodhart differentiates prudential regulation from systemic regulation and explains that prudential regulation relates to the safety and soundness of a financial institution for purposes of protecting customers who stand to substantially suffer financial losses due to the failure of an institution not being able to withstand systemic events.[23]

Prudential regulation, with central banks often playing the role of the prudential authority, generally prescribes conditions to individual financial institutions in respect of capital adequacy requirements, financial exposures and expenditures with the objective of maintaining financial stability.[24] As an example, the Federal Reserve in the United States of America, is a sophisticated large central bank in one of the largest (if not the largest) economies in the world that is mandated with, *inter alia*, supervising and efficiently regulating the United States of America' financial system to ensure its stability, and to achieve this, the Federal Reserve employs various regulatory toolkits, which include prescribing minimum reserve requirements.[25] Despite the role and mandate of central banks globally being a controversial subject, it is argued that central banks are fundamental in maintaining financial stability while also facilitating global collaboration.[26]

The subprime mortgage default crisis that hit the United States of America in 2008 detrimentally affected various economic systems across the world and this culminated into a major global financial crisis, popularly referred to as the 2008 GFC.[27] One of the explanations offered as to the cause of this crisis, is that the US Federal Reserve played a crucial hand in policies that facilitated unsustainable price inflations and lenient supervision of lending standards.[28] In the wake of this financial crisis, multi-

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[23]Goodhart et al *Financial Regulation: Why, how and where now?* (1998) 5.

[24] McLean "Prudential Supervision of Registered Banks in New Zealand" 1994 *International Financial Law Review* 18.

[25] Mahmudov "Federal Reserve System and Its Role in the Emergence of the Global Financial Crisis" 2016 *Baku State University Law Review* 217, 220.

[26] Arner et al "Central Banks and Central Bank Cooperation in the Global Financial System" 2010 *Pacific McGeorge Global Business & Development Law Journal* 12.

[27] Mahmudov 2016 *Baku State University Law Review* 236.

[28] Canova "The Role of Central Banks in Global Austerity" 2015 *Indiana Journal of Global Legal Studies* 668.

disciplinary scholarship also took various views on the subject of the regulatory initiatives that need to be implemented and how the financial system needs to be structured to ensure that it is effective and resilient.[29]

As highlighted by Tarullo in his 2014 keynote address titled "[M]acroprudential regulation" at the Yale Law School conference on challenges in financial services, the differing views on the cause of the GFC will influence differing regulatory approaches on how to effectively respond to prevent future financial crises.[30] Post-GFC focus has shifted to controlling the financial sector as a whole in order to prevent systemic risks on a global economic level. Such system-wide regulation is known as "macro-prudential regulation" as opposed to micro-prudential regulation which entails the prudential regulation of individual financial institutions (which individual approach has been highlighted by the GFC as unable, on its own, to effectively achieve financial stability).[31] The purpose of prudential regulation has therefore been widened post-GFC to prescribe rules and standards by which financial institutions must be supervised which includes reporting standards and how these financial institutions should participate in the financial market.[32]

The past Crisis is evidence that the existing corporate insolvency measures employed by financial institutions cannot single-handedly avert potential meltdowns within the financial system when these financial institutions collapse.[33] In particular, the failures of banks in many jurisdictions have necessitated the need for improved and enhanced prudential regulation of banks that will significantly prevent bank risks, if not ultimately eliminate them.[34] In many jurisdictions, it is generally accepted that the GFC was a result of poor regulatory frameworks that did not set out clear mandates for financial institutions to deal with risks that could potentially cause a spill-over to the entire

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[29] Ford "Macro- and Micro-Level Effects on Responsive Financial Regulation" 2011 *U.B.C. Law Review* 589.

[30] Tarullo "Macroprudential Regulation" *Yale Journal on Regulation* 2014 506.

[31] South African National Treasury *A safer financial sector to serve South Africa better* 2011 12.

[32] "Prudential" <http://www.banking.org.za/what-we-do/prudential> (last accessed on 10 June 2018).

[33] South African National Treasury et al *Strengthening South Africa's Resolution Framework For Financial Institutions* 2015 1.

[34] Kaufman 1996 *Cato Journal* 21.

financial system.[35] To create a resilient financial system, the policies underlying financial sector regulation therefore need to be adapted to improve banking supervision on a micro-prudential level as well as on macro-prudential level in order to safeguard financial stability of individual institutions and on a system-wide level.[36]

1.2 Micro-prudential regulation

As stated above, micro-prudential regulation concentrates on the financial safety and soundness of an individual institution.[37] This approach to regulation is characterised by policies that focus on monitoring the risks of individual institutions and their ability to withstand failures.[38] Micro-prudential policy is thus concerned with regulating risk-taking behaviour by individual institutions to achieve financial stability.[39] The objective of micro-prudential regulation is accordingly based on limiting potential failure of an individual institution.[40] From a banking perspective, micro-prudential policies therefore mainly assess how a bank responds to risks that are "exogenous" without focussing on the "endogenous" risks and how this relates to the entire financial system.[41]

Accordingly the micro-prudential regulatory toolkit seeks to accurately measure the risk and value attached to assets of individual institutions and to actively intervene to ensure that such financial institutions are well capitalised to avoid problems that could

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[35] South African Reserve Bank Financial Stability Department *A new macroprudential policy framework for South Africa* 2016 3.

[36] Osinski et al "International Monetary Fund Monetary and Capital Markets Department Macroprudential and Microprudential Policies: Toward Cohabitation" 2013 IMF Staff Discussion Note 5.

[37] South African National Treasury *A safer financial sector to serve South Africa better* 2011 12.

[38] Osinski et al "International Monetary Fund Monetary and Capital Markets Department Macroprudential and Microprudential Policies: Toward Cohabitation" 2013 IMF Staff Discussion Note 5.

[39] Zhou 2010 De Nederlandsche Bank Working Paper 1.

[40] Remarks by Andrew D Crockett, General Manager of the Bank for International Settlements and Chairman of the Financial Stability Forum, before the Eleventh International Conference of Banking Supervisors, held in Basel, 20-21 September 2000 "Marrying the micro-and macro-prudential dimensions of financial stability" <https://www.bis.org/speeches/sp000921.htm> (last accessed 15 February 2018) 2.

[41] Osinski et al "International Monetary Fund Monetary and Capital Markets Department Macroprudential and Microprudential Policies: Toward Cohabitation" 2013 IMF Staff Discussion Note 6.

give rise to systemic risks.[42] In this system of regulation, the standards of regulation are based on the assumption that risks to an individual institution have an external origin.[43] Pre-GFC this method of regulation has been at the centre of achieving financial stability by regulating and supervising the financial welfare of an individual institution with the purpose of preventing systemic risk outbursts.[44] Post-GFC the regulatory focus however markedly shifted to a system-wide approach as concerns arose that the failure of an entire financial system would have much more damning effects on the economy than a single isolated failure of a financial institution.[45]

1.3 Macro-prudential regulation

Macro-prudential regulation is an approach to regulation that analyses macro-economic trends and how these trends interact and affect the stability of the financial system.[46] The policy of macro-prudential regulation employs certain instruments in an effort to limit systemic risks and these instruments are generally categorised as either capital-based, liquidity-based or asset-side-based.[47] Essentially, this system of regulation involves the collection of data that is characterised as macro-economic,

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[42] Calomiris "Financial Innovation, Regulation, and Reform" 2009 *Cato Journal* 76. The concept of systemic risk is described as a risk of disturbance in the financial system arising from an event or circumstance attributed to a financial institution's failure to render financial services or the lack of customer and investor confidence in the ability of financial institutions to render the financial services such that this has a detrimental effect to parts or the entire economic environment. See South African National Treasury et al *Strengthening South Africa's Resolution Framework For Financial Institutions* 2015 (v).

[43] Mollentze and Kamlana "Macroprudential policy and the twin peaks" <http://financialmarketsjournal.co.za/oldsite/19thedition/printedarticles/macroprudential.html> (last accessed 28 September 2018).

[44] Calomiris 2009 *Cato Journal* 76.

[45] Acharya in Canuto et al *Dealing with the Challenges of Macro Financial Linkages in Emerging Markets* (2013) 58 available at <http://www.worldbank.org/content/dam/Worldbank/document/Poverty%20documents/EMERGING_WB_CH02_57-90.pdf> (last accessed on 6 November 2018).

[46] South African National Treasury *A safer financial sector to serve South Africa better* 2011 12.

