If you owe the bank a hundred thousand dollars, the bank owns you.
If you owe the bank a hundred million dollars, you own the bank.

— American Proverb

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Exploring the commencement standard for business rescue

Submitted in partial fulfilment of the requirements for the degree in
PhD Business Management
In the Faculty of Economic and Management Sciences
At the University of Pretoria
Under the supervision of Professor Marius Pretorius
By

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Dedication

To my Dad, you never failed to inspire.

To my Mom, for believing in me.

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Acknowledgements

While my name may be alone on the front cover of this thesis, I am by no means its sole contributor. Rather, there are a number of people behind this piece of work who deserve to be both acknowledged and thanked here:

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List of abbreviations

AHP	Analytic Hierarchy Process
BRiL	Better Return than in Liquidation
BRP	Business Rescue Practitioner
CAPEX	Capital Expenditure
CEO	Chief Executive Officer
CIPC	Companies and Intellectual Property Commission
CVA	Corporate Voluntary Arrangement
EBIT	Earnings Before Interest & Tax
LOL	Likelihood of liquidation
OFCF	Operating Free Cash Flow
PCF	Post Commencement Funding
PI	Public Index Score
R&D	Research & Development
SME's	Small to Medium Enterprises
UK	United Kingdom
UP	University of Pretoria
US	United States

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Glossary

Business rescue	The formal turnaround mechanism available to companies in South Africa. Business rescue is legislated in Chapter 6 of the Companies Act 71 of 2008. See the enacted definition in Appendix 1 – Sections 128, 129 & 131 of Chapter 6 of the Companies Act 71 of 2008.
Commencement of proceedings	The effective date of insolvency proceedings whether established by statute or a judicial decision.
Commencement standard	An instrument that identifies the debtors that can be brought within the protective and disciplinary mechanisms of the insolvency law and determines who may make an application for commencement (United Nations Commission on International Trade Law, 2005).
Deepening insolvency	Fraudulent or negligent prolongation of a firm's life beyond insolvency, resulting in damage to the firm caused by increased debt.
Economic insolvency	Occurs at the point where the company value falls below the sum of all creditors' claims (Drescher, 2013:48).
Financial distress	Is a situation where cash flow is insufficient to cover current obligations. These obligations may include unpaid debts to suppliers and employees, actual or potential damages from litigation and missed principal or interest payments' (Wruck, 1990:421).
Formal turnaround	Court-led or supervised procedure that is commenced and governed by legislation with the aim of rescuing a company.
Informal turnaround	A turnaround process that is not regulated by the insolvency law and will generally involve

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	voluntary negotiations between the debtor and some or all of its creditors.
Insolvency	When a debtor is generally unable to pay its debts as they mature or when its liabilities exceed the value of its assets
Interdisciplinary research	Any study or group of studies undertaken by scholars from two or more distinct scientific disciplines. The research is based upon a conceptual model that links or integrates theoretical frameworks from those disciplines, uses study design and methodology that is not limited to any one field, and requires the use of perspectives and skills of the involved disciplines throughout multiple phases of the research process (Aboelela, Larson, Bakken, Carrasquillo, Formicola, Glied, Haas & Gebbie, 2007).
Laissez-faire	An economic system in which transactions between private parties are free from government intervention such as regulation, privileges, tariffs, and subsidies.
Liability	A probability or threat of damage, injury, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through pre-emptive action.
Liquidation	Proceedings to sell and dispose of assets for distribution to creditors in accordance with the insolvency law
Moratorium	Also known as a stay of proceedings, a legally authorised period of delay in the performance of a legal obligation or the payment of a debt.

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Reorganisation	Is a term occasionally used in a general sense to denote the rehabilitation of a distressed business, but it may also be used more narrowly to refer only to the process of rehabilitation under a formally recognised legal insolvency procedure, whose statutory titles may vary from administration, business rescue or reorganization.
Secured debt	Debt backed by a mortgage, pledge of collateral, or other lien; debt for which the creditor has the right to pursue specific pledged property upon default.
Strategic bankruptcy	Occurs when an otherwise solvent company makes use of the bankruptcy laws for some specific business purpose.
Thesis	An extended research paper that is part of the final exam process for a graduate degree. The document may also be classified as a project or collection of extended essays.
Thesis by publication	Also known as an article thesis, a doctoral dissertation that is a collection of research papers with introductory and conclusion chapters.
Turnaround	A major intervention necessary to avert eventual failure of the company (Belcher, 1997).
Twilight zone	Period when a company is in financial difficulty, but it is not clear whether an insolvency case or workout will occur (INSOL International, 2013).
Zone of insolvency	A shift in the focus of the directors' duties from company and shareholders to the creditors as the company becomes insolvent and nears the stage of a formal declaration of its insolvent status (Rajak, 2008).

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Preface

Reorganisation is a relatively new development within insolvency law and is becoming increasingly popular across the world. It is complex, being both a second chance to some parties and great frustration to others. An understanding of these complexities is important to regulators, practitioners and academics. The choice to pursue proceedings is not always clear and is often clouded by overwhelming pressure, emotions and self-interest. The aim of this study is to provide a comprehensive and critical review of the standard that grants access to the commencement of proceedings and bridge the gap between the various perspectives, develop a cohesive understanding of the phenomena, upon which future studies can be based. The subject matter requires a broad approach to cover the various aspects at play. Therefore, the research is of a multidisciplinary nature and is explored through the incorporation of studies from business, law, finance, economics and entrepreneurship. The topic is diverse and absent of an underpinning theory. For South Africa, the topic is of a great interest as the reorganisation finds itself amidst an array of abuse and misunderstanding. Though South Africa is used as the main reference point, the study aims to highlight universally accepted principles for goal application. A framework is presented to assess the prospects of reorganisation success at commencement. This tool seeks to make the commencement decision fast and simple while giving conscious attention to the business principles and stakeholders. The framework offers a fresh perspective on how the commencement decision can be evaluated.

This thesis was completed on the 1 December 2017.

Pretoria, South Africa.

Wesley John Rosslyn-Smith

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01

CHAPTER

Introduction, problem definition and the methods applied

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Introduction

As the global economy faces rapid technological change and credit becomes increasingly accessible, the opportunities for financial distress and commercial failure increase proportionately. These economic conditions have presented challenges for insolvency systems. The reprisal has been the rapid evolution of insolvency law, most evident in reorganisation procedures. Insolvency law in its modern sense is no longer a separate stage at the end of a firm's life cycle but is nowadays seen as intertwined with the journey of a business. Turnaround procedures involve going beyond the normal managerial responses to business troubles. The exceptional nature of turnaround action requires specialised strategies to be implemented by either informal or formal means, to avert eventual failure of the company. Informal actions do not demand any resort to statutory insolvency procedures but are contractually based. Formal turnaround (reorganisation) uses legal procedures to facilitate the rescue of a business.

Reorganisation offers a distressed firm an extensive panoply of tools with which to affect a rescue of both its financial position and its operations. Formal turnaround, as seen in the context of South Africa, appears as a new management discipline that is subject to increased scrutiny by business and academics alike. The process is still tainted by notoriety and perceived stigma from an antiquated past. Known colloquially as business rescue, the procedure faces multifaceted challenges in an environment desperate to preserve employment and thirsty for growth.

Reorganisation, observed from a broader perspective, maximises an underperforming firm's value for the benefit of its stakeholders by facilitating turnaround through an all-encompassing plan that will restore the financial well-being and viability of a debtor's business. While reorganisation may present an opportunity to curb job losses and retain key economic resources, it also poses a significant threat to the value of the business. Abandoning an unsupervised legal weapon in an economy unexperienced with formal turnaround presents significant risks – one of which is affording businesses with no economic value the sanctuary of these reorganisation laws. The provisions of the procedure are

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aimed at alleviating the mass tort of litigation inflicted by an informal means of turnaround and debt collection. However, when this protection is ill-deserved, the effect is less than desirable. As firms grasp at the moratorium granted by reorganisation, creditors remain vulnerable to the erosion of their claims. For the most part, the self-regulating components of proceedings are intended for filtering out these uneconomic firms before commencement. This would allow only firms with the prospect of success to exploit the recovery tools with the aim of maximising the value of the firm for all its stakeholders.

The commencement standard stands to safeguard the reorganisation process against abuses and yet, at the same time, persuade at-risk firms to enter proceedings as early as possible. The threshold requirements for entering are highly sensitive and must continuously adapt to modern economic conditions in an attempt to assess the viability of a business. At a point typically synonymous with constrained time frames, limited resources and heightened stakeholder tension, deciphering the prospects of success is by no means an easy task. This makes the instrument a complex cluster of paradoxes that nonetheless remain an integral part of the reorganisation process, directly impeding the success rate.

Turnaround literature has also been coerced into rapidly adapting to the economic demands of a highly volatile environment. The provisions made available by modern reorganisation laws have become a popular tactical business option to combat disruptive innovation, diminishing market demand, industry contraction, or even supplier overcapacity. The pressure to model strategies that optimise the revitalisation of a business in reorganisation is a steadily expanding facet of management sciences. In some cases, reorganisation is used as a competitive instrument. Adam Smith's invisible hand has no influence in reorganisation as new and unexplored economic forces are established. This in turn facilitates rapid recovery efforts by deploying various reorganisation strategies. Reorganisation is, therefore, a field that requires a transdisciplinary approach in solving the many new challenges the modern system is unearthing.

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Business rescue summarised

This research intends to explore the commencement standard of reorganisation from an international perspective, using business rescue as a comparative foundation. Business rescue operates as the main formal turnaround procedure available to financially distressed businesses in South Africa. The process replaced its less than successful predecessor, judicial management, as a modern alternative in 2011. The business rescue process is set out in Chapter 6 of The Companies Act 71 of 2008 as an out-of-court process set in motion by a company's board of directors or a court order. The objective of proceedings is to allow a financially distressed firm to restructure and reorganise itself in an attempt to avoid liquidation and allow the company to continue on a solvent basis. If that is not possible, a secondary objective requires a return to creditors or shareholders that would exceed what would be gained by immediate liquidation. Proceedings can be grouped into three basic phases (i) initiation – either voluntarily or compulsory; (ii) the preparation of a business rescue plan; and (iii) voting, confirmation and implementation of the plan.

Once the process has commenced, the company is granted automatic protection by a temporary moratorium on the rights of claimants against the company, or in respect of property in its possession. The process and business are supervised by an appointed business rescue practitioner ("BRP"). After an initial analysis of the company, the BRP must determine whether a reasonable prospect of success exists with regard to the objectives stated above. Should a reasonable prospect exist, the BRP is tasked with the development and implementation of a plan, if approved, to rescue the company by restructuring its affairs, business, property, debt and other liabilities, and equity.

The procedure is primarily focused around three affected parties, consisting of shareholders, creditors and employees (or their registered trade union). The interests of these affected persons are recognised, as is their participation in the development and approval of the business rescue plan. The BRP must adhere to a series of strict deadlines consisting of notices, meetings and the publication of the plan. In part, the BRP is instructed to convene two meetings with the company's

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creditors, the latter reserved for the approval of the plan. The approval must gain the support of no less than 75% of the creditors' voting interests, and at least 50% of the independent creditors' voting interests. The BRP must then substantially consummate the plan in accordance with its contents. Should the plan be rejected at the meeting, the BRP will need to seek a vote in respect of a revised plan, or otherwise convert the business rescue to liquidation proceedings. The BRP does, however, have the option to approach the court to set aside any inappropriate vote, though to do so requires a substantial reason.

Business rescue is expanded on throughout the various chapters of this study.

Importance of the study

Reorganisation has become a dynamic and creative field, playing an increasingly important role in business across the world. The introduction of business rescue in South Africa has shown the critical importance of this mechanism in preserving jobs and preventing economically viable companies from terminating. One of the central components of reorganisation is the commencement standard. The standard applied to reorganisation proceedings remains a highly complex instrument that is forced to continuously adapt to modern economic life. In its design it should also take into consideration certain social and political factors. The door to reorganisation should only be open for a debtor who satisfies a criterion that is intricately woven into the objective for which proceedings have been instituted. Therefore, this research may prove its importance in these three respects:

1. Provide a contextual background for a commencement standard that reflects both the legal and economic functions it serves.
2. Develop a comprehensive theoretical foundation for a commencement standard for business rescue on which future academic research within management sciences could be based.
3. Develop a practical framework that could be used by practitioners, courts, directors or any affected party to assess the reasonable prospect of success at the commencement of business rescue proceedings.