[47] South African Reserve Bank Financial Stability Department *A new macroprudential policy framework for South Africa* 2016 3.

which includes price inflations in assets, credit expansions, leverage ratios[48] and others.[49] Contrary to the micro-prudential regulatory approach, this form of prudential regulation views risk as having internal origin and attributable to the economic conduct of an individual jurisdiction's financial system.[50]

Although in most jurisdictions, like South Africa, this system of regulation mainly focuses on banks, it is generally observed that macro-prudential regulation is also aimed at addressing and enhancing financial stability amongst those financial institutions in an individual jurisdiction that are considered to by systemically important (also known as SIFIs).[51] Macro-prudential regulation also focuses on integrating prudential regulatory systems of various jurisdictions by creating a platform for such different systems and the mechanisms employed to integrate and facilitate information sharing across borders with the purpose of strengthening existing supervisory systems, enhancing disclosure requirements and broadening the confines of financial regulation.[52] The macro-prudential approach to financial and banking regulation and supervision is a policy tool premised on the need to efficiently limit systemic risks that could emerge.[53] As the GFC demonstrated that the micro-prudential approach to regulation was not effective to monitor systemic risks within individual financial institutions and on a global scale,[54] macro-prudential regulation thus aims to prevent

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[48] Leverage ratios are mechanisms used to calculate the capital that comes in the form of debt or the capacity of an institution to duly meet its financial obligations.

[49] Awrey "Macro-Prudential Financial Regulation: Panacea or Placebo" 2009 Amsterdam Law Forum 17.

[50] Mollentze and Kamlana "Macroprudential policy and the twin peaks" <http://financialmarketsjournal.co.za/oldsite/19thedition/printedarticles/macroprudential.html> (last accessed 28 September 2018).

[51] South African Reserve Bank Financial Stability Department *A new macroprudential policy framework for South Africa* 2016 3.

[52] Awrey 2009 *Amsterdam Law Forum* 17.

[53]Acharya 58.

[54] Pooran "Macro-Prudential Supervision – A Panacea for the Global Financial Crisis" 2009 *Law and Financial Markets Review* 534.

system-wide financial risk by assessing, evaluating and adjusting the overall levels of the banking system.[55]

1.4 Nature and scope of dissertation and research methodology

This dissertation seeks to explore the concept of bank regulation and more particularly the role of prudential regulation as a regulatory tool that contributes to the promotion of financial stability. A critical analysis will be done on this mechanism, particularly in relation to the capital and liquidity requirements it imposes, with the purpose of evaluating its effectiveness in preserving and maintaining a safe and sound financial system in the pursuit of financial stability. This will be done by a critical study of the available policy documents, statutes, books and scholarly articles.

1.5 Chapter lay-out

This dissertation will comprise of four chapters. Chapter One is the roadmap that introduces the topic and provides background to the study as well as the research question that will be addressed. It also sets out the research methodology and provides the chapter lay-out. In Chapter Two, I shall discuss the aspect of capital requirements, the international regulatory instruments that have been designed over the years to address regulatory capital as a means of promoting financial stability and how these have been implemented from a South African perspective. Chapter Three discusses the liquidity requirements set out in the international instruments and their role in preserving and maintaining financial stability, whilst highlighting the implementation of such requirements in South Africa. Chapter Four contains the conclusions and recommendations of the study.

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[55] Osinski et al "International Monetary Fund Monetary and Capital Markets Department Macroprudential and Microprudential Policies: Toward Cohabitation" 2013 IMF Staff Discussion Note 5.

Chapter Two: Capital requirements imposed on banks

2.1 Introduction

The purpose of this chapter is to evaluate and unpack the capital requirements imposed on banks and the mechanisms that have been established and implemented on an international level in response to the need for effective banking regulation following historical financial crises. This chapter will discuss the basis and critical role of capital requirements, the relevant regulatory instruments and how capital requirements regulation in respect of banks has been adopted and implemented in South Africa.

Capital requirements (also known regulatory capital) establish a standard that ensures that banks invest money in a manner that minimizes risk for the benefit of their customers and the economy at large.[56] Capital requirements promote prudent investment behavior on the part of banks and essentially influence banks to invest in low risks assets when using the banks' capital[57] and accordingly they improve efficiency and profitability.[58] Essentially, capital requirements are aimed at ensuring that the assets of a bank exceed its liabilities as reflected on the bank's balance sheet.[59]

Notwithstanding much support for capital regulation, with reference to operational cost implications on banks and how this ultimately affects the general functioning of the economy (i.e. by limiting accessibility to credit in the market), there exists controversial opposition to the imposition of higher capital requirements on banks.[60] At the outset, in regulating capital, it is stated that regulators need to construct the meaning of

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[56] "Capital requirement" <https://www.investopedia.com/terms/c/capitalrequirement.asp> (last accessed 14 June 2018).

[57] Hellmann et al "Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?" 2000 *The American Economic Review* 154.

[58] Aiyar et al "Bank Capital Regulation: Theory, Empirics, and Policy" 2015 *IMF Economic Review* 14.

[59] Rutova and Volkheimer "Revisiting the Basel Accords: Lessons Learned from the Credit Crisis" 2011 *University of Miami Business Law Review* 84.

[60] Schooner 2016 *Washburn Law Journal* 328.

'capital' in a manner that has global application and that is consistent across borders either from a legal or accounting perspective.[61]

2.2 The basis and critical role of capital standard requirements of banks in maintaining and preserving financial stability

As set out in the first chapter of this dissertation, the regulation of banks stems from the increasing concerns surrounding the business of banks and the prevailing economic conditions under which banks are operated.[62] As explained, the business of a bank is, *inter alia*, to lend and borrow money and if a borrower defaults on the loans made by the bank during dire economic times, the bank's losses can have far reaching detrimental consequences to the economic system as a whole.[63] Banks receive money from a wide range of customers who, due to the lending function of banks, assume a level of risk in depositing their money with banks and in addition to this, macroeconomic factors relating to the ability of the banking system to withstand financial meltdowns largely provides the rationale why banks have to be regulated.[64] Particularly, banks need to be regulated because customers cannot monitor banks and the functioning of banks may give rise to systemic risks.[65]

The management of the intricacies of banking risks and losses have become even more fundamental for financial stability due to the role banks play in the economic world.[66] The global banking system recognises that effective supervision of banks coupled with a regulatory framework for capital requirements, is essential for an

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[61] Baltali and Tanega "Basel III: Dehybridization of Capital" 2011 *NYU Journal of Law & Business* 7.

[62] Heimler "Competition Policy, Antitrust Enforcement and Banking: Some Recent Developments" Fourth Meeting of the Latin American Competition Forum (San Salvador, 11th and 12th July 2006) 2 <www.oecd.org/daf/competition/prosecutionandlawenforcement/38821319.pdf> (last accessed 11 June 2018).

[63] Rutova and Volkheimer 2011 *University of Miami Business Law Review* 84.

[64] Heimler 2006 2 <www.oecd.org/daf/competition/prosecutionandlawenforcement/38821319.pdf> (last accessed 11 June 2018).

[65] Santos "Bank Capital Regulation In Contemporary Banking Theory: A Review of the Literature" 2000 BIS Working Paper 5.

[66] Author unknown "Capital standards for banks: the evolving Basel Accord" 2003 *Federal Reserve Bulletin* 395.

effective system of prudential regulation[67] and compliance with capital requirements give assurance to bank customers that should a bank fall into distress their claims against that bank are safe.[68] Over the years global developments in financial markets have made banks susceptible to financial disasters which are difficult to manage[69] and consequently increases the exposure of the banking system to systemic risks and losses.[70]

It has been observed in many studies that a bank that is well capitalized reacts better to potential financial meltdowns.[71] An effective system of regulation is therefore necessary to address these prevailing issues pertaining to the safety and soundness of banks, the payment systems and the financial system in general.[72] The failure to establish an effective system of prudential regulation in respect of banks may lead to unmanageable systemic risks and losses.[73] Evidently, historical threats and probable future threats to the stability of the financial system, as a result of the constantly developing roles of banks, global trends and the fractional deregulation of banks, warrant the need to regulate banks in this manner.[74]

Dow explains that money is an integral component of the economy that is embedded with risks and this is a cause of concern for the financial and banking system which justifies the need to regulate banks.[75] The insolvency of a bank can have detrimental effects on the economy and prudential capital regulation is therefore fundamental to the counter any potential bank exposures.[76] Capital requirements alleviate the banks'

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[67] Hellman et al 2000 *The American Economic Review* 154.

[68] Atik "Basel II: A Post-Crisis Post Mortem" 2011 *Transnational Law & Contemporary Problems* 738.

[69] Kapstein 1989 *International Organization* 329.

[70] Kapstein 1989 *International Organization* 324.

[71] Schooner *Washburn Law Journal* 2016 348.

[72] Heimler 2006 3 <www.oecd.org/daf/competition/prosecutionandlawenforcement/38821319.pdf> (last accessed 11 June 2018).

[73] Kapstein 1989 *International Organization* 327.

[74] Dow 1996 *The Economic Journal* 698.

[75] Dow 1996 *The Economic Journal* 698.

[76] Balthazar *From Basel 1 to Basel 3 The Integration of State-of-the-Art Risk Modelling in Banking Regulation* (2006) 5 available at

risk to insolvency by setting standards and imposing ratios that essentially restrict the debt funding activities of banks.[77] In this regard, Dow remarks that to maintain financial stability within the economic system, regulation and supervision of banks is essential for the safety and soundness of the banking sector while taking into account that it is a sphere that is fraught with indeterminable risks pertaining to asset value expectations.[78]

The concerns of central banks relating to capital ratios in banks reached a high water mark in 1982 when the Latin American Debt Crisis[79] played out in what was regarded a crucial "wake-up call" for regulators to prioritize capital reserve regulation within banks.[80] Post the 1982 Latin American debt crisis, regulators embarked on directing their efforts to maintaining adequate capital reserves within banks and implementing a pro-active approach of 'crisis prevention', which requires substantive knowledge of financial crises, as opposed to mere reactive 'crisis management'.[81] As explained by Kapstein,[82] the mechanism of crisis prevention is implemented through the strict surveillance of a financial institution and establishing adequate and effective capital controls within the institution for purposes of preventing potential financial distress situations.

Following these events, international organizations and bodies such as, the Bank for International Settlements (BIS), the Organisation for Economic Cooperation and Development (OECD), the International Monetary Fund (IMF) and the Standing Committee in Basel, took heed of the call and over the years combined efforts to

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<http://baselcert.org/privatecontent/pdf/From%20Basel%201%20to%20Basel%203.pdf> (last accessed on 6 November 2018).

[77]Schooner *Washburn Law Journal* 2016 334.

[78] Dow 1996 *The Economic Journal* 699 – 700.

[79] This crisis originated when the Finance Minister in Mexico advised the Federal Reserve chairman, the US Treasury secretary and the International Monetary Fund that Mexico is unable to sustain its 80USD billion foreign debt and consequently other Latin American including other less-developed country in other parts of the world.

[80] Kapstein 1989 *International Organization* 333.

[81] Kapstein 1989 *International Organization* 333.

[82] Kapstein 1989 *International Organization* 333.

research and develop analysis on banking system risks, how these risks can be effectively addressed in a consensual manner amongst individual state regulators, and the role of regulatory capital with the concerted goal to preserve the integrity of the global financial system.[83] However, as submitted by Schooner[84], these international concerted efforts to regulate capital did not avert yet another crisis, being the GFC and consequently the efficiency of the first and the second instalment of the Basel Accords (discussed below) was brought to question.[85] To this end, the GFC revealed and raised further concerns pertaining to the inadequacy of capital reserves within banks and the consequential inability of banks to absorb losses.[86]

2.3 An overview of international capital adequacy regulation

2.3.1 *Basel I*

In 1988, the coordinated efforts of the G10 countries[87] and the Basel Committee on Banking Supervision[88] led to the establishment of the *International Convergence of Capital Measurement and Capital Standards*,[89] a collaborative prominent achievement and contribution towards addressing capital standards, also known as Basel I.[90] Basel I set out a framework that was intended to enhance capital standards amongst

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[83] Kapstein 1989 *International Organization* 333.

[84] Schooner *Washburn Law Journal* 2016 349.

[85] Lyngen "Basel III: Dynamics of State Implementation" 2012 *Harvard International Law Journal* 532.

[86] Aiyar et al 2015 *IMF Economic Review* 2.

[87] The G10 was a working group constituted of 10 countries being Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States and Switzerland whose finance ministers and central bank governors gather in connection to with annual meetings of the International Monetary Fund and the World Bank to discuss financial and monetary policies that impact member countries, trade and the global economy.

[88] The Basel Committee on Banking Supervision is the primary global standard setter for the prudential regulation of banks and provides a forum for regular cooperation on banking supervisory matters. Hereinafter referred to as the Basel Committee.

[89] Basel Committee on Banking Supervision 1988 "International Convergence of Capital Measurement and Capital Standards". This publication is available on the BIS website (www.bis.org). Hereinafter referred to as Basel I.

[90] 2003 *Federal Reserve Bulletin* 395 – 405.

individual states with the objective to achieve international convergence.[91] It set out three pillars dealing with the constituents of capital (also known as Pillar 1), the manner in which bank's assets are to be risk weighted (also known as Pillar 2) and the target standard ratio[92] (also known as Pillar 3).[93] Premised on enhancing the resilience of the global banking system and eliminating undue competitiveness among international banks, Basel I defined capital requirements in terms of the balance sheet of a bank[94] and required a minimum ratio of capital to risk weighted assets of 8%.[95]

The objective of Basel I was to regulate the minimum levels of capital within internationally active banks[96] including subsidiaries of such banks that perform banking activities.[97] It described the mechanism for assessing levels of capital and the minimum capital standards (with discretionary powers conferred on national regulators to implement higher levels) to be implemented and maintained.[98] In terms of Basel I, the regulatory capital of a bank was to comprise of the core capital (also known as Tier 1 capital) and the supplementary capital (also known as Tier 2 capital) of which the core capital related to equity capital and disclosed reserves within the bank, while the supplementary capital pertained to, *inter alia*, instruments that embody elements of both debt and equity.[99]

On implementation, Basel I specifically concentrated on credit risk, however in 1996, it was revised to also focus on bank losses as a result of market price risks.[100] The evolution of risks within banks and the limitations in distinguishing the levels of risks allowed banks to, *inter alia*, pursue exposures with less requirements than would be

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[91] Santos 2000 BIS Working Paper 17.

[92] Target standard ratio refers to the minimum standard ratio of capital to weighted risk assets of 8% which international banks were expected to have achieved at the end of the transitional period.

[93] Rutova and Volkheimer 2011 *University of Miami Business Law Review* 86.

[94] Balthazar 17.

[95] Pentz "Third Time's the Charm: Will Basel III Have a Measurable Impact on Limiting Future Financial Turmoil" 2014 *Penn State Journal of Law and International Affairs* 266.

[96] Basel I 2.

[97] Basel I 3.

[98] Basel I 2.

[99] Basel I 2.

[100] Santos 2000 BIS Working Paper 18.

imposed by the market on such assets and in place of exposures with higher regulatory capital requirements.[101] This 'regulatory capital arbitrage' meant that even though banks were complying with Basel I, they retained inadequate capital for the assets they held.[102] In essence, banks were deceiving the system by concentrating on securitisations and mortgage and home equity lending (which were risk weighted at 50%).[103]

Despite Basel I being useful in providing insight on the setting of capital standards[104] and being intricate and involved, the Basel Committee were of the view that it did not achieve its objectives adequately and consequently, hence the revision of Basel I commenced in 1999.[105] As Lee submits,[106] the Basel I framework was also flawed in that it ultimately set forth micro-prudential regulation (which is institution specific) as the approach to protecting the entire financial system.

2.3.2 *Basel II*

In 2004, the Basel Committee adopted the second instalment to the Basel Accords, that was premised on the three pillars of Basel I referred to above.[107] The document titled "*International Convergence of Capital Measurement and Capital Standards: a Revised Framework*"[108] revisited the methods of Basel I and revised the approach in which credit risk is calculated on assets (the standardized approach and internal rating based approach) and provided additional methods for banks in determining the levels

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[101] 2003 *Federal Reserve Bulletin* 396.

[102] 2003 *Federal Reserve Bulletin* 397.

[103] Bleier and Yoest "Federal Banking Agencies Propose Basel III Capital Requirements for U.S. Banking Organizations: What It Is and What It Means" 2013 *Banking Law Journal* 5.

[104] Santos 2000 BIS Working Paper 88.

[105] Rutova and Volkheimer 2011 *University of Miami Business Law Review* 88.

[106] Lee "Basel III and Its New Capital Requirements, as Distinguished from Basel II" 2014 *Banking Law Journal*.

[107] 2003 *Federal Reserve Bulletin* 398.