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An ill-defined commencement standard poses a significant threat to the success of business rescue. Already abuse of the procedure is taking place, as many companies and practitioners "feed off" creditors' claims to sustain undeserving firms, whereas reorganisation proceedings aim to ensure the rescue of worthy companies and save jobs when possible. This research aims to define the commencement standard for business rescue and in so doing give more clarity to the term *reasonable prospect*. This will provide legislators, courts, practitioners and other affected parties a means to screen potential firms applying for business rescue and ultimately increase the efficiency and effectiveness of business rescue in South Africa.

Problem definition

Distressed firms should opt for reorganisation if the value created by continuing is expected to exceed the value that would be preserved by liquidation. The failure by a commencement standard to discriminate between non-viable (economically distressed) firms and those in temporary financial difficulty (financially distressed) has major economic ramifications. Limited academic research has been completed on understanding and practically implementing the criteria proposed by commencement standards. This has challenged directors, practitioners, the courts and affected parties alike to make meaningful deductions as to the degree to which rescuing a company is appropriate for reorganisation or not. Realising the complex yet essential role of a commencement standard within the context of business rescue in South Africa, the following problem definition is formulated:

How can a theoretical understanding of a commencement standard assist in enhancing the effectiveness of this mechanism? Can a framework to assess the likelihood of reorganisation success be developed, to be used at the commencement of proceedings?

The problem described above is conveyed by the following two research objectives that underpin this study. First, to identify the perspectives that should be considered in understanding reasonable prospect at the commencement of

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proceedings. Second, to design a framework that can practically assess the likelihood of reorganisation success at the commencement of proceedings.

Research ethics

This study has considered and upheld to the highest degree the ethical standards defined by Cooper and Schindler (2008:34). The researchers were devoted to maintaining an objective view, minimising the possibility of bias and data misinterpretation. A concerted effort was made to evade careless errors and reduce negligence as far as possible while applying careful and critical judgment at all times.

Respondents' informed consent to participate in the research was obtained, in accordance with the guidelines of the University of Pretoria (see Appendix 2 – Letter of consent). This ensured that the respondents were provided with information about the purpose of the study, the sponsor, who the researchers were, how the data would be used and what participation was required of them. The respondents were granted the privilege of confidentiality and anonymity by the researchers to best aid the purposes of the study and to prevent any harm or negative effects against the subjects and their organisation. Professional standards were adhered to, to the best of the researcher's ability, supported by the ideals of honesty and integrity.

Referencing technique

This thesis has been compiled in accordance with the referencing guidelines detailed in "*Referencing in academic documents*", 7th edition 2016, authored by Theuns Kotzé as the official referencing guidelines of the Department of Business Management at the University of Pretoria. The style is an adaptation of the Harvard referencing style used across many commerce faculties. Please note that in Chapters 3-5 the referencing style may differ, depending on the requirements of the journal that the paper targeted.

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Research methodology

A brief overview of the research design is provided here. The study utilised international themes of reorganisation and highlighted the comparative benchmarking of key elements in insolvency deemed necessary, taking into account historical and literature analysis on the topic. This study took the format of an article-based thesis and therefore the research methodology for each paper is discussed separately in the papers found in chapters 3,4 and 5.

In the tradition of the institution, use of the plural personal pronouns such as "we" or "our" refers to the work of the student, while acknowledging the support and guidance of their supervisor.

This thesis is written from an interdisciplinary perspective that is based on a concept that integrates theoretical frameworks from legal, financial and management sciences, using a methodology that is not limited to any one field. Therefore, the perspectives and skills of the involved disciplines are used throughout the multiple phases of the research process. Tranfield and Starkey (1998:352) emphasise that this feature "cannot be reduced to any sum of parts framed in terms of contributions to associated disciplines". The practical managerial problems within turnaround management are interdisciplinary and require advanced knowledge and understanding across all three fields. Starkey and Madan (2001) highlight the importance of this feature in developing practical, relevant knowledge for the industry. Therefore, although this thesis is written through the lens of management, it must consider all three disciplines to address business issues and practical managerial problems that it aims to solve.

The thesis took into account the legal knowledge and exposure of the researchers on legal developments and case-law precedent up to 1 August 2016 and not beyond that date. Developments in the law of business rescue are ongoing and will continue to develop over time.

The researcher's ontological position remained that of an objective realist, believing that knowledge comes from facts associated with real-life cases and their context. When repeated mentions of practices and praxis were found, it was

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possible to generalise from them. The researcher aimed to maintain a critical view and interpret legal works from an international insolvency perspective where possible. Epistemological positions acknowledged the researchers' awareness of their methodological values, beliefs and philosophical assumptions. These assumptions could influence how the research was conducted and are stated in order to understand the "intellectual climate" in which it took place. The researchers' personal experiences with business failure and involvement in rescues ignited their interest in the field.

The first part of the research comprises a literature review that examines the various components of the commencement standard and how the proposed research fits within the wider array of literature. A deductive approach was used to identify theories and ideas from various jurisdictions. The critical analysis revealed generic components that were deemed essential to the purpose of a commencement standard. The succeeding chapters expand on the research methodology.

Arrangement of chapters

Table 1 shows the arrangement of the chapters in this thesis, and the primary research method used.

Table 1 An overview of the arrangement of chapters and research methods.

	Subject	Method
Chapter 1	Reason for the study, the problem definition and the methods applied	An introduction
Chapter 2	Introduction to the commencement standard	Literature review
Chapter 3	Through the gates of horn and ivory – a theoretical foundation for a commencement standard to business rescue	Contextual study
Chapter 4	A liabilities approach to the likelihood of liquidation in business rescue	Contextual study

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Chapter 5	Calculating the Likelihood of Liquidation with value weighted indicators derived by Delphi and the analytic hierarchy process	Delphi and analytic hierarchy process
Chapter 6	Summary of main finding and conclusion	Summary

Chapter 2 provides an introductory literature review of a commencement standard. In this chapter, the various generic structural features of a commencement standard for reorganisation are discussed. A summarised comparison of the structural features of commencement standards from various countries is also presented. Expanding on the literature review, Chapter 3 (Paper 1) develops a theoretically grounded foundation for the commencement standard. The value maximisation principle, stakeholder theory, and legal requirements are used to structure propositions that deliver a theoretical foundation for a commencement standard. In Chapter 4 (Paper 2), under the principle of value maximisation, the components of a commencement standard and turnaround literature are analysed to develop a Likelihood of Liquidation Framework. The framework identifies nine liabilities that are used to assess the prospect of success in reorganisation at the commencement of proceedings. Chapter 5 (Paper 3) continues with the development of the Likelihood of Liquidation Framework by identifying key indicators for the nine liabilities, investigating the relative importance of each liability/indicator and finally proposing anchor scale values for each indicator. Finally, Chapter 6 draws a picture of the study and its findings.

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02

CHAPTER

An introduction to the commencement standard

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How did the invisible hand lose its grip?

The "invisible hand" is a term coined by Adam Smith (2016) during the 18th century in his book *The Wealth of Nations*, which invoked an enduring piece of imagery to describe the unintended social benefits of individual self-interested actions within the economy. As the invisible hand would have it, there is an incentive for third parties to seize control of a failing entity in order to salvage their claims. The notion of free market exchange automatically directing self-interest toward socially desirable ends is a core validation of the laissez-faire economic philosophy. However, as Baird (1991) explains, the collective interests of the group can be jeopardised when a single creditor exercises their rights over an insolvent estate. It is customary to expect the party that benefits from a particular legal rule to invoke it accordingly; however, insolvency is different. The beneficiaries of insolvency law are the creditors as a whole and not the individual creditors within the group. This is the so-called "common pool problem", which arises where more than one person has rights over the same, finite fund of resources (Fletcher, 2005:9).

Insolvency law thus transforms what were initially multiple relationships between each creditor and the debtor into a unified whole, with the aim of administering and deriving maximum value from the debtor's estate. To do so, insolvency laws place various protective and disciplinary mechanisms upon the ill debtor in reorganisation. The aim of these is to allow the debtor to overcome its financial difficulties and resume or continue normal commercial operations (United Nations Commission on International Trade Law, 2005:27). These mechanisms in effect introduce synthetic rules for the benefit of society in order to facilitate the rapid recovery of the firm in distress and ultimately maximise its return – violating the benign view of self-interest that the invisible hand embodies.

Insolvency serves the economic function of screening and eliminating only those firms that are economically inefficient and whose resources could be better used in some other activity (White, 1989:129). For reorganisation proceedings, this rule is fundamental, while it seeks to rehabilitate a distressed firm. Keep in mind that the same mechanisms that are intended to support a viable, financially

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distressed firm can also serve to give shelter to an injuriously uneconomical firm. Baird (1987) and Jackson (2001) have argued that market-based insolvency procedures are more efficient, and that financially distressed firms should be "auctioned" in the open market instead of attempting reorganisation. Rajan and Zingales (2003) suggest that market-based systems also seem to be more effective at forcing companies in declining industries to shrink and release capital. However, studies have shown there to be a net gain to creditors from reorganisation (Alderson & Betker, 1995; Eisenberg & Tagashira, 1994).

It is important therefore to distinguish between business failure and the economic function of insolvency. Insolvency is not intended to prevent the failure of inefficient firms. A firm can fail in the sense that its assets (resources) would be better used elsewhere, and this would be deemed acceptable (Boraine & Wyk, 2015:236). Business failure, however, does not necessarily mean that reorganisation has failed, but rather represents the desired outcome of an efficient process. Famous economist Joseph Alois Schumpeter reiterated this through the term "constructive destruction", which sees the reallocation of investments as "constructively" destroying or replacing the old physical economy with the new (Omar, 2008:61). Pol and Carroll (2006), citing Schumpeter, state "[constructive destruction] could provide better results than the invisible hand and price competition". One must keep in mind, though, that failure is itself constituted out of an assemblage of calculative technologies, expert claims and modes of judgement (Miller & Power, 2005). Professionals will undoubtedly perceive corporate events in distinctive ways.

This is where it gets interesting. It is an extension of finance theory that a firm's financial health (its ability to pay its debts) is different from the firm's economic health (its ability efficiently to provide goods or services) (Adler, 1997:334). This means that a firm riddled with debt can suffer financial distress while remaining economically viable. Conversely, a financially distressed firm could also be economically unviable, in which case there would be no benefit from its entering reorganisation proceedings, which would simply erode its value. This issue is easily concealed in the rather nebulous area where law and economics intersect. As King (1975:306) unravels it from an economic point of view, "failure" means

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nothing more than an excess of average costs (in the historical sense) over average earnings. That is, while the potential return on investment of a firm may have exceeded the potential return of the alternative investments available, the realised return of that firm in question may have fallen far short of expectations. Failure in this regard does not necessarily mean operations have ceased or the firm has failed to meet its financial obligations (Everett & Watson, 1998:373). On this premise, some firms are failures in this economic context and yet continue to operate. A reorganisation process unable to distinguish the viability of a firm will certainly go against the primary economic function on insolvency. Yet in most reorganisation laws, the commencement standard concerns itself simply with the financial health of a firm and is unable to assess its economic viability.

The introduction of reorganisation has introduced economic suppressants that operate deliberately and with sufficient control and intent to rehabilitate a distressed firm and enable it to re-emerge as a going concern. The invisible hand is not able to override these safeguards, though Smith argued:

> *…in the race for wealth and honours and preferments… may run as hard as he can, and strain every nerve and every muscle, in order to outstrip all his competitors. But if he should justle or throw down any of them, the indulgence of the spectators is entirely at an end. It is a violation of fair play, which they cannot admit of.*

The removal of these controls therefore causes the "invisible hand to lose its grip" and leave economic forces vulnerable to abuse. Given reorganisation's formidable power, the door to reorganisation remains a vital safeguard against such exploitation. Yet without a commencement standard able to recognise and deter uneconomical firms, reorganisation can potentially result in economic harm. It would be insufficient to rely on the "impartial spectator" for moral reasoning. For that reason, our research aims to explore the viability of a firm at the commencement of proceedings.

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The commencement standard

The standard held for the commencement of insolvency proceedings is a fundamental component of an insolvency law's architecture. As the foundation upon which insolvency proceedings can be commenced, this standard identifies the debtors who may enter the protection and disciplinary mechanisms of the insolvency law. The most desirable features of the commencement standard would balance transparency and certainty to afford convenient, cost-effective and swift access to proceedings (United Nations Commission on International Trade Law, 2005). Should the standard be too rigid, it might deter both debtors and creditors from commencing with proceedings and in turn incur damaging costs caused by the delay. On the other hand, a standard too lenient would permit abuse by debtors not in financial distress, frustrate creditors or simply facilitate the avoidance of onerous obligations. Unfortunately, this balance is not easily achieved, and criteria are often too ambiguous or cumbersome, leading to litigation at the outset of proceedings that makes for an inefficient system (White, 1989).

The commencement standard will typically take a different form in the case of either liquidation or reorganisation proceedings, the latter being the focus of this study. The standard applied to reorganisation proceedings remains a highly complex instrument that is forced to continuously adapt to modern economic life. It must, in addition, consider social and political factors in its design (Blazy, Chopard, Fimayer & Guigou, 2011:136; International Monetary Fund, 1999). As a result, reorganisation has become a dynamic and creative field playing an increasingly important role in business (Girod & Karim, 2017:132). Almost ninety countries across the world have reformed their insolvency laws since World War II, and more than half of them have done so during the last decade (Gine & Love, 2010:1). Reorganisation is now more accessible than ever before. The door to reorganisation is, therefore, a critical component of reorganisation success and should only open for a debtor who satisfies a criterion that is intricately woven into the objective for which proceedings have been instituted.

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The commencement standard for liquidation (winding-up) proceedings may share some commonality with reorganisation as both are in pursuit of a collective response to a debtor's general default, however, there are some distinct differences that should be noted. Liquidation as commonly defined by statute as a process in which the debtor's assets are realised and the creditors' claims are met as far as possible concluding with the extinguishment of the firm's personality (Westbrook, 2010:126). The definition, therefore, does not preclude the preservation of the business, as the sale of the debtor's business as a going concern is certainly possible under liquidation (barring some jurisdictions). However, the disposition of liquidation does require that the assets be disposed of as quickly as possible only entertaining the survival of the business insofar as this is necessary for the liquidation process. The commencement standard, therefore, applied to liquidation is not concerned with the viability of the firm. The focus therefore of liquidation remains the realisation of assets and foreclosure of the legal entity as opposed to reorganisation which aims to preserve the business. The rigidity of the liquidation process may hinder its ability to preserve the firm as a going concern as effectively as reorganisation laws permit. Judicial approval is often needed to commence with liquidation proceedings, thereby hampering the speed and ease of access that is required by a firm typically seeking to preserve its operations. Liquidation will furthermore utilise more stringent insolvency tests in contrast to reorganisation procedures (United Nations Commission on International Trade Law, 2005, p. 53). There are certainly a number of differences to take note of between the commencement criteria applied to liquidation in contrast to reorganisation however our focus will now return to reorganisation.

To best understand the optimal timing of commencement of reorganisation, one can view it in relation to the "zone of insolvency", a period of financial distress[1] sandwiched between solvency and complete insolvency (Mattocks, 2008:1).

[1] Wruck (1990) defines financial distress as "a situation where cash flow is insufficient to cover current obligations. These obligations can include unpaid debts to suppliers and employees, actual or potential damages from litigation and missed principal or interest payments".

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During this period directors must take cognisance of the company's situation and begin to undertake remedial action as the director's duties are shifted from the company and its shareholders towards the creditors (Rajak, 2008; Ruben, 2010). However, initially this period is plagued by what is known as the "twilight zone". The twilight zone is when a firm enters into a phase of financial difficulty, and it is uncertain whether or not a formal insolvency will ensue or whether some form of a consensual solution can be achieved among the stakeholders. In the twilight zone is when any informal turnaround strategies are most likely to be attempted. However, by definition, it is also a period vulnerable to attack by creditors (INSOL International, 2013:95). Often this period is clouded by misjudgement, ignorance or even denial by directors (Rajak, 2008:58). There are a vast number of firms that lurk on the edge of the troubled financial waters that cascade into the zone of insolvency, and others that linger in the twilight zone for far too long. For the optimal timing of commencement of reorganisation, the commencement standard should prevent the unnecessary loitering in the twilight zone and begin proceedings sooner rather than later to avoid the further deterioration of value.

Emerging from the twilight zone, the debtor will either see their business break the chains of the zone of insolvency and regain financial viability from informal turnaround efforts or face the commencement of formal insolvency proceedings. Formal proceedings therefore would take some form of a reorganisation or liquidation procedure. Figure 1 is an adaption of the business life cycle demarcating where reorganisation is expected to commence within the zone of insolvency.

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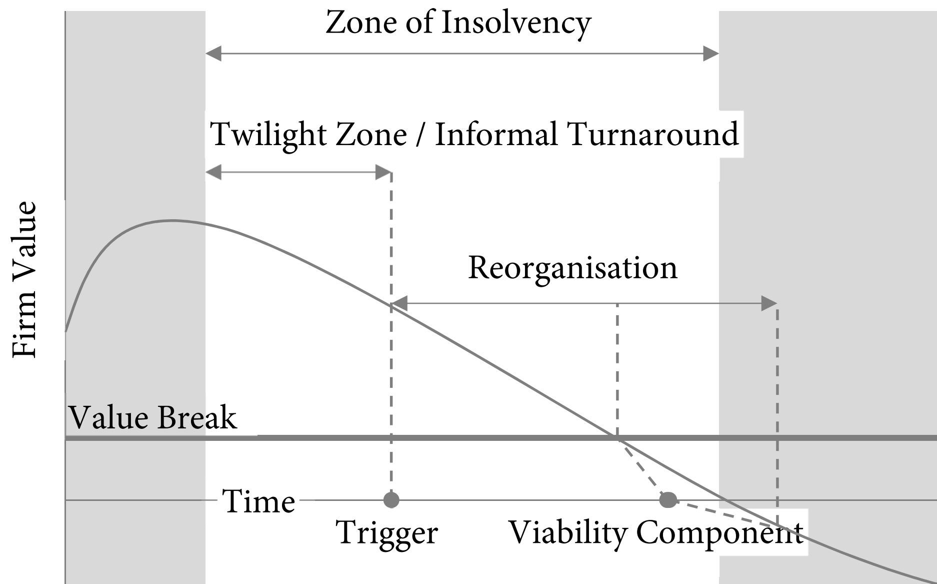

Figure 1 The commencement of reorganisation in relation to the zone of Insolvency (own compilation)

As observed in Figure 1, reorganisation is flanked by two requirements, firstly a trigger and subsequently a viability component; both will be explained further. Where the company's value falls below the sum of all creditors' claims (the "value break" point) is when economic insolvency occurs (Adriaanse & van der Rest, 2017:90; Drescher, 2013:48). The value break point demarcates the absolute latest point at which insolvency proceedings must be put into effect. Those creditors that are underwater (where the security will yield little or no value for their existing exposure) will suffer impairment past this point. Economic insolvency considers the insolvency costs that will further reduce the firm's value (Brealey, Myers & Allen, 2010:478; Frank & Goyal, 2011:177).

In order to work effectively, a useful commencement standard is required to consider a number of aspects. These aspects deal with items such as what triggers reorganisation, the viability standard, who may be permitted to apply for proceedings and what time limit is set for the commencement decision. Each of these generic structural features will be discussed briefly to give a holistic view of a commencement standard.

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Reorganisation triggers

An important aspect of every commencement standard is the clarity and extent to which it draws accurate and precise lines for the initiation of proceedings. Financial distress is an immediate trigger for any restructuring effort (Adriaanse & van der Rest, 2017:90). A legal insolvency trigger indicates the timely initiation of reorganisation yet is subject to serval restrictions regarding the general legal enforceability. The trigger does not commence proceedings immediately but should rather be viewed as a pre-qualification to lure distressed businesses into reorganisation. The trigger aims to encourage the commencement of proceedings as early as possible. Some jurisdictions impose an obligation on debtors to commence proceedings if they meet the requirements of a trigger by threatening directors with personal liability for failure to commence a case timeously after the advent of insolvency (United Nations Commission on International Trade Law, 2005:50; Wessels, Markell, Kilborn, American College of Bankruptcy & International Insolvency Institute, 2009:23). Bibeault (1999:82) notes that perhaps the most important factor in the success of reorganisation is early detection and commencement of proceedings. The reasons for an early filing may be either to preserve equity from additional losses or maximise creditor claims (Burdette, 2004:410).

The underlying logic of reorganisation is based on the notion that "sooner rather than later" will improve the likelihood of being successfully rehabilitated. However, reorganisation can be initiated too early, in that a common-pool problem exists. Jackson (2001:203) argues that premature commencement may prevent negotiations outside insolvency from taking place. Informal workouts are often more effective in resolving distress, typically leaving formal proceedings as a secondary option (Finch, 2009:781; Kastrinou & Jacobs, 2016:1). If healthy firms were permitted to commence proceedings too early, they could use reorganisation to simply seek unwarranted protection from creditors. Distressed firms, on the other hand, if forced to reorganise prematurely by secured creditors seeking quick repayment, may incur unnecessary legal and administrative expenses that could have been avoided by an informal workout (Pomerleano &

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Shaw, 2005:319). Therefore, optimal timing relies on various incentives to trigger proceedings for a firm in financial distress.

Nevertheless, it is more likely that reorganisation will commence too late rather than too early (Cepec & Kovac, 2016:82; Harner & Griffin, 2014:251; Westbrook, 2010:134). For that reason, the fewer hurdles there are, the greater the likelihood of a case going forward in a timely fashion. The most commonly used insolvency tests are classified into the following three triggers.

Commercial insolvency

Commercial insolvency (also known as illiquidity, cash flow test or general cessation of payments test) is one of the most widely used triggers for reorganisation. Commercial insolvency is a flow-based indicator that constitutes an insolvency trigger when the company is unable to pay obligations that are due (Drescher, 2013:50). Sometimes referred to as a "bright-line test", it decisively grants grounds for commencement, rather than inquiries into a debtor's intention or desire or alleged misconduct (Westbrook, 2010:66). Indicators of a firm's illiquidity may consist of its failure to pay salaries, employee benefits, rent, taxes, trade accounts payable and other essential business-related costs. This trigger is designed to activate reorganisation sufficiently early in the period of the firm's financial distress to reduce dissipation of assets (McCormack, Keay, Brown & Dahlgreen, 2016:248). The test is ideal in that it is clear and relatively fair to administer. Directors are obliged to file if they fail to pay debts when they become due. For creditors, the trigger affords them the right to initiate proceedings when repayment is not forthcoming. Creditors thus circumvent confrontation with the debtor over access to "confidential" information and avoid the recruitment of valuation experts to affirm whether or not the debtor's assets exceed its debts (Westbrook, 2010:65). Under this approach, illiquidity is technically when the firm nears economic insolvency, as additional financial means to avoid illiquidity would otherwise be obtainable. The asymmetry of information between stakeholders can, however, conceal economic insolvency by accessing new lines of credit or asset sales (Cornett, McNutt, Strahan & Tehranian, 2011:301).

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Therefore, the commercial insolvency trigger usually fails to incentivise commencement before the occurrence of economic insolvency.