[108] Rutova and Volkheimer 2011 *University of Miami Business Law Review* 88-89. Hereinafter referred to as Basel II. Basel II is available for download at www.bis.org

of capital that is to be retained against market and operational risks.[109] As a revision of Basel I, Basel II provides an improved outlook on how financial institutions need to be regulated and it aligns regulatory capital with operational risk, transparency and governance.[110] Similar to Basel I, the minimum ratio of capital to risk weighted assets of 8%, was imposed under Basel II.[111] However, banks were required to retain capital comprising of 50% of Tier 1 capital and much stricter risk weights were applied in relation to certain investments and funding.[112]

The first pillar of Basel II addresses the minimum capital requirements and imposes a duty on banks to retain minimum capital reserves as buffers against bank exposures as a result of credit, market and operational risks.[113] Pillar two deals with the supervisory review function within banks and set outs out four key principles that emphasise the adoption of good and sound management of capital that goes over and above the minimum capital requirements in ensuring that banks establish and implement effective methods of managing the bank risk exposures.[114] The last pillar is focused on strengthening market discipline and complimenting the other two pillars by setting out disclosure requirements pertaining to the banks' risk profile and levels of capital reserves.[115]

Atik remarks that Basel II has introduced a range of acceptable methods that banks can utilise in determining capital while taking into consideration the banks' credit and operational risks and this feature of Basel II means that individual banks are allowed (within the confines of Basel II) to determine capital in a manner that compliments their internal operations and the financial market infrastructure in order to cater for the market conditions under which the bank is exposed.[116] In this regard, Basel II

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[109] Shaik-Peremanov "Basel II - The Right to Privacy: A South African Perspective" 2009 *South African Mercantile Law Journal* 549.

[110] Pentz 2014 *Penn State Journal of Law and International Affairs* 267.

[111] 2003 *Federal Reserve Bulletin* 398.

[112] 2003 *Federal Reserve Bulletin* 398.

[113] 2003 *Federal Reserve Bulletin* 398.

[114] 2003 *Federal Reserve Bulletin* 398.

[115] Basel II 2.

[116] Atik 2011 *Transnational Law & Contemporary Problems* 732.

enhances the rules of capital adequacy by moving away from the strict methods of calculating capital to apply to all institutions towards flexible methods that are institution specific.[117]

Despite the efforts of Basel II to set forth a framework that influenced effective credit risk management, Basel II did however not adequately provide for capital reserves for bank exposures.[118] Amongst other shortcomings, Basel II has been criticised for determining capital by using credit ratings and for creating a misconception that financial crises would be prevented by capital reserves as a result of banks complying the framework.[119] Notwithstanding the improvement of diversifying capital requirements, it has been said that Basel II has failed to deal with flaws of Basel I, in that banks relied on credit ratings which evidence has shown to be imprecise.[120] Bleier submits that the views of many were that Basel II gave too much authority to the bank management structures to determine and manage the risks of the banks with the result of inefficiently limiting risk.[121] Further this condoned behaviour on the part of banks to dispose of many assets (at very low values, i.e "fire sales") during times of economic pressures to escape the costs of capital.[122]

2.3.3 *Basel III*

In the wake of the GFC, the Basel Committee established the third (and latest) framework in the Basel Accords series, titled "*Basel III: A global regulatory framework for more resilient banks and banking systems*"[123] in an effort to address the shortfalls

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[117] Bleier and Yoest 2013 *Banking Law Journal* 5.

[118] Atik 2011 *Transnational Law & Contemporary Problems* 734.

[119] Rutova and Volkheimer 2011 *University of Miami Business Law Review* 85.

[120] Bleier and Yoest 2013 *Banking Law Journal* 5.

[121] Bleier and Yoest 2013 Banking Law Journal 5.

[122] Bleier and Yoest 2013 *Banking Law Journal* 5.

[123] Basel Committee of Banking Supervision 2010 "*Basel III: A global regulatory framework for more resilient banks and banking systems*" This publication is available for download at www.bis.org. Hereinafter referred to as Basel III.

of Basel I and Basel II and to enhance the risk management and regulation of banks.[124] Improving on the three pillars of Basel II,[125] Basel III revisits the flaws of Basel II, as evidenced by the recent GFC, and provides a framework of rules that are aimed at restoring confidence in the stability, integrity and ability of banks to withstand systemic risks and ultimately prevent such economic shocks.[126] Established in 2010 and endorsed by the leaders of the G20[127] and the Financial Stability Board (FSB),[128] Basel III is premised on enhancing the resilience of banks by incorporating approaches to micro and macro-prudential regulation of banks and setting forth significant reforms that address the risks and stability of individual banks and the banking system at large.[129] Basel III was finalized in a document published by the Basel Committee in December 2017 titled "*Basel III: Finalising post-crisis reforms*"[130]

Adapted from the inadequate rules of Basel II, the reformed comprehensive measures of Basel III are intended to improve management and supervision of risks in banks by enhancing previous methods and introducing new mechanisms to strengthen the ability of banks to absorb any losses and improving the banks' governance structures and transparency.[131] The methods of risk weighting assets are also adapted into Basel III, however banks are required to maintain higher levels of capital against these assets.[132] Basel III is structured to be more stringent than Basel I and Basel II in

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[124] "Basel III: international regulatory framework for banks" https://www.bis.org/bcbs/basel3.htm (last accessed on 12 June 2018).

[125] Basel III 2.

[126] Bleier and Yoest 2013 *Banking Law Journal* 5.

[127] This is an international forum comprising of Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

[128] The Financial Stability Board is an international body that monitors and makes recommendations about the global financial system.

[129] Basel III 2.

[130] Basel Committee on Banking Supervision 2017 "*Basel III: Finalising post-crisis reforms*" 1. This publication is available for download at www.bis.org.

[131] "International Standards" https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/International-Standards.aspx (last accessed 12 June 2018).

[132] Lee 2014 *Banking Law Journal* 31.

requiring higher levels and quality capital base[133] and confines the description of capital.[134] In this regard, Tier 1 capital, which is limited to common stock, has been raised from 4% to 8.5% while the overall capital requirements having been raised to 10.5% and Tier 2 capital may include preferred stock embodying debt features and certain subordinated debt while Tier 3 capital which was set forth in Basel II and comprised of unsecured subordinated debt, has been done away with under Basel III.[135]

Under Basel III, the Basel Committee intends to ensure that banks have adequate quality capital to enhance their risk coverage by, *inter alia*, introducing leverage ratio requirements in addition to capital requirements.[136] This latest instalment of the Basel Accords also sets out requirements to lessen procyclicality by strengthening the ability of banks to absorb losses while enhancing countercyclical buffers[137] that will serve as cushions during periods of stress.[138] Generally, Basel III addresses issues surrounding risks that the financial system is prone to and how this is interconnected to the financial well-being of an individual institution.[139] Basel II concentrated more on the banks' "banking book" which records loans and deposits instead of the "trading book", from which most of the GFC losses emanated.[140] Basel III attempts to rectify this position

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[133] Lee 2014 *Banking Law Journal* 28.

[134] Lyngen 2012 *Harvard International Law Journal* 527.

[135] Lyngen 2012 *Harvard International Law Journal* 527.

[136] Basel III 2 - 7.

[137] Premised on safeguarding the banking system during economic downturns caused by excessive credit growth, countercyclical buffers comprise of three separate elements for national authorities, internationally active banks and bank specific requirements. The countercyclical buffer regime imposes additional capital defences and requires bank capital requirements to take cognisance of the macro-economic factors to which banks are exposed. In respect of national authorities, they are required to assess excessive credit growth and, in their discretion, based on the severity of the systemic risk, impose a buffer requirement between zero and 2.5% of risk weighted assets. In light of where their credit exposures are geographically situated, internationally active banks are to set the buffer as a weighted average and the countercyclical buffer requirement of a bank will extend the capital conservation buffer. The countercyclical buffer regime is discussed in Basel III 57 - 60.

[138] Basel III 2 - 7.

[139] Basel III 2 - 7.

[140] Lee 2014 *Banking Law Journal* 33.

by setting out mechanisms to prevent 'regulatory capital arbitrage' by particularly requiring that banks maintain adequate levels of capital in respect of complex securitizations and the banks' trading and derivatives transactions.[141]

Notwithstanding that it brings to the table fresh mechanisms for determining regulatory capital, Basel III is criticised for having been adapted from Basel II and therefore being prone to the shortcomings of its predecessor, particularly, the risk-weighted method of determining capital is substantially similar to that of Basel II.[142] Pentz[143] criticizes the ability of Basel III to strengthen the stability of the financial system to prevent economic failures on the basis that Basel III mainly concentrates on addressing competition amongst the international market players and history has shown that for minimum capital requirements to be useful, effective financial regulation is necessary. As a more global approach to regulation, Basel III is faulted for its impractical levels of regulatory capital, its failure to comprehensively deal with the issue of collateralized debt obligations that consist of bundled up high risk home loans and affording banks and credit rating agencies the discretion to determine the risk posed by an asset.[144]

2.4 The adoption and implementation of international capital adequacy regulation in South Africa

Although the Basel Accords are not legally binding on South Africa, as a member of G20 countries, the South African Reserve Bank[145] through the erstwhile Bank Supervision Department, adopted the capital adequacy requirements established in terms of Basel II and subsequently in Basel III into its domestic laws.[146] The regulatory capital set forth by Basel III has been transposed into the Banks Act[147] and the

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[141] Lee 2014 *Banking Law Journal* 33.