Factual insolvency

Factual insolvency or over-indebtedness is a stock-based trigger for commencing proceedings when an excess of liabilities over assets signals financial distress. This trigger typically uses the balance sheet test as a means of assessment. Over-indebtedness generally marks the point beyond economic insolvency. Directors are typically mandated to file for insolvency when in over-indebtedness, while for creditors it is optional (United Nations Commission on International Trade Law, 2005:50). However, for creditors, this trigger relies on information under the control of the debtor. A practical limitation of over-indebtedness is that it is seldom possible for creditors to ascertain the exact position of financial distress in order to put forth an application. In addition, it may give a misleading indication of the debtor's financial situation, since balance-sheet values can be evaluated either by using going-concern values or liquidation values (European Law Institute, 2017:199). Heaton (2006:992) remarks that this choice of valuation is typically tricky, as in most litigated insolvency tests an entity, at the test date, is "midway between a prosperous going concern and a dead enterprise". The choice between a going concern or deathbed valuation influences whether the firm is assumed to be sold as a going concern or by piecemeal liquidation. Moreover, this test may be prone to delays and data accuracy (Pomerleano & Shaw, 2005:292). Audited financials may be required to determine the fair market value of the business and therefore take time to compile and sign off (Laitinen, 2011:179). Records not adequately maintained or readily available may further aggravate this issue. A balance sheet test is also considered backwards-looking, reflecting historical developments which might have already become dangerous for the firm and triggering proceedings too late (Spindler, 2006:347).

Prospective illiquidity

Threatening or prospective illiquidity is a trigger that estimates the company's future ability to pay due obligations (Drescher, 2013:50). The estimates are calculated on the basis of a financial forecast of expected cash inflows and

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outflows over a span of time covering either short periods or cases relating to significantly longer terms, depending on the nature of the obligation to be met. This trigger combines the cash-flow test for commercial insolvency with a balance sheet test, thereby making sure that long-term commitments are adequately covered by existing assets (Schön, 2006:193). Therefore, it is a forward-looking test that recognises that it is not enough to be able to meet current obligations; the firm must be able to meet its future obligations as well (Heaton, 2006:989). Prospective illiquidity remains a petition right exclusively available for the debtor. While it is usually not obligatory to file, directors may be required to disclose the firm's financial situation to affected parties[2]. The assessment of prospective illiquidity involves a high degree of subjectivity and is therefore to a certain extent controllable (Drescher, 2013:50). Liquidity variables are notorious for fixating on short-term obligations, thereby relying on exogenous factors playing a more significant role (Balcaen & Ooghe, 2006:84; Wu, Gaunt & Gray, 2010:38). This trigger aims to start proceedings at an earlier point, to enhance the chances of a turnaround success or to preserve the assets of the debtor for subsequent liquidation. It furthermore extends directors' responsibilities by obliging them to pronounce their view of the firm's liquidity and business situation before the distribution of funds to shareholders. This would, in essence, result in a shifting of risk to its future business operations from the shareholders to the creditors (Schön, 2006:194). Therefore, prospective illiquidity leads to an initiation of proceedings before the incident of economic insolvency.

[2] The South African Companies Act 71 of 2008 mandates under section 129 (7) that, if the board of directors have reasonable grounds to believe that the company is financially distressed, but decides not to adopt a resolution for the voluntary initiation of business rescue proceedings in terms of section 129(1) of the Companies Act 2008, the board must distribute a written notice to all affected parties detailing the reasons for not initiating business rescue proceedings while it fulfils the definition of "financially distressed" in section 128(1)(f). See Appendix 1 – Sections 128, 129 & 131 of Chapter 6 of the Companies Act 71 of 2008.

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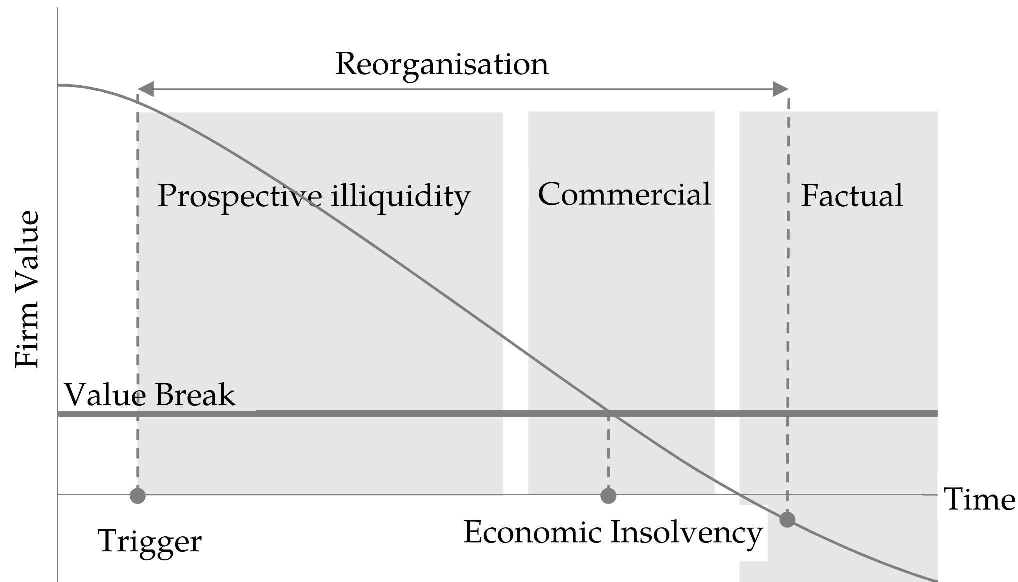

Figure 2 Comparison of trigger timings in reorganisation (own compilation)

The trigger mechanism attached to reorganisation is therefore significant, in that it directly influences when proceedings can begin. Figure 2 positions the three triggers discussed above relative to the period of reorganisation in a perfect market. Incentivising directors to pull the trigger sooner will be partly influenced by the trigger points available. Typically, a debtor-friendly regime will favour earlier trigger mechanisms, as they tend to rely more on the discretion of directors. However, as Dari-Mattiacci and Geest (2009:382) advocate, the threat of punishment ("a stick") is more powerful than the promise of reward ("a carrot") because, when parties comply, the punishment is not carried out and thus can be reiterated all over again (the multiplication effect), whereas rewards will have to be paid (by someone) and thus are consumed with use. Prospective triggers should, therefore, be reinforced by mandatory action by directors when creditors' interests are at risk (European Law Institute, 2017:166).

An insolvency law may adopt a single trigger or multiple triggers in combination. A single trigger may often be too narrow and exclude distressed firms that might benefit from proceedings. Therefore, reorganisation typically attaches two or

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more triggers, making the procedure easier to access. Jackson (2001:199) argues that a trigger alone should not be sufficient to commence with proceedings. Jackson considers the example of a start-up company undertaking significant R&D; such a situation would typically require debt that might make the firm vulnerable to a stock takeover using insolvency proceedings, despite the absence of the common pool problem. Kahl (2002:136) points out that financial distress is an imperfect indicator of economic viability. Pulling the trigger for reorganisation should not automatically activate a moratorium, as the ability of the firm to continue trading and be successfully reorganised must first be established (Rajak & Henning, 1999:267). That leads us to the second requirement, reorganisation viability.

Reorganisation viability

As shown in Figure 1, the period for reorganisation is flanked by two requirements, firstly a trigger and subsequently a viability component. While the trigger attempts to encourage early filing, the viability component prevents economically unviable firms from commencing with proceedings. Garrido (2012:7) considers "the most important precondition for a successful debt restructuring is the viability of the debtor's business". The viability component embraces the assessment of an organisation's economic viability, estimates the general probability level of a going-concern in financial distress, in particular with respect to the proceedings yet to unfold (Drescher, 2013:340). King (1975:303) defines this requirement as the "emergence of the debtor from reorganization in a solvent condition and with reasonable prospects of financial stability and success". However, the assessed viability is never a guarantee of success, but rather an offer of a "reasonable prospect" of it (Winikka, 2006:733). The reality is that forecasting viability beyond a very short space of time is often limited, and a simple, realistic and logical stance should be applied (Adriaanse & van der Rest, 2017:157).

Firms will approach reorganisation in various conditions of distress, but they are generally likely to leave it too late (Adriaanse, 2005:73). If the diagnosis is too severe or the business is deemed economically unviable, liquidation is then advised, thereby preventing "dead on arrival" debtors from languishing in

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reorganisation to no good end (McCormack *et al.*, 2016:213). An early liquidation can preserve the residual value of the firm, which ultimately accrues to shareholders at the end of the proceedings (Altman & Hotchkiss, 2006:8). For creditors, this is generally considered preferable, as an earlier filing reduces the impairment risk of their claims as well. Simply put, attempting a turnaround that merely delays the inevitable demise of a business does more harm than good!

In the event that the commencement standard fails to screen out unviable firms, one of two errors can occur. Under the null hypothesis that a distressed firm is economically unviable, a Type I error arises when it is allowed to reorganise, and a Type II error occurs when a viable firm is liquidated (Balcaen & Ooghe, 2006:65; Fisher & Martel, 1995:116; White, 1994). Fisher and Martel (2004) identify two methods of measuring these errors. First, an *ex post* measure results from using *observed* outcomes for firms in reorganisation and indicates the probability of a Type I error. Secondly, an *ex ante* measure is constructed using *predicted* outcomes from an econometric model of the result of the reorganisation process. From the perspective of investors, creditors and other stakeholders, it is crucial for the commencement standard to be based on an *ex ante* method and predict the outcome following reorganisation as well as possible (Barniv, Agarwal & Leach, 2002:498; Drescher, 2013:33).

Viability, as part of the commencement standard should therefore be defined in terms of the predicted probability of success in reorganisation at the time of commencement (Fisher & Martel, 2004:152). The *ex-ante* method hinges heavily on timely initiation. Without prompt initiation of insolvency proceedings, the financial and business deterioration of firms filing for insolvency will be so severe that the issue of *ex-post* efficient insolvency proceeding might actually become irrelevant (Cepec & Kovac, 2016:82). The viability component may extend beyond economic insolvency, as long as it yields a return greater than in liquidation. To effect timely initiation, the commencement standard would include some measure of forecasted revenues or profits prior to reorganisation; unfortunately, there are various difficulties in doing this that are discussed later in Chapter 3. Alternatively, one could look at the components in the business that are ultimately responsible for generating that income. This measure of viability is

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used in development of the Likelihood of Liquidation Framework proposed later in this study.

The viability component is clearly a fundamental part of the commencement standard. However, it remains one of the most challenging instruments for insolvency law to define (Rasmussen & Skeel Jr, 1995:89; Roe, 1983:534). One possible reason may be because it is a phrase that is neither a legal nor an accounting term of art. The concept relies so heavily on business intuition that it remains inextricably attached to that domain. Professor Arnold (1937:230) vibrantly described the intertwining of law and economics in reorganisation as "celebrated by one of the wildest ideological orgies in intellectual history". An estimate of the viability of a firm that seeks turnaround support in reorganisation must, therefore, consider not only the legal and financial conditions but also the business aspects in its assessment. Often courts require the "business judgement rule" to assess viability from a reasonable objective business perspective (Spindler, 2006:349). The business judgement rule presumes that the board acted on an informed basis and in good faith, and that their actions were in the best interests of the firm. However, this rule is known as a "safe harbour" as it shields directors form personal liability (United Nations Commission on International Trade Law, 2013:18).

The conceptualised sources of viability remain rooted in the foundational work of turnaround literature. Trahms, Ndofor and Sirmon (2013:1289) state that the cause of distress should be a primary concern when establishing the economic viability of the firm. Distress may be due to external factors, internal factors, or a combination of both. Compiling several variables together can offer some insight into viability. Variables such as profitability, leverage, liquidity, cash flow, and size are found to be significant (Ratner, Stein & Weitnauer, 2009:34). However, non-financial variables such as macroeconomic conditions, industry, age, competencies of management, submission lags, audit reports and prior payment behaviour may also supply crucial incremental information (Keasey & Watson, 1987; Winikka, 2006). Reduced-form equation, however, stands to reduce insights into the decision-making process that takes place within firms and in markets prone to volatility and, therefore, may fail to predict what will happen in

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a crisis (Pomerleano & Shaw, 2005:257). Balcaen and Ooghe (2006:79) argue that the clear majority of statistical-failure prediction models are based on an "initial battery" of variables arbitrarily chosen on the basis of their popularity in the literature.

Viability is therefore not easy to measure, and the balance between the complexity and simplicity of the standard is tested at this point. If the threshold level of evidence required is too high, then this will discourage filing until it is too late for effective rescue to be undertaken. If too low, this will invite abuse or allow non-viable firms to commence with proceedings. Reorganisation viability requires, above all, that the emerging firm be a healthy one. It cannot consider the candour of creditors to come, nor the turnaround strategies to be pursued. For commencement purposes, viability should consider only the known variables proven prima facie to exist at the time of filing. In some jurisdictions, the viability requirement may be omitted from the commencement standard, only to be proved in more factual form later in the proceedings (for example in the Australian voluntary arrangement and the US Chapter 11). Feasibility of the reorganisation plan is, however, a far more detailed analysis of viability and is not covered in this study (Pretorius & Rosslyn-Smith, 2014:128).

Commencement gateway

Reorganisation is entwined into the fabric of a country's insolvency system. The process must coexist with competing insolvency procedures to ensure its effective and efficient use (Keay, 1999; Omar, 2008:85; Westbrook, 2010:128). The method of integrating reorganisation may differ, as some countries may adopt a unitary approach, with an "observation period" for review of the business prospects before deciding on whether to liquidate or rescue the firm (United Nations Commission on International Trade Law, 2005:19). Alternatively, if reorganisation is detached, then the ability to convert proceedings may be made available. Jurisdictions may provide a single gateway for a financially distressed firm, or a dual point of entry. The commencement standard should consider, in relation to the whole insolvency system, the various gateways to initiating reorganisation. The gateways typically offered allow the debtor, either at its own

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initiative or under compulsion from another party, the grounds to commence proceedings (Finch, 2009:205). Each involves its own control procedures and may specify varying constraints on the trigger and viability requirements. These constraints take note of asymmetric information about the debtor's affairs and the options available for maximising the value of the debtor's estate (Mumford, 2003:57). This, once again, is heavily dependent on whether the disposition of the regime is debtor friendly or creditor friendly.

A commencement standard, as we now know, looks to encourage early filing of viable firms in order to preserve as much value as possible for the benefit of the shareholders and creditors alike. In line with this objective, the gateway to commencing proceedings should afford the right parties the means to initiate proceedings in a timely fashion. One of the primary approaches is a voluntary application by the debtor, by either statute or a judicial decision (Rajak, 2013:80). Access granted automatically through statute is fast and straightforward, but it opens the risk of being abused by debtors and therefore resulting in less confidence and support from creditors. Furthermore, exclusive moratorium periods make it almost impossible to negotiate with a debtor. Reorganisation then in effect becomes a weapon of delay, with the time value of money able to bring creditors to their knees, forcing them to capitulate (Weiss & Wruck, 1998:72). However, if voluntary access is contingent on court approval, then the court can ensure the commencement standard is administered correctly, though this will probably come at the cost of delaying proceedings. Furthermore, if the burden of proof placed on a debtor is too strenuous, it may discourage filing until it is too late for effective rescue to be undertaken (Finch, 2009:577).

Not all reorganisation proceedings offer creditors or affected parties the ability to commence proceedings (United Nations Commission on International Trade Law, 2005:54). For example, the Dutch suspension-of-payments procedure (*surseance van betaling*) can only be initiated by the debtor (Veder, Wessels, de Jong & Dijkhuizen, 2014). However, if this happens, the commencement standard is likely to be adapted accordingly. A request by a creditor or affected party will be regarded as a compulsory application. In a sense, this forces the debtor into reorganisation. To succeed, the application would typically need to

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provide evidence that the trigger and viability requirements have been met. Such information will undoubtedly be difficult for creditors to ascertain, as there exists an asymmetry of information (Warren, 1993:369). Therefore, the gateway provided for by compulsory applications is usually subject to varying requirements. Creditors in general, however, are not necessarily interested in maximising the viability of the firm, and are typically geared towards obtaining the greatest value as early as possible (Roe, 1983:542). Consequently, if there is sufficient uncertainty about the firm's viability, the best course for the creditors may be to postpone any insolvency decision and wait for more information about the firm's viability (Kahl, 2002:136).

Gap period for commencement decision

The time between application and commencement amounts to a central issue for the commencement standard. After the filing for reorganisation proceedings, a "gap period" may exist prior to the court's ruling thereupon (that is, prior to the opening of a proceeding). In some jurisdictions, there is no time lapse and proceedings are immediately initiated by an application or board resolution (for example in South Africa and Australia). Opening proceedings in other jurisdictions (such as those in Japan and Germany), may, however, be reliant on additional verification of the reorganisation triggers and a preliminary assessment of reorganisation viability. These regimes may be described as having "discretionary access" (Westbrook, 2010:129).

Judicial approval is historically the standard. Though it increases costs by authenticating the requirements for commencement, it in turn reduces abuse of reorganisation laws, and firms with honourable intentions are more likely to be admitted (Burdette, 2004:410; Wood, 2007:199). Although the benefits of this preliminary screening are clear, it inevitably amounts to a stalling period that can have detrimental effects (Weiss & Wruck, 1998:72). During this time, the firm will notably continue to decline, allowing the erosion of value and subjecting creditors to the risk of impairment of their claims before they get the opportunity to protect them (Evans, 2003:116). After the firm makes a public declaration of a state of insolvency, it remains vulnerable during this time (Westbrook, 2010:133).

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As a general rule, this stage should be kept to a minimum or possibly even omitted (Pomerleano & Shaw, 2005:320). Current trends in modern reorganisation laws seem to be favouring automatic entry for distressed firms to avoid costly delays (Paulus, Potamitis, Rokas & Tirado, 2015:12).

When the commencement standard includes an approval step, it concerns no so much who decides to commence proceedings but rather what that authority is required to do in order to approve an application (United Nations Commission on International Trade Law, 2005:58). If the processes of verification are too onerous, then this would inevitably lead to procrastination. A process that places too heavy a burden on the authority, both as to the seriousness of the financial condition of the firm, and proof thereof, will notably frustrate debtors and possibly deter them. Invariably, speed will be one of the most critical factors in saving a viable business, with unnecessary delays defeating the very purpose of the rescue provisions (Burdette, 2004:420). If an institutional authority is given the task of assessing the reorganisation viability, then one should also consider the authority's capacity or expertise to undertake complex investigations requiring considerable commercial and business expertise. The expenses related to gathering the necessary information can be discouraging, in particular to smaller firms (Evans, 2003:119).

Japan's Civil Rehabilitation Proceedings ("*Minji Saisei*"), for example, involve discretionary access, during which period the court examines the grounds for commencement of proceedings. The duration of the gap period varies from case to case, but the national average time is less than one month and is even shorter in commercial centres like Tokyo - about two weeks (Tomasic, 2006:29). In addition, an injunction order is required to obtain a stay of creditor enforcement for this gap period. This injunction order expires at the commencement of the proceedings, when creditor enforcement is automatically stayed (International Financial Law Review, 2017:25).

While the United Kingdom's (UK's) new Administration and Corporate Voluntary Arrangement ("CVA") provides an automatic entry, it is nevertheless subject to conditions (Kastrinou & Jacobs, 2016:7; Westbrook, 2010:131). While

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the timing of commencement can differ dramatically across jurisdictions, all jurisdictions at least accept the theoretical need to enhance timely intervention and efficiency in the insolvency process (Wessels *et al.*, 2009:15).

Some jurisdictions distinguish an application brought by a debtor or a creditor. In the case of South Africa, proceedings may commence automatically if initiated by the debtor. However, in the case of a creditor application, the process is initiated exogenously, requiring additional verification (section 131 South Africa, 2008). This aims to avoid abuse by creditors or other affected parties by requiring court approval. The time-lapse encumbered by the creditor's application would present the debtor with various recourse opportunities, including consenting to the application or disputing the applicant's claim as to its financial position, and requesting the commencement of different proceedings – though this, it could be argued, could be a two-edged sword.

Kilborn (2016:598) considers the drawbacks of discretionary access, indicating that while the authentication of an application may yield some benefits, the burden of time must weigh heavily. Predicting the likelihood of commencement approval introduces further uncertainty at a very crucial juncture for the financially distressed firm. As the World Bank (2014) notes, "[s]ome danger of moral hazard . . . will be present in any system, but these slippages should not overshadow the substantial benefits of providing relief in the overwhelming majority of cases. Care should be taken to avoid sacrificing the great good of such a system simply because perfection cannot be assured." Therefore, fixing time limits can ensure both certainty and predictability of the decision-making and the efficient conduct of the proceedings without delay (United Nations Commission on International Trade Law, 2005:58). The requirement of exogenous approval, however, becomes redundant if the commencement standard can rely solely on both party's good faith.

Good faith test

Possibly one of the most complex yet critical components of the commencement standard is ascertaining the purpose for which the distressed firm's director's is intent on using reorganisation (Jackson, 2001:199). Exploring the *mens rea*

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requirement unravels the debtor's intentions and state of mind at commencement (Westbrook, 2006). The desire to differentiate between "honest" and "dishonest" filings is important in ensuring an effective and fair reorganisation process. The "good faith" test allows for meticulous scrutiny of the director's use of reorganisation and extends beyond the trigger and viability requirements. This test examines whether a debtor is attempting to unreasonably deter and harass creditors or to effect a speedy, efficient reorganisation on a feasible basis (Keach, 2005). Therefore, part of a good commencement standard is the identification of those values to be pursued in a rescue. The Council of Europe (Kilborn, 2010:28) cautions that this test be based "on a practical level", because of its inherent subjectivity and the difficulty of identifying reasonable core criteria for "good faith". Venditto (1993:1592) identifies several actions the test aims to preclude from proceedings, these being (1) cases filed to obtain the benefits of the automatic stay when an injunction or stay pending appeal is unavailable in a litigation; (2) cases filed solely to prevent a foreclosure by a secured creditor; and (3) "new debtor syndrome": cases where property is transferred to a newly formed or revitalised entity on the eve of a reorganisation filing. While "bad faith" filings may not be limited to Venditto's list, it does highlight the importance of addressing these aspects on the doorstep of proceedings.

The good faith test is administered in various ways across jurisdictions. However, the rationale remains the same: to ascertain whether the debtor is trying to abuse the reorganisation process and invoke the automatic stay for improper purposes. An explicit requirement of "good faith" appears in the laws in France, Greece, and Cyprus (McCormack *et al.*, 2016:297). The Dutch law's rigorous application of good faith has barred the door to more than 10% of debtors (Kilborn, 2016:590). The US uses the good faith test in a broader sense, ensuring that the hardships imposed on creditors are justified by the fulfilment of the statutory objectives. The US Chapter 11 somewhat incorporates the viability requirement in the good faith test, but it has been criticised as a standard that has eluded judicial definition (Altman & Hotchkiss, 2006:59; Venditto, 1993).

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A good faith enquiry, however, is fact-specific and costly (Jackson, 2001:196). The intention of the debtor can be difficult to unravel, as there will certainly be a blend of motives at play. Jackson (2001) highlights the existence of "mixed-motive" situations, where a value-maximising use of reorganisation and a selfish goal of changing rights are both present. The commencement standard should, then, instead concern itself with the more obvious violations of the good faith test and not be perplexed by idiosyncrasies (Eow, 2006:332). For the most part, distressed scenarios often entail several supporting elements of good faith, including the evidence of insolvency, poor earnings or significant litigation exposure.

The commencement standard for business rescue

The South African reorganisation procedure is legislated by the Companies Act 71 of 2008[3] (the Act), which was promulgated in 2009 and has been effective since 1 May 2011. It abolished the extant procedure for reorganisation (judicial management) for a unique legal process named "business rescue" (Calitz & Freebody, 2016:287). The procedure introduced a number of modern reorganisation features, conceding to the view that a business has more substantial value as a going concern over its formidable foreclosure (Smits, 1999:83). Rajak and Henning (1999:267) reiterate that "the debtor is nowadays seen less and less as a commercial outcast and more and more as a potential business unit to be nursed back to financial health, so as once more to resume its place in the market for the benefit of both past and future creditors." Despite preserving a creditor-friendly position, where the wishes of creditors carry a lot of weight, business rescue is far more in favour of the debtor company than its predecessor (Burdette & Calitz, 2015:440; Levenstein, 2016:441). Pretorius (2016) describes this this as a debtor-friendly fallacy. This is a trend that seems to support the World Bank's view of convergence, with pro-creditor systems

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[3] Extracts of the relevant sections from the Companies Act 71 of 2008 have been provided in Appendix 1 – Sections 128, 129 & 131 of Chapter 6 of the Companies Act 71 of 2008.