[142] Lyngen 2012 *Harvard International Law Journal* 533.

[143] Pentz 2014 *Penn State Journal of Law and International Affairs* 262.

[144] Lee 2014 *Banking Law Journal* 31.

[145] Hereinafter referred to as SARB.

[146] "South Africa's implementation of Basel II and Basel III" <https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/South-Africa's-implementation-of-Basel-II-and-Basel-III.aspx> (last accessed on 7 November 2018).

[147] Act 94 of 1990.

Regulations relating to Banks[148] to be legally binding on banks in South Africa[149] and to be phased in parts until 1 January 2019.[150]

The Banks Act and the Regulations were initially amended in January 2013 to align them with the Basel III risk-based capital standards by, *inter alia*, requiring higher levels of common equity capital, introducing additional capital buffers[151] and imposing effective governance and transparency duties on banks in South Africa.[152] Further amendments pertaining to, *inter alia*, directives and interpretations for the completion of monthly returns concerning credit risk, market risk, equity risk in the banking book, operational risk and capital adequacy and leverage were published in March 2015.[153]

In an assessment conducted by through the Regulatory Consistency Assessment Programme,[154] South Africa was found to be consistent and compliant with the capital standards and the three pillars set forth by Basel III, including but not limited to, the definition of capital and the determination of minimum capital, the conservation and

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[148] Government Notice No. R. 1029, in Government Gazette No. 35950 on 2012-12-12, as amended by Government Notice No. R. 261, in Government Gazette No. 38616 of 2015-03-27; Government Notice No. R. 309, in Government Gazette No. 38682 of 2015-04-10 and Government Notice No. 297 Government Gazette No. 40002 on 2016-05-20. Hereinafter Regulations.

[149] Basel Committee on Banking Supervision (2015) Regulatory Consistency Assessment Programme (RCAP) "Assessment of Basel III risk-based capital regulations – South Africa". Hereinafter referred to as RCAP Assessment.

[150] "South Africa's implementation of Basel II and Basel III" <https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/South-Africa's-implementation-of-Basel-II-and-Basel-III.aspx> (last accessed on 7 November 2018).

[151] Basel III introduced additional capital buffers, being the capital conservation buffer that is equivalent to 2.5% of risk weighted assets comprising of common equity tier 1 and the counter-cyclical buffer ranging between 0% and 2.5% of risk weighted assets as determined by the national authorities in their discretion.

[152] "South Africa's implementation of Basel II and Basel III" <https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/South-Africa's-implementation-of-Basel-II-and-Basel-III.aspx> (last accessed on 7 November 2018).

[153] Government Notice No. R. 261 in Government Gazette No. 38616 of 2015-03-27; Government Notice No. R. 309 in Government Gazette No. 38682 of 2015-04-10.

[154] This is a programme established by the Basel Committee to assess the implementation of Basel standards by a member country.

countercyclical buffers[155], the standardised and internal ratings based approaches to determining credit risk, the Basel III standards to operational and market risk and the overall implementation of the supervisory review process and market discipline.[156] The South African Reserve Bank (SARB) is continually committed to the effective implementation of the international standards on regulatory capital to preserve and maintain safety and stability in the South African banking system.[157]

Regulation 38 of the Regulations to the Banks Act[158] which aims to, *inter alia*, implement the Basel III standards on capital disclosure, qualifying capital and measurement of risk-weighted exposure, mainly sets out provisions for the completion of the monthly return by banks concerning capital adequacy and leverage.[159] In more particular terms, banks are required to make use of the methodologies and approaches as set out in the Regulations for purposes of measuring their aggregate risk weighted exposure in relation to the particular bank's credit, market and operational risk and counterparty credit risk.[160] Regulation 38(8) sets out provisions relating to the determination of the minimum required capital and reserve funds.[161] These capital requirements are further stipulated in Annexure A of Directive 5 of 2013 published by SARB[162] and provide for minimum and applicable additional levels of capital in respect of Common Equity Tier 1 and Tier 1 and the total required bank capital.

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[155] With the object of ensuring that banks have sufficient capital reserves above the capital requirement and that banks adhere to the capital requirements, the conservation buffer regime requires banks to establish capital buffers to ensure that they can absorb shocks during distressed periods. To read more about the mechanisms, the framework of the conservation buffer regime and the minimum capital conservation ratios that an individual bank is required to establish based on the common equity Tier 1 ratios see Basel III 54 - 57.

[156] RCAP Assessment 4.

[157] "South Africa's implementation of Basel II and Basel III" <https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/South-Africa's-implementation-of-Basel-II-and-Basel-III.aspx> (last accessed on 7 November 2018).

[158] Regulation 38.

[159] This monthly return is also known as "Form BA 700".

[160] Regulation 38(2).

[161] Regulation 38(8).

[162] Directive 5 of 2013 issued on 2013-04-26.

The Regulations also provide for matters relating to the adjustments to or deduction from capital and reserve funds[163] and provisions on qualifying capital and reserve funds[164] and specific and general conditions for minimum capital and reserve funds in relation to securitisation schemes and resecuritisation exposures.[165] The Registrar of banks is empowered with a discretion, subject to the Regulations, to direct a bank that is not adequately complying with the Regulations to specifically act in a certain manner to comply with the Regulations.[166] Banks in South Africa are also required to, *inter alia*, make public disclosures in their annual financial statements and in any other disclosures setting out relevant information relating to the banks' capital adequacy standing, governance structure and details on how the banks manage risk.[167]

2.5 Final observations

The regulation of bank capital is considered to be at the heart of enhancing the ability of banks to withstand economic pressures by essentially limiting the banks' debt in comparison to their equity standing.[168] Hellman does however note that,[169] the regulation of bank capital can be costly to banks from an operational perspective and can affect their competitive ability. Further, their profit-making competency is threatened because as a consequent of high capital standards, banks ultimately lack funds in their reserves for investment purposes.[170] In this regard, it is fundamental that capital requirements achieve parity between maintaining the financial stability of a bank and its ability to make profit like any other business.[171] These challenges are what led to the need for coordinated international efforts to achieve harmonised capital

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[163] Regulation 38(5).

[164] Regulation 38(9).

[165] Regulation 38(7).

[166] Regulation 38(4).

[167] Regulation 43(1).

[168] Schooner *Washburn Law Journal* 2016 327.

[169] Hellmann et al 2000 *The American Economic Review* 151.

[170] Rutova and Volkheimer 2011 *University of Miami Business Law Review* 85.

[171] Rutova and Volkheimer 2011 *University of Miami Business Law Review* 85.

regulation.[172]

Evidently, policy coordination on an international level in relation to capital requirements largely depends on the knowledge as agreed amongst individual state regulators and this agreed knowledge is somewhat confined due to the differing areas of concerns of systemic risks for each particular jurisdictions.[173] Santos comments that the limited knowledge on how regulatory capital is to be effectively implemented across borders and outlining what goals it sets to achieve makes it difficult to agree on the best approach to establish the capital standards.[174] Furthermore, as pointed out by Hellman, one needs to be mindful of the fact that capital requirements cannot be the sole mechanism of prudential regulation.[175] Ultimately, in the absence of continuous information sharing amongst states and development of efficient regulatory mechanism, Kapstein is of the view that it will be impossible for jurisdictions to observe and supervise the safety and soundness of the global financial market.[176]

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[172] Santos 2000 BIS Working Paper 1.

[173] Kapstein 1989 *International Organization* 332.

[174] Santos 2000 BIS Working Paper 1 – 2.

[175] Hellmann et al 2000 *The American Economic Review* 154.

[176] Kapstein 1989 *International Organization* 326.