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becoming more debtor-friendly and pro-debtor systems tilting back toward stronger creditor rights (Pomerleano & Shaw, 2005:308).

Business rescue, therefore, emerged from within a highly conservative, creditor-friendly system of insolvency (Boraine, Evans, Roestoff & Steyn, 2015:62). However, despite the short period since its adoption, the formation of a rescue culture is already beginning to form (Levenstein, 2016:23). As Burdette (2011:132) points out, a debtor-friendly position is far more conducive to recovery efforts, and therefore a paradigm shift was required. The conversion is aptly described by Mongalo (2014) in an opening speech at a business rescue colloquium:

> *At the outset, no one can dispute the reality that the time had come in South Africa at the time of the reform of business rescue for the strictly creditor-friendly commencement procedures of judicial management proceedings to be replaced by a system which accommodates the voluntary access to business rescue protection in line with the debtor-friendly system of business rescue already in place somewhere else within the Anglo-American and Commonwealth jurisdictions.*

Commencing proceedings under business rescue therefore mirrors a modern approach, calling for early intervention and maintaining a clear continuation bias (Morrison, 2007; Rajak & Henning, 1999; Westbrook, 2010:129). The out-of-court procedure makes for easy access and reduced costs (Boraine & Wyk, 2015:239; Burdette, 2004:410), while the duel gateway enables convenient access for the debtor as well (Joubert, 2013:553). The commencement standard for business rescue is outlined in Figure 3. Business rescue is triggered at the onset of "financial distress", which is defined in section 128(1)(f) of the Act as:

(i) that the company appears to be reasonably unlikely to be able to pay all of its debts as they become due and payable within the immediately ensuing six months (Prospective illiquidity / commercial insolvency); or

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(ii) it appears to be reasonably likely that the company will become insolvent within the immediately ensuing six months (Factual insolvency).

The trigger mechanism for business rescue therefore supports the view that at the first signs of financial distress, a firm is afforded the ability to initiate proceedings. These trigger tests aim to activate reorganisation sufficiently early in the period of the firm's financial distress to reduce dissipation of assets. The tests are ideal in that they are clear and relatively fair to administer. In Firstrand Bank Limited v Wayrail Investments (Pty) Ltd (2013) the Court concluded that the word "solvent", where it appears in Part G and in item 9 of Schedule 5 of the 2008 Act, means both factual or actual solvency and commercial solvency in the sense that a company must currently or presently be able to discharge its liabilities as and when they fall due in the ordinary course of business. The prospective illiquidity test under section 128(1)(f)(i) extends directors' responsibilities by obliging them to pronounce their view of the firm's liquidity and business situation before the distribution of funds to shareholders. This would, in essence, result in a shift of risk to its future business operations from the shareholders to the creditors (Schön, 2006:194). This obligation extends itself further in section 129(7), that should the firm believe itself to be financially distressed but have chosen not to initiate proceedings, then the board must deliver a written notice to each affected person stating why it has taken such a decision. The "stick", as Cepec and Kovac (2016) would put it, provided by section 129(7) is intended to prevent the reckless trading of a company under the disguise of limited open information. Whether this has been the reality still needs to be determined.

Developments in South African case law have questioned whether a company can be said to be "financially distressed" if it is already unable to pay its debts or is already insolvent. In Tyre Corporation Cape Town (Pty) Ltd and Others v GT Logistics (Pty) Ltd and Others (2016), it was held that existing factual insolvency may constitute "financial distress". It was however emphasised that this entry requirement relied (possibly more so) on the viability test of reasonable prospect for rescuing the company to be present. The Court reiterated that section 131(4)(a)(iii) gives the court the authority to grant a business rescue order on the

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basis that it is just and equitable to do so for financial reasons, whether or not the company is "financially distressed".

Business rescue grants two gateways for initiating proceedings; namely, voluntarily – when the board of directors of a company pass a resolution; or compulsorily – when an application is made to the court by an affected person. Voluntary initiation is outlined in section 129 of the Act and allows the debtor the means to commence with proceedings. The process requires a board resolution that acknowledges there are reasonable grounds to believe that the company is financially distressed and there appears to be a reasonable prospect of success. Once the documentation is filed with the local regulating authority (Companies and Intellectual Property Commission - "CIPC") then automatic access is given to the debtor. This seems to be in line with modern trends that favour automatic entry to cut out the costly delays to the business (Paulus *et al.*, 2015:12).

The alternate gateway is compulsory initiation that appears in section 131 of the Act. This entry method is subject to judicial approval on application by an affected person. The application must provide the court with sufficient information to determine under section 131(4)(a) if:

(i) the company is financially distressed;
(ii) the company has failed to pay over any amount in terms of an obligation under or in terms of a public regulation, or contract, with respect to employment-related matters; or
(iii) it is otherwise just and equitable to do so for financial reasons, and there is a reasonable prospect for rescuing the company;

The decision to commence is therefore at the discretion of the court and reliant on the information provided by the applicant. As Evans (2003:119) points out, the expenses related to gathering the necessary information can be discouraging as a result of its asymmetric nature. Trade creditors are likely to spot signs of distress in their customers but are often limited financially to invoke a compulsory application (Baird, 1991). The court is also not bound to the defined reorganisation trigger, as section 131(4)(a)(iii) gives the court the authority to

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grant a business rescue order if it is just and equitable to do so for financial reasons, whether or not the company is "financially distressed" (Meskin, Galgut, Magid, Kunst, Boraine & Burdette, 2017:18.14).

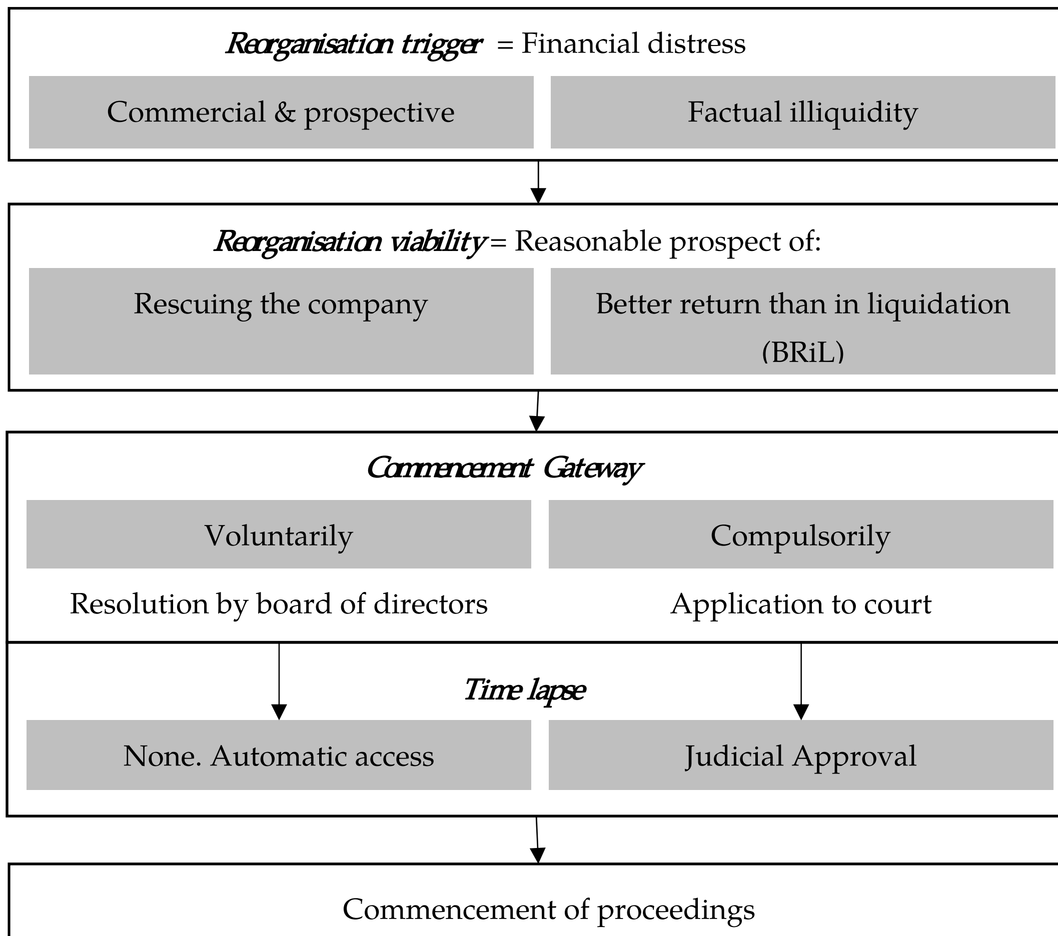

Figure 3 An outline of the commencement standard for business rescue in South Africa (own compilation)

The viability component for business rescue is known as "reasonable prospect", the centrepiece of this study. The term is considered to be without any concrete judicial definition (Joubert, 2013; Levenstein, 2016:308) though it plays such a critical role in filtering non-economic firms (Garrido, 2012:7). The complexity of the term has harassed practitioners, creditors and the courts and has proved to be an Achilles heel of the regime thus far. It is important to note that reasonable

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prospect is referred to throughout the business rescue process, implying it has an evolving definition. For our purposes, the meaning of the words "reasonable prospect" refers to the decision to commence proceedings. The concept of a reasonable prospect is expanded upon throughout this study.

Commencement standards in major jurisdictions

The generic structural features of a commencement standard that have been discussed above will take various forms across the world. Table 2 provides a summarised comparison of the main structural features of commencement standards from 10 countries, including South Africa. The countries were chosen on the maturity of their reorganisation laws, accessibility of information and diversity. The US, UK, Canada and Australia were selected on account of certain unique features and characteristics relevant to the aim of this thesis as well as the availability of English literature supporting their legal developments. The inclusion of German and Dutch systems gives insight into the civil law jurisdictions who are making significant strides in insolvency law. Finally, the comparison chose to include Japan and Singapore to extend the comparison to two of the most developed insolvency regimes in the Asian region. After reviewing the composition of commencement standards across various jurisdictions, one may observe some interesting differences, the most prominent of which will be briefly discussed.

The US reorganisation process contained in Chapter 11 of the Bankruptcy Code does not require proof of reorganisation viability to commence with proceedings. The test for viability is instead shifted after commencement prior to the first meeting of creditors, where the US Trustee holds an "initial debtor interview" aimed at investigating the debtor's viability (section 586 US Bankruptcy Code). The Dutch suspension of payments procedure in a similar way does not mandate the need to prove viability to commence with proceedings (Veder *et al.*, 2014:5). The Dutch legislator, though, has been working on various pieces of legislation aimed at the recalibration of insolvency law and driven by the principle of "continuity" of companies. The more relevant of the three proposed Acts is the Continuity of Companies III (*Wet continuïteit ondernemingen III* (WCO III))

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which involves forcing important suppliers to continue to make supplies in a bankruptcy (Gispen & Gangelen, 2017).

The French *redressement judiciaire* commencement relies on court approval and involves a gap period to conduct a judicial inquiry into the reorganisation viability of the firm. Improvements in legislation have provided a drastic reduction in the gap period, resulting in some occasions where there is an almost immediate transfer of the debtor to the liquidation (Westbrook, 2010:128). The French procedure also places a time limit on the reorganisation trigger. The debtor must file for reorganisation no later than 45 days from the date on which it becomes insolvent (Henrot, Talbourdet & Gumpelson, 2016).

The German main insolvency proceeding follows a uniform insolvency system and makes no distinction between reorganisation and liquidation proceedings. Once initiated, the overriding purpose is the collective satisfaction of the debtor's creditors either by liquidation or by reorganisation of the firm (The International Insolvency Institute, 2017:193). A new procedure aimed at supporting the restructuring processes is the Protective Shield Proceedings (*Schutzschirmverfahren*). The commencement standard for this special procedure relies on imminent illiquidity and/or over-indebtedness but cannot be initiated if the firm is illiquid at the time of the application (Deloitte Touche Tohmatsu Limited, 2017:27).

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Table 2 A comparison of commencement standards in major jurisdictions (compilation from various sources)

Jurisdiction	Reorganisation Trigger	Reorganisation Viability	Gateways
South Africa Business Rescue Companies Act 71 of 2008 Out of court (via business rescue practitioner) Creditor friendly	Factual insolvency Commercial insolvency / Prospective illiquidity	Reasonable prospect of success, or a better return than in liquidation.	Dual Debtor (voluntary - board resolution) Creditors or affected parties (compulsory application to court)
United States Reorganization U.S. Bankruptcy Code Court driven Very debtor-friendly Debtor-in-possession	None. Insolvency of any kind is not required.	None.	Single (via court) Debtor (voluntary petition) Creditors (involuntary petition)
Canada			

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CCAA proceedings Companies' Creditors Arrangement Act (CCAA) Court driven Creditor friendly	Factual insolvency Commercial insolvency Debts in excess of CAN$5million	Reorganisation would be favourable to the debtor company's creditors A reasonable likelihood of continuing as a going concern and can develop an acceptable reorganisation plan. The debtor company does not have an improper motive for making the application.	Single (via court) Debtor Creditors
United Kingdom			
Administration Insolvency Act 1986 Court driven & out-of-court (via an administrator) Creditor friendly	Commercial Insolvency Factual Insolvency Court judgment is unsatisfied	Reasonably likely to achieve: The rescue as a going concern; or a better result for the creditors as a whole; or the realisation of assets to make a distribution to secured or preferential creditors.	Dual Debtor Creditors (affected party with a floating charge for out-of-court proceedings)
Germany			
			Single (via court)

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Insolvency proceedings (Insolvenzverfahren) Insolvency Act 1999 Court driven	Commercial insolvency (illiquidity) Factually insolvency (over-indebtedness) (within three weeks after occurrence of insolvency)	Company's future as a going concern (Fortführungs- prognose)	Debtor Creditors
France			
Rehabilitation proceedings (*redressement judiciaire*) The 1984/94 Law Court driven Debtor friendly Debtor-in-possession	Commercial Insolvency (45 days)	Not ceased operating, and its rescue seems possible.	Debtor Creditors Public Prosecutor
Netherlands			
	Commercial Insolvency	None	Single (via court) Debtor petition only

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Suspension of payment (*surseance van betaling*) Dutch Bankruptcy Act Creditor friendly			
Japan			
Civil Rehabilitation Proceedings (*Minji Saisei*) Civil Rehabilitation Act Quasi-debtor in possession (Court will generally appoint a supervisor - *kantoku-iin*) Debtor friendly	Commercial Insolvency (Director's discretion) Factual insolvency	There must exist the possibility of a rehabilitation plan being created; or creditors consent; or there is no possibility of the plan being confirmed by a court;	Single (via court) Debtor (petition) Creditors (petition)

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Australia Voluntary administration Corporations Act 2001 Out-of-court (via an administrator) Creditor friendly	Prospective illiquidity Commercial Insolvency Factual insolvency	None	Single (via administrator) Debtor (directors via board resolution) Creditors (secured) Liquidator
Singapore Judicial Management Companies Act Court driven (by judicial managers)	Prospective illiquidity Commercial Insolvency Factual Insolvency	Court considers a real prospect of: the survival of the company, or the whole or part of its undertaking as a going concern; the approval of a compromise or arrangement between the company and its creditors; or the more advantageous realisation of the company´s assets than would occur in a winding up.	Single (via court) Debtor (members' resolution) Debtor (directors - board resolution) Creditors

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Compiled from various sources (Altman & Hotchkiss, 2006; Cohen & Prophet, 2017; Henrot et al., 2016; International Financial Law Review, 2017; McCormack et al., 2016; Shibata, Ide & Nihei, 2017; The International Insolvency Institute, 2017; Tomasic, 2006)

From a shallow review of the generic structural features it is clear the commencement standard for reorganisation is applied in various ways across the world. This may be the result of various historical events, rescue culture or even the political or economic climate of these countries. What is important to note, however, notwithstanding the differences, is that the objective of reorganisation remains consistent - to assist in the rehabilitation of the company for the benefit of its stakeholders. To do so, reorganisation viability must exist in some form to warrant the extra ordinary protection of these laws.

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03

CHAPTER

Through the gates of horn and ivory – a theoretical foundation for a commencement standard to business rescue

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Chapter 3

We had the experience but missed the meaning.

— T.S. Eliot, Four Quartets

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Through the gates of horn and ivory – a theoretical foundation for a commencement standard to business rescue

Abstract: The gateway into reorganisation proceedings remains a critical component in our efforts to refine and evolve proceedings. A commencement standard is required to enable convenient, inexpensive and quick access to proceedings. A commencement standard too stringent will exclude noteworthy candidates, while one that is too flexible will allow entry of uneconomical ones. Developing a theoretically grounded commencement standard is critical because business rescue processes have largely been practically constructed. That is, what is known about the business rescue phenomenon has been practitioner driven. Aligning the theoretical foundation with the theories driving reorganisation will serve to improve the effectiveness of this tool and reduce abuse, asset erosion and deepening of insolvency. We used the value maximisation principle, stakeholder theory, and legal requirements to structure propositions that could provide the foundation for a commencement standard. This paper explores the utility and relevance of the value maximisation principle to the formulation of a theoretically sound commencement standard with propositions used as the pillars of this foundation.

Keywords: Turnaround, value maximisation, reorganisation, business rescue, reasonable prospect, commencement standard

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Introduction

> *"For two are the gates of shadowy dreams, and one is fashioned of horn and one of ivory. Those dreams that pass through the gate of sawn ivory deceive men, bringing words that find no fulfilment. But those that come forth through the gate of polished horn bring true issues to pass, when any mortal sees them"*
>
> *(Segal, 1991, p. 237)*

The concept of reorganisation has been widely deliberated, as it has potential economic and social benefits (Altman & Hotchkiss, 2006, p. 8). Reorganisation aims to preserve and maximise the economic value of the business as a going concern, while conceding that not all distressed firms can or should be rescued (Eow, 2006, p. 302). The intention is to redeploy underutilised resources and ensure the value maximisation of a distressed firm's assets (LoPucki & Whitford, 1993, p. 752). White (1989, p. 129) uses economic theory to suggest that insolvency stands to filter economically inefficient firms and preserve viable ones.

A commencement standard is required to enable convenient, inexpensive and quick access to proceedings (Westbrook, 2010, p. 66). This ultimately ensures that firms using the procedure are doing so for the right reasons. Where the standard fails, the abuse of reorganisation proceedings and waste of resources will tend to result in what is known as a "bad faith" filing. Once the process is initiated, it is often both difficult and expensive to terminate, owing to lengthy litigation and the protection laws afforded by the reorganisation.

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The commencement of reorganisation[4] proceedings heralds a different environment for the debtor, as opposed to informal proceedings, as a variety of stakeholders gain new information and power, all of whom (from self-driven interests) try to negotiate a plan that will result in better returns than if they were thrown into the jaws of liquidation. The principles of insolvency law come into play. The primary aim of these principles is to reallocate the resources of society in order to have the business emerge better poised to yield profits for the future.

These are, as it were, true dreams or aspirations, passing through the gates of horn. Homer's depiction above of the gates of horn and of ivory is used here to describe the commencement standard proceedings. The firms that approach the proceedings with honest intentions hold viable hopes that belong to the gates of horn; the illusory gates of ivory, however, belong to those debtors who seek to abuse the process or who are incapable of recovery, and may erode value to the detriment of everyone. For this purpose, a commencement standard for reorganisation screens prospective companies who are opting to file for proceedings. Ideally, such a standard should be carefully crafted to the central principles of the procedure, whereby only appropriate firms are permitted access.

In South Africa's quest for a successful formal corporate rescue procedure, the country's lawmakers adopted Chapter 6 of The Companies Act 71 of 2008 (hereafter referred to as "The Act"), better known by its colloquial name "business rescue". A report by the South African Department of Industry has revealed that only 9.4% of companies were able to emerge "successfully" from a business rescue (Pretorius, 2014). This low percentage evokes little confidence in

[4] The word "reorganisation" is occasionally used in a general sense to denote the rehabilitation of a distressed business, but it may also be used more narrowly to refer only to the process of rehabilitation under a formally recognised legal insolvency procedure, whose statutory titles may vary from administration, business rescue or reorganization.

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the regime's[5] effectiveness, even though we lack evidence on how many of these companies were viable candidates in the first place.

The commencement standard for reorganisation (also known as commencement criteria) is intended to alleviate this problem as much as possible and outline the threshold requirements for companies looking to make use of the privileges on offer by reorganisation legislation. A commencement standard that is too stringent would exclude worthy candidates, while one that is too flexible would allow entry of unsuitable ones. Furthermore, a commencement standard should be applied continuously throughout proceedings to ensure that the concept of "deepening insolvency" does not accrue (Millner, Neely & Reed, 2007; Willett, 2005, p. 550). Deepening insolvency maintains that the efforts to save an obviously dying entity can benefit some at the considerable expense of others (Altman & Hotchkiss, 2006, p. 289). Directors may be held liable for fraudulently or negligently prolonging the life of a firm by taking on high-risk decisions that increase the likelihood of there being some value left over for shareholders while decreasing the amount that creditors could recoup. The reality, however, is that commencement standards tend to favour either extreme: either too stringent or too flexible. On the odd occasion when one strikes a balance, it is probably the result of ambiguous wording (Westbrook, 2010, p. 66). This captures a fundamental problem of business rescue – that the commencement criteria remain poorly defined. This has challenged directors, practitioners, the courts and affected parties alike in determining when the viability of a business is sufficient to commence with business rescue or not. A set of criteria may emerge over time from practice, but there is clearly a need for a theoretically based commencement standard.

The purpose of this paper is therefore to formulate a theoretically based commencement standard and to show how this could be applied to business rescue. Developing a theoretically grounded commencement standard is critical

[5] A regime refers to the recognised reorganisation procedure in a particular country.

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because business rescue processes have largely been practically constructed. What is known about the business rescue phenomenon has been practitioner driven. It is only now that scholars are turning to developing a theory-driven understanding of the business rescue processes. To date, academics have written little on commencement standards and the unique circumstances experienced at this critical juncture. Aligning the theoretical foundation with the theories driving reorganisation would serve to improve the effectiveness of this tool and reduce abuse, asset erosion and deepening insolvency.

This paper explores the utility and relevance of the value maximisation principle to the formulation of a theoretically sound commencement standard, with propositions placed throughout to that effect. Additionally, the proposed formulation draws from stakeholder theory to develop a sustainable solution for the value maximisation principle. After that, the legal requirements are discussed, such as strategic bankruptcy, standard and burden of proof for the commencement standard. Each of these layers provides a perspective on the various constructs at work, and in so doing illustrates the complexity of designing a commencement standard. In the process, the aim is to demystify this area of heightened debate and ultimately guide future research and practice in this field both locally and internationally. Finally, the resulting theoretical principles for commencement are applied to business rescue and the understanding of the concept of "reasonable prospect".

Key Concepts

The formulation of a commencement standard should begin with understanding the function of reorganisation. Where a distressed business is concerned, the purpose of the procedure is to allow the firm to deal with financial difficulty and to remain in existence as an operating concern by reorganising its operations and settling its debts (Blum, 2000, p. 183). Historically, it originates from the economic premise in common law maxims that *salus populi suprema lex est* (the welfare of the people is the supreme law) (Hansen, 2000, p. 380). Jackson and Scott (1989, p. 197) have streamlined this notion, holding that the primary focus

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of reorganisation proceedings is the ex-ante maximisation of the value of the firm for society.