Chapter Three: Liquidity requirements for banks

3.1 The concept of liquidity

The liquidity of a bank is a composite concept that is largely connected to the economic market, the appetite for risk amongst market players and the cost of finding a buyer or seller of a particular asset.[177] In a comprehensive discussion of the concept of liquidity, Hicks[178] explains that liquidity is attributable only to assets that can be marketed easily and the degree of liquidity differs from one asset to another. Liquidity in a bank is considered in relation to the ability of the bank to expeditiously sell or buy an asset or security without compromising the price of such an asset or security.[179]

For market players, this concept is related to the costs associated with buying and selling an asset in a limited market field (i.e. market liquidity) and for banks and financial institutions this relates to the ability to acquire funding to cover any potential funding shortfalls (i.e. funding liquidity).[180] The balance sheet of an institution is also described with reference to this concept of liquidity (i.e. balance sheet liquidity).[181] An institution whose balance sheet mostly reflects cash assets or assets that can be readily realized into cash and more equity like liability claims as opposed to short term debt obligations, is considered to be liquid.[182]

It is submitted that liquidity crises are mostly attributed to the introduction of new financial instruments to market players without adequate reference on how to alleviate or manage any of the potential risks associated with such instruments (i.e.

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[177] Malz "Liquidity Risk after the Crisis" 2018 *Cato Journal* 36.

[178] Hicks "Liquidity" 1962 *The Economic Journal* 791.

[179] "Liquidity" <https://www.investopedia.com/terms/l/liquidity.asp> (last accessed on 12 November 2018).

[180] Acharya 2006 *Economic and Political Weekly* 460-463.

[181] Krishnamurthy "Amplification Mechanisms in Liquidity Crises" 2010 *American Economic Journal Macroeconomics* 26.

[182] Krishnamurthy 2010 *American Economic Journal Macroeconomics* 26.

the collateralized debt obligations were at the forefront of the GFC).[183] Acharya[184] differentiates market liquidity risks surrounding banks from funding liquidity risk by explaining that market liquidity risks refers to unforeseeable transaction costs involved with trading an asset in the market, while funding liquidity risks refers to the unforeseeable risks in relation to access to funding by banks and their ability to honor their cash obligations. Risks to funding liquidity, which bank managers are mostly concerned with, are said to originate from cash funds flowing out of a bank as a consequence of shocks to the entire economic system as well as shocks affecting a bank, individually.[185]

This chapter focuses on the concept of liquidity in banks and how risks to the liquidity of banks largely affects their stability and resilience to withstand economic downturns, as evidenced by, amongst others, the events of the GFC as well as the basis for imposing liquidity requirements. This chapter discusses the regulatory frameworks set forth by the collective efforts of international and individual state regulators with the object of assessing the ability of liquidity requirements to adequately manage liquidity risks. In addition, I will consider how the current international regulatory regime has been transposed and adopted into the relevant South African legislative instruments.

3.2 The basis of liquidity requirements

In addition to other aspects, it is argued that the events of the GFC revealed that banks and all other financial institutions were not best placed to manage their liquidity.[186] The GFC was evidence enough that the lack of cash and assets in a bank that can be easily converted into cash, is crucial to the stability of a bank.[187] As

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[183] Krishnamurthy 2010 *American Economic Journal Macroeconomics* 26.

[184] Acharya "Liquidity Risk: Causes, Consequences and Implications for Risk Management" 2006 *Economic and Political Weekly* 460.

[185] Acharya 2006 *Economic and Political Weekly* 460.

[186] Stern "Regulating Liquidity Risks within Institutional Protection Schemes" 2014 *Beijing Law Review* 210.

[187] Hartlage "The Basel III Liquidity Coverage Ratio and Financial Stability" 2012 *Michigan Law Review* 454.

Thomas submits[188] the Crisis revealed that liquidity risk is central to banking risk and the effect differs across markets with banks that predominantly rely on interbank funding, suffering severe consequences. In this regard, critical questions in respect of the stability of the banking system, including concerns regarding the liquidity of banks need to be addressed.[189] The regulatory framework and the nature of the business of a bank is essential in assessing the impact of a systemic risk on the funding ability of a bank.[190] In essence, prudential regulation, *inter alia*, strengthens the ability of the financial system as a whole to withstand systemic shocks by imposing prudent liquidity levels.[191]

Maddaloni[192] explains that liquidity risk arises when a bank is required to immediately and unexpectedly make payments towards large amounts of money being withdrawn by various depositors all at once and the occurrence of this event in one bank can potentially have an effect on other banks and the financial system as a whole (contagion). On the basis that banks use the funds deposited by their clients (typically on a short-term basis) to in turn advance loans to their other customers (typically on a long term basis), they are exposed to significant liquidity risks because long term loans mature after long periods while short-term depositors may wish to withdraw their funds at any time.[193] Essentially, this risk is attributed to the inability of a bank to expeditiously convert its assets into cash to cater for such withdrawals as a mechanism to avoid or reduce any potential losses that may threaten the liquidity of the bank.[194]

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[188] Stern 2014 *Beijing Law Review* 211.

[189] George and Mohan "Liquidity Coverage Ratio Requirement Increases Cost of Securitization for U.S. Banks" 2015 *Journal of Structured Finance* 13.

[190] Acharya 2006 *Economic and Political Weekly* 460.

[191] Classens 2014 *Yale Journal* on *Regulation* 742.

[192] Maddaloni "Liquidity risk and policy options" 2015 *Journal of Banking & Finance* 515.

[193] South African National Treasury et al *Strengthening South Africa's Resolution Framework For Financial Institutions* 2015 1.

[194] "Liquidity Risk" <https://www.investopedia.com/terms/l/liquidityrisk.asp.> (last accessed on 12 November 2018).

Due to the interconnectedness that exists between various financial institutions within a financial system, the collapse of one bank, as indicated, can affect the whole financial system and therefore effective regulation is necessary to alleviate any liquidity risks and prevent a system-wide financial breakdown.[195] The domino effect of one bank's failure on other banks or the financial system as a whole is deemed the major argument for the need to regulate banks in todays globalized financial sector.[196] It is stated that the balance sheet structure of the banking business where short-term deposits fund long term obligations owed to a bank is one that exposes a bank to particularly high liquidity risk.[197] To reasonably maintain the stability and soundness of the financial system, regulation of asset and liability structures in financial institutions are thus essential.[198]

A bank that is solvent (on the face of its balance sheet) is also at risk of failing if it does not have adequate funding to pay its debts and also repay its depositors.[199] In this regard, prudential regulation is also premised on the rationale that banks need to maintain liquidity that is adequate to cater for events when depositors do not reinvest money in the bank and to safeguard against this, generally.[200] Effective regulation of the financial system and the management of risk is therefore essential to enable the analysis of liquidity risk within banks.[201]

3.3 An overview of international liquidity regulation within banks

Prior to the GFC, the regulation of liquidity focused on risks associated with banks running dry due to short term depositors withdrawing their funds, however the GFC was evidence that the method of wholesale funding by banks and the funding

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[195] Hartlage 2012 *Michigan Law Review* 454.

[196] Rodriguez 2003 *Cato Journal* 115.

[197] South African National Treasury et al *Strengthening South Africa's Resolution Framework For Financial Institutions* 2015 1.

[198] Classens 2014 *Yale Journal* on *Regulation* 742.

[199] South African National Treasury et al *Strengthening South Africa's Resolution Framework For Financial Institutions* 2015 1.

[200] Dow 1996 *The Economic Journal* 698.

[201] Weber et al "Liquidity-adjusted risk measures" 2013 *Mathematics and Financial Economics* 69.

between and amongst such banks are the main concerns for bank liquidity.[202] Effective internationally harmonized liquidity standards are essential to compliment capital requirements in preserving and maintaining a more resilient banking sector.[203] To preclude further systemic risks, global regulators recognized the need to revise the framework of regulating bank liquidity risk[204] and ultimately have strengthened liquidity regulation pursuant to the Basel III Accord.[205] As a response to strengthen liquidity management within the banking sector, these liquidity requirements are aimed at enhancing the regulation of liquidity within banks and promoting their resilience.[206]

In the third instalment of the Basel Accords, the Basel Committee on Banking Supervision introduced internationally agreed liquidity standards that prescribe minimum liquidity requirements to facilitate compliance across borders.[207] Described as a "forward looking framework" in respect of bank regulation and in introducing harmonised liquidity requirements, the Basel III Accord generally requires banks to preserve liquid assets that can easily be converted into cash in times of distress.[208]

Although based on differing purposes, the Liquidity Coverage Ratio and the Net Stable Funding Ratio are the two minimum liquidity standards that have been internationally developed to alleviate risks to funding liquidity within banks while allowing national regulators or supervisors to exercise their discretion in certain respects.[209] While the Liquidity Coverage Ratio requires banks to maintain adequate high quality liquid assets with the object of strengthening the ability of banks to withstand liquidity risk pressure on a one month basis, the Net Stable Funding Ratio

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[202] George and Mohan 2015 *Journal of Structured Finance* 13.

[203] Basel III 8.

[204] George and Mohan 2015 *Journal of Structured Finance* 13.

[205] Stern 2014 *Beijing Law Review* 211.

[206] Hartlage 2012 *Michigan Law Review* 454.

[207] Basel III 8.

[208] Lee 2014 *Banking Law Journal* 32.

[209] Basel III 8.

standard requires banks to maintain sufficient liquidity to withstand liquidity risk pressures on a one year basis.[210]

3.3.1 *Liquidity Cover Ratio*

The Liquidity Coverage Ratio, which is described as a short-term minimum liquidity standard[211] ensures that banks have sufficient resources available based on a 30 day period to substitute for large amounts of cash flowing from banks as a result of system-wide and institution related crises.[212] It does so by requiring banks to maintain high-quality assets that are liquid and not subject to any financial liability.[213] This standard is premised on the rationale that the unencumbered high quality liquid assets should be adequate in sustaining the banks over the 30 day stress period to allow the relevant bank management and the central banks sufficient time to establish and implement solutions to the banks' distress.[214]

Essentially, this standard comprises of two distinct features, being the value of the stock of high quality liquid assets and the total net cash outflows[215] in a bank.[216] High quality liquid assets are those assets which are generally classified as, low risk assets that can be easily valued and converted into cash.[217] To ascertain whether

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[210] Basel III 8 - 9.

[211] Van Vuuren "Basel III Countercyclical Capital Rules: Implications for South Africa" 2012 *SAJEMS* 321.

[212] Basel III 9. Basel III sets out these specific shock scenarios which were modelled on the events of the GFC and these include amongst others, downturns in the credit rating of an institution, decreases to deposits and wholesale funding.

[213] Basel III 9.

[214] Bank of International Settlements 2013 "Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools" par 16. This publication is available on the BIS website (**www.bis.org**). Hereinafter LCR.

[215] Total net cash flowing out of a bank is calculated by reducing the total expected cash outflow by the total expected cash to flow into the banks. For further detailed explanation of how this is calculated; LCR par 69.

[216] LCR par 22.

[217] LCR par 23. For a comprehensive outline of the characteristics of high quality liquid assets, see LCR par 24.

a liquid asset qualifies as a high quality asset, the assessment is based on whether when such asset is sold or repurchased, the competency of such liquid asset to create liquidity remains consistent even during times of financial distress within the markets.[218]

For purposes of the Liquid Cover Ratio, there are two types of assets that are considered as high quality liquid assets which the bank can include as part of the stock and these are assets which the bank possesses on the first day of the stress period, (i.e. Level 1 assets and Level 2 assets.[219] Level 1 assets are not subject to any limitation for purposes of the Liquidity Coverage Ratio and include, coins, banknotes, qualifying marketable securities representing claims on or claims guaranteed by sovereigns, central banks and other international organisations, qualifying central bank reserves, certain domestic debt securities issued by sovereign and central bank.[220]

Level 2 assets (Level 2A and Level 2B assets), which are required to comprise of 40% of the total stock of high quality of liquid assets for purposes of the Liquidity Cover Ratio, include, amongst others, qualifying marketable securities representing claims on or claims guaranteed by sovereigns, central banks and other international organisations, vanilla debt securities[221] and covered bonds issued by banks, residential mortgage backed securities and common equity shares.[222]

In addition to the liquidity coverage ratio mechanisms adopted by banks generally to assess the banks' risks to liquidity, the Liquidity Cover Ratio requires that during stable periods when banks are not exposed to any financial pressures, the banks' high quality liquid assets must, as a minimum, be equal to the total net cash flowing

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[218]LCR par 25.

[219] LCR par 42.

[220] LCR par 50.

[221] Vanilla debt securities are the simplest forms of debt securities that can be easily valued using standard methods and they are not as complex as structured financial products. LCR par 52 and footnote 19.

[222] LCR par 51 - 54.

out of the bank.[223] This means during such periods the ratio between the high quality liquid assets and the total net cash outflows must not fall below 100%.[224] During periods of financial pressure, it is allowable that the ratio may fall below 100% as banks may need to utilise the high quality liquid assets to prevent any potential liquidity crises.[225] In exercising their discretion on how banks should use the high quality liquid assets, as set out by the Basel Committee on Banking Supervision, bank managers and supervisors across various jurisdictions should take account of various circumstances relating to the macroeconomic factors and financial circumstances that exist at the time of the financial distress period and those that could potentially arise in the future.[226]

On the basis of a survey outcome, indicating that various regulators from various jurisdictions utilise different methods to monitor liquidity risks, the Basel Committee on Banking Supervision established five minimum standards of measurement that national regulators can implement in their respective jurisdictions to measure liquidity risks in a consistent manner with the discretion to establish additional methods.[227] The first metric set out in Basel III is aimed at ensuring that banks are aware of the amount of liquidity they require and the probable liquidity crises that may ensue within the bank by requiring that banks evaluate any contractual maturity mismatch.[228] The second metric is termed the "concentration of funding" and it ensures that banks monitor liquidity risks as a result of the bank losing any source of funding, and therefore requires the banks to evaluate their wholesale funding sources and to diversify such sources.[229]

Banks are further required, in terms of the third metric, to measure the amount of assets that are not subject to any encumbrance to assess which assets banks are

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[223] LCR par 17.

[224] LCR par 17.

[225] LCR par 17.

[226] LCR par 18. See LCR par 18 for discussion of the points that supervisors need to consider in the exercise of their discretion.

[227] Basel III 9.

[228] Basel III 10.

[229] Basel III 10.

capable of being encumbered when raising funds from various sources.[230] Basel III requires, in terms of the fourth standard of regulating liquidity, that banks should consider their Liquidity Cover Ratio in light of the banks' foreign currency exposures.[231] To assist banks in achieving effective liquidity regulation, the fifth liquidity rule requires that banks must maintain tools that will serve as indicators to keep them abreast of any changes in the market, asset price fluctuations from a market-wide perspective and from an institution perspective and all information in the market in order to track any looming liquidity crises to assess the banks' exposures to such liquidity crises.[232]

3.3.2 Net Stable Funding Ratio

Based on internationally agreed elements, the Net Stable Funding Ratio is a standard of liquidity regulation that is based on the amount of available stable funding within a bank in relation to the amount of required stable funding within a bank. [233] As required by the Basel Committee on Banking Supervision, the ratio between the available amount of stable funding and the required amount of stable funding must continuously be at least 100%.[234] It is stated that the available stable funding which is based on the funding sources of a specific bank, is measured with reference to the capital and liabilities of a bank that can be used over a one year period, while the required stable funding of a bank relates to the liquidity risk profile of a bank's assets and its off-balance sheet exposures.[235]

Net Stable Funding Ratio is a standard that promotes effective monitoring of bank liquidity risk that is focused on both on and off balance sheet items and decreased use of short term wholesale funding resources during market liquidity crises.[236] In

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[230] Basel III 10.

[231] Basel III 10.

[232] Basel III 10.

[233] Bank of International Settlements 2014 "Basel III: The Net Stable Funding Ratio" 2. This publication is available on the BIS website (www.bis.org). Hereinafter referred to as NSFR.

[234] NSFR 2.

[235] NSFR 2.

[236] Basel III 9.

this regard, banks are required to maintain a certain amount of funding sources on a one year basis that match the liquidity profiles of the banks' assets and any contingent liquidity requirements that banks may have.[237] As an integral aspect, bank supervisors across various jurisdictions are required to observe these international standards and exercise discretion with regard to their specific jurisdictions on how best to adopt these standards.[238]

3.4 Liquidity regulation of banks in South Africa

Similar to the regulatory capital framework as highlighted in Chapter Two above, the Banks Act[239] and the Regulations relating to Banks[240] have been amended to provide for the implementation of a liquidity framework set forth in Basel III in South Africa.[241] Regulation 38(15)[242] sets out the requirements of leverage ratio and the method on how the qualified capital and reserve funds and the exposure measure is determined for purposes of calculating the leverage ratio. Regulation 26(14)[243] generally sets out the provision relating to the minimum requirements of the Net Stable Funding Ratio and the calculation of the available amount of stable funding and the required amount of stable funding.

To facilitate compliance with the Liquidity Cover Ratio requirements as stipulated in the third instalment of the Basel Accord and in light of South African banks having limited resources qualifying as high quality liquid assets, SARB approved a

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[237] Basel III 9.

[238] NSFR 2.

[239] Act 94 of 1990.

[240] Government Notice No. R. 1029, in Government Gazette No. 35950 on 2012-12-12, as amended by Government Notice No. R. 261, in Government Gazette No. 38616 of 2015-03-27; Government Notice No. R. 309, in Government Gazette No. 38682 of 2015-04-10 and Government Notice No. 297 Government Gazette No. 40002 on 2016-05-20.

[241] "South Africa's implementation of Basel II and Basel III" <https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/South-Africa's-implementation-of-Basel-II-and-Basel-III.aspx> (last accessed on 7 November 2018).

[242] Regulation 38(15).

[243] Regulation 26(14).

"committed liquidity facility" (also referred to as CLF).[244] The purpose of the CLF is to assist banks[245] that struggle with complying with Liquidity Cover Ratio requirements due to the general shortage of high quality liquid assets in the South Africa by providing them with a 12 month-facility which they can draw from to meet the Liquidity Coverage Ratio requirements.[246] For purposes of the Liquidity Cover Ratio, the amount of the CLF which can be draw down by the bank is always limited to the lesser of the amount of collateral that is lodged with the SARB (after the reduction of the required haircuts) and facility size granted.[247] Since the introduction of the CLF, SARB, has issued various guidance notes[248] setting out guidelines on what qualifies as high quality liquidity assets for calculating the Liquidity Cover Ratio and what assets qualify as collateral for the CLF.[249]

3.5 Final remarks

Banks' exposure to liquidity risks are attributed to the fact that the business of banks places them at risk of unexpected cash demands and one bank's individual liquidity issues can just as well affect other banks and the entire financial system.[250] The GFC revealed how easily bank liquidity can deplete and the pertinence of prudent

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244 "Committed Liquidity Facility" <https://www.resbank.co.za/Markets/Domestic/CommittedLiquidityFacility/Pages/default.aspx> (last accessed on 10 November 2018).

245 South African Reserve Bank *Operational notice pertaining to the committed liquidity facility* 2016 4. Only banks that experience shortfalls with their LCR are eligible to apply for the CLF. The SARB issued an addendum titled "*Operational notice pertaining to the committed liquidity facility*" which sets out the operational measures on how the CLF will be applied on the banks. .

246 South African Reserve Bank 2016 4.

247 South African Reserve Bank 2016 5.

248 The South African Reserve Bank has issued the following guidance notes relating to the Liquidity Coverage Ratio, including amongst others, Guidance Notes 6/2013, Guidance Note 6/2013. Guidance Note 8/2014, Guidance Note 5/2014 and Guidance Note 5/2015 and Guidance Note 6/2016.

249 "Committed Liquidity Facility" <https://www.resbank.co.za/Markets/Domestic/CommittedLiquidityFacility/Pages/default.aspx> (last accessed on 10 November 2018).

250 Jacobs et al "The regulatory treatment of liquidity risk in South Africa" 2012 *SAJEMS* 294.

liquidity management within banks for the stability of a banking system.[251] As Van Vuuren notes,[252] banks in various jurisdictions have indicated that they have limited amounts of resources that qualify as high quality liquid assets in their respective jurisdictions. In this regard, these liquidity requirements that have been introduced under Basel III have been argued to be unrealistic targets for certain banks, even during periods when banks are not under any financial pressures.[253]

[251] Basel III 8.

[252] Van Vuuren 2012 *SAJEMS* 321.

[253] Van Vuuren 2012 *SAJEMS* 321.

Chapter Four: Conclusions and recommendations

4.1 Conclusions

The objective of this dissertation was to critically study the available policy documents, statutes, books and scholarly articles in an effort to disseminate the role of prudential regulation of banks in promoting financial stability. As a background to the study, the first chapter of this dissertation, discussed the concept of regulation and more specifically, prudential regulation, by briefly setting out the two constructs of prudential regulation, being micro-prudential and macro-prudential regulation. Furthermore, in highlighting the effects of the GFC and other past financial crises on the global economic system, Chapter One introduced the need and role of prudential regulation with respect to banks in particular and its contribution to the promotion of stability within a financial system.

In this exposition it was evident that the occurrences of financial crises are to a great extent related to the manner in which banks are regulated and managed based on the risks they are exposed to. It was made clear in this discussion that the collapse of one bank can, through the contagion-effect triggered by interconnectedness, easily result in the collapse of other banks and/or the financial system as a whole. Essentially it is necessary to construct effective and comprehensive measures to curb these potential financial crises in a manner that is relevant from both a local and cross-border perspective.

In the quest of examining the relationship between the prudential regulation of banks and the promotion of financial stability, the second chapter of this dissertation identified and critically analysed the regulatory capital toolkit of prudential regulation. This was done by analyzing the basis and critical role of capital standard requirements within banks in maintaining and preserving financial stability, unpacking the framework of regulatory capital as internationally agreed among the various state regulators and the relevant international bodies who, over the years, have combined their efforts to conduct research and analysis on how financial stability can be achieved in an effective and efficient manner. From the discussion of the various scholarly views and arguments, a case was made that regulatory capital standards should strive to achieve

internationally harmonized standards with the object to establish an equal competing field for banks across various jurisdictions.

Furthermore, in the discussion of the capital requirements, the Basel Accords, which establish standards for regulatory capital, were extensively examined pertaining to how they set out minimum levels of capital required within banks and how such levels are to be computed. From the discussion in Chapter Two, it is evident that the Basel Accords, amongst other things, established the need for banks' to be sufficiently capitalized to protect them in times of financial and economic pressures by creating capital reserves that will serve as cushions to safeguard them from falling flat. Further, in this discussion it was alluded to that state regulators are vested with discretionary powers to review the standard minimum levels brought forth by the Basel Accords with a view to implement higher obligations in their relevant jurisdictions.

A brief examination, from a South African perspective, established that South Africa has implemented the minimum regulatory capital standards through amending and mainstreaming the relevant legislative and regulatory instruments to cater for the established global standards. In a nutshell, it was established that South Africa, as a G20 member, has taken the positive approach of recognizing the need to regulate banks with the purposes of enhancing and preserving the stability of the financial system.

The third chapter focused on the aspect of liquidity within a bank and liquidity requirements as a method established for prudential bank regulation. The discussion in Chapter Three established that liquidity requirements basically require that banks ought to maintain certain minimum levels of liquidity, as internationally agreed, to cater for distressed periods in the economic and financial market. It was discovered that this regulatory framework was introduced by the third and latest Basel Accord, as a supplement to the capital requirements discussed in Chapter Two. These requirements were considered with a high-level discussion of the relevant mechanism that are used to measure liquidity in banks and it was affirmed that liquidity requirements are based on ensuring that banks remain stable enough to withstand any shocks, either to the system as a whole or to the banks individually.

From the exposition in Chapter Three, and based on the business that banks conduct, it was affirmed that liquidity requirements are meant to give banks some level of runway to continue operating even during periods when their liquidity is threatened. In the discussion in Chapter Three, the key findings include that the liquidity of a bank is highly threatened when financial meltdowns occur, as evidenced by past financial crises, and to protect banks from failing, banks should have enough cash assets that will sustain them throughout those periods of financial pressure. In this discussion it was also highlighted that our central bank, SARB, with certain exceptions, has made efforts to bring our banks in line with the global standards.

4.2 Recommendations

As comprehensively discussed in this dissertation a sound and proper functioning financial system is a notion that requires active efforts and contributions from all the relevant stakeholders, globally and within each jurisdiction. Evidently, the commendable global partnership of the relevant stakeholders led to the establishment of frameworks aimed at achieving a stable financial system by building a resilient banking sector. Although banks are not the only players within the financial system, they are arguably major players.

From the above exposition, a case has been made that well-regulated banks can promote financial stability by preserving their resilience in times of pressures through regulatory capital and liquidity requirements. Arguably, the effectiveness of these regulatory reforms requires continued information sharing, engagements and co-ordination amongst the various state regulators to ensure that the standards established can effectively be implemented in the various jurisdictions. From a regulatory perspective, this means that when reviewing these standards, there must be consideration of the economic conditions in which these banks operate to prevent a situation where banks that operate in weaker economies struggle to adhere to the standards.

Evidently, banks in the various jurisdictions need to be regulated in such a manner that a balance is struck between promoting a resilient financial sector overall and ensuring that banks are not overly regulated to an extent that it affects their day to day

operations. In this regard, it is submitted that the set minimum standards should allow for exceptions in so far it does not compromise the ability of a bank to withstand economic shocks.

From a forward-looking perspective, much efforts are needed to continue to supervise banks in a manner that accounts for the various changing circumstances in their respective economies in which they operate and bearing in mind the implications of globalisation. Whether or not a financial crisis will ensue and the magnitude of effects it will have on the financial sector, is a matter of time and the prevailing market circumstances, however, it is safe to argue that the well management and regulation of banks is a good place to start with the long term view to build resilient banks that could cope even under the worst economic circumstances.

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