This supports the notion that it was never the sole purpose of reorganisation to function as an alternative to liquidation simply because it would assure a greater distribution to creditors. On the contrary, it bears a virtuous obligation to society. More recent literature has begun to recognise the importance of stakeholders' interests in better achieving this goal (James, 2016; Pajunen, 2006; Smith & Graves, 2005). Jensen (2002) consolidated both narratives, culminating in the explanation that a firm cannot maximise value if it ignores the interests of its stakeholders. From here, the value maximisation theory will be expanded upon to serve as the basis of the proposal for the commencement standard criteria.

If we extend White's (1989, p. 129) economic logic, we can assume that a commencement standard should discriminate between firms on the basis of these two theories that underpin the value of a firm, namely that reorganisation will ensure the value maximisation of the firm while taking into account all the interests of all its stakeholders (stakeholder theory). If the commencement standard is unable to achieve this, the reorganisation will result in providing a "safe haven" for moribund firms, resulting in the erosion of the firms' value. We extrapolate this theory further to illustrate its bearing on the commencement standard.

Value maximisation principle

As a general principle, the overriding objective of insolvency proceedings is underpinned by value maximisation (United Nations Commission on International Trade Law, 2005, p. 83). Jensen (2002, p. 236) defines value maximisation as the decisions made to increase the total long-run market value of the firm. The market value of a firm in reorganisation proceedings is preferably known as the reorganisation value (Blum, 1950, p. 571). The mechanisms afforded by insolvency law are aimed at facilitating higher distributions to creditors, be it by liquidation or reorganisation proceedings. If the forced sale or liquidation of the firm's assets fails to maximise the value of the firm, then reorganisation creates an opportunity for the business to be sold as a

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going concern, where the collective value of assets may result in a higher return than if the assets were to be sold piecemeal. The value maximisation policy underpinned by LoPucki and Whitford (1993, p. 752) incorporates the concept of externalisation of costs into value maximisation, realising true opportunity cost forgone by business failure. Warren (1987, p. 787) also recognises this as a common feature with creditors in reorganisation proceedings, realising that a creditor's claim is often valued in terms of a distribution policy, neglecting the value attained by an "ongoing premium" (especially the long-term aspects). In this sense, the value maximisation policy incorporates external costs that are not always acknowledged by creditors and shareholders.

It is a common misconception among scholars that an insolvency system must screen a firm solely on its financial health – its ability to pay its debts – when it is rather the firm's economic health – its ability to provide goods or services efficiently – that is under scrutiny (Adler, 1997, p. 344). Stewart and Amit (2003, p. 499) note that organisational ecology holds that the environment will syphon off unfit firms, as the ability to survive over time is "both a function of whether an organisation is suited to the current environment and its ability to adapt appropriately if the environment evolves". White (1989, p. 129) relates this to insolvency, suggesting that insolvency proceedings should not go so far as to shelter economically inefficient firms. The reorganisation is therefore justified only if the firm or its assets are worth more economically if reorganised than if they were not. We are often under the impression that reorganisation has failed if the firm is subsequently liquidated or sold, whereas this may be the desired outcome of an efficient process. The value maximisation principle can be explained by the following example:

> *To the pie manufacturer, its pastry laminating line is key to its value-adding process. For the company, the asset holds both a market value and the potential to generate profit, let alone the other benefits it may offer, such as job preservation or social welfare. For the creditor, who has financed the asset, the machine merely represents a market value at best. Value maximisation of the asset is clearly greater in the hands of the pie manufacturer.*

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The example above, though simplistic, illustrates in essence the principle of value maximisation in favour of reorganisation. Insolvency scholars have successively recited the fundamental role of the principle, though little has highlighted its impact on the commencement standard. Ang and Chua's (1980, p. 359) results support the notion that the commencement decision prefers reorganisation over liquidation when it maximises the firm's value, acknowledging that when the converse is true then liquidation should be the optimal insolvency route. We know that reorganisation potentially affords the firm a higher market value by continuing its operating activities (Altman & Hotchkiss, 2006, p. 8). A commencement standard, however, should prevent the uneconomic operation of a firm that would lower the value that would otherwise be available to creditors upon liquidation (LoPucki, 1983, p. 158). An effective standard would then restrict access to firms whose assets would be eroded as attempts to revive them are pursued. The application of this theory to the commencement standard will seek to improve the procedure's effectiveness and recovery rate.

Proposition 1: Applying the value maximisation principle may prevent uneconomical firms from commencing reorganisation proceedings.

The next set of factors/arguments proposes that a commencement standard should test for value maximisation for several of the following reasons. The first, and evidently most apparent, reason to apply the value maximisation principle to the commencement standard would be to prevent the misuse of the reorganisation procedure. The motives behind the commencement of reorganisation are not always clear and only become apparent to external parties later in the proceedings (Betker, 1995, p. 4; Martel, 1991, p. 55). Mumford (2003, p. 57) examines the effect of asymmetric information surrounding the debtor's affairs prior to commencement and the impact on the possibilities available for maximising the value of the firm (see the discussion on Strategic bankruptcy). Directors or any other affected party with the right to commence proceedings may be driven by hidden agendas that are not commonly known and may result in an undesired outcome for the majority of creditors or society (Adler, 1997, p.

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359; D'Aveni & MacMillan, 1990, p. 651). In fact, LoPucki and Whitford (1993, p. 673) reveal that the influence of creditors and shareholders over management frequently prevents firms from maximising their value. While it may prove impractical to uncover such plots so early in the proceedings, the value maximisation principle offers constituents the reassurance that proceedings will begin on the notion that value will not deteriorate before distributions are made or before the information is presented later in the plan.

Proposition 2: Applying the value maximisation principle may reduce the abuse of reorganisation proceedings with high levels of asymmetric information at commencement.

The second reason for applying the value maximisation principle is that it requires the early approximation of the reorganisation value of the firm. While this has been recognised as a difficult task (Baird & Bernstein, 2006, p. 30), it nevertheless ensures that sufficient information exists for the decision to reorganise (Routledge, 1997, p. 128), keeping in mind that the actual valuation is not required, but merely a reasonable estimation. Such valuation methodology may follow the popular practice of triaging the firm's pre-distressed value, though various other methods are available (Altman, 1984; Franks & Torous, 1994). Nevertheless, it requires a preliminary analysis of the net earnings which the firm may reasonably anticipate in the definite future.

Proposition 3: Applying the value maximisation principle may encourage early approximation of the reorganisation value of the firm.

The third motive derived from the value maximisation principle is the shift in a distribution and value-creation (investment) mindset (Modigliani & Miller, 1958, p. 274). This principle is best described using the analogy of expanding a pie, which is the investment or "value maximising" question, while the dividing and sharing of the pie is the financing or "distribution" question. This is in line with

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the value recovery process expected in the rescue plan (Adriaanse, 2005, p. 23). Applying only a distributional assessment may risk not maximising the value of the firm for the benefit of all claimants, or the interests of many who are not technically “creditors” but have an interest in the business’s continued existence (Warren, 1987, p. 787). Value maximisation, therefore, demands that an investment mindset be adopted to commence with the reorganisation.

Proposition 4: Applying the value maximisation principle may cultivate a value-creating mindset for reorganisation proceedings.

There is no disputing the benefit of value maximisation to society, with over 200 years of economics and finance research clearly indicating that social welfare is maximised when all firms in an economy maximise total firm value (Altman & Hotchkiss, 2006, p. 8; Hansen, 2000). The rationale for this is that social value is created when a firm produces an output, or set of outputs, that are valued by its customers more highly than the value of the inputs it consumes (as valued by their suppliers) in such production (Jensen, 2002, p. 329; Jensen, 2010, p. 8). This is consistent with LoPucki and Whitford (1993, p. 752), if expressed through the concept of externalisation of costs. That is, should management only consider the value to the firm when choosing to discontinue and sell a business, several "external" costs may be overlooked, such as the cost to workers of finding new jobs, or the disruption to local governments resulting from the reduction in their tax bases.

Proposition 5: Applying the value maximisation principle may promote social welfare interests before commencing proceedings.

If we refer to the origin of reorganisation as the maxim that the ‘welfare of the people is the supreme law’, we can conclude that maximising social wealth is a central tenet for the commencement standard to embody. Most reorganisation laws have embedded distributional policies intended to protect vulnerable parties

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who have an interest in a business's continued existence (Warren, 1987). Therefore, the commencement standard should ensure that the privileges of reorganisation laws do not come at a cost to society. In so doing, the value maximisation principle can be used to discriminate against firms that will have an adverse effect on society if afforded the protection of reorganisation.

Stakeholder theory perspective

While value maximisation provides a strong foundation from which to evaluate the commencement standard, the evaluation should additionally consider some aspects of stakeholder theory that lean towards improving the long-term performance of firms. Dialectic tensions between individuals with varying values and preferences automatically increase as the firm opens up to change and pluralism (Pettigrew, Thomas & Whittington, 2001, p. 214). As multiple constituents become increasingly concerned with the organisation's affairs, the impending question as to whose interests the firm should serve becomes more prevalent.

Considering such a question leads us to a stakeholder view of the firm. It has been widely acknowledged in turnaround literature that stakeholders may play an important role in a firm's survival (Arogyaswamy, Barker & Yasai-Ardekani, 1995; D'Aveni & MacMillan, 1990; Pajunen, 2006). In one of the most frequently cited articles in economics, Jensen and Meckling (1976, p. 8) have observed "that the firm is often just a legal fiction which serves as a nexus for a set of contracting relationships among individuals". Keay (2012:6) states the companies are structures that people who want to carry on business collective can use effectively and productively. Suggesting that the firm is a component of various stakeholder interests takes us beyond the dogmatic idea that business exists simply for a single purpose; rather it is there to satisfy a multitude of stakeholders. Stakeholders consist of "all individuals or groups who can substantially affect the welfare of the firm: not only the financial claimants, but also employees, customers, communities, and governmental officials, and under some interpretations, the environment, terrorists, blackmailers, and thieves" (Freeman, 1984, p. 53).

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Insolvency proceedings are often fooled by the illusion that the company is protected by its legal *locus standi* and tend to ignore the critical relationships at play. Jensen (2002, p. 246) expands the value maximisation principle to include aspects of stakeholder theory so that the objective function of the firm is to maximise total long-term firm market value. The INSOL International (2000) Statement of Principles clearly states that reorganisation should consider the long-term viability of the debtor in its assessment of prospect. The decision criteria for reorganisation must specify how to make the trade-offs between the various stakeholders, who often have conflicting and inconsistent demands. The commencement standard is therefore expected to incorporate elements of stakeholder theory in order to increase the likelihood of successful reorganisation and to better achieve maximisation of value.

Proposition 6: The commencement standard should incorporate elements of stakeholder theory to improve the suitability of reorganised firms.

Proposition 6a: The commencement standard should incorporate stakeholder power to influence the firm.

Proposition 6b: The commencement standard should incorporate the legitimacy of the stakeholder claim.

Proposition 6c: The commencement standard should incorporate the urgency of the stakeholder's claims on the firm.

The concept of a commencement standard appears, however, to be a legal one and is therefore in addition constrained by legal requirements that will now be discussed.

Legal analysis

As part of our theoretical foundation, certain legal constraints are now discussed. Modern reorganisation has to date been led by practice, primarily from an insolvency law perspective, leaving its economic prowess to fall behind (Eow, 2006, p. 304; Westbrook, 2010, p. 121). This can be mostly attributed to the pressing necessity of choosing between reorganisation or liquidation, something

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that challenges most distressed firms (Wood, 2007, p. 1). As the rights of creditors, employees, shareholders and other stakeholders are simultaneously affected, an agreement must translate the collective concerns of all parties. This is referred to in the literature as the "common property" problem[6] (Martel, 1991, p. 62). While legislators are primarily concerned with overall societal welfare, they should consider how this can be done fairly and efficiently.

The legal constraints are now explored from a business rescue perspective to uncover the implications of the commencement standard. This is critical to our theoretical understanding. Therefore, we acknowledge and include these constraints. First, we need to define the statutory requirements of the commencement standard for business rescue.

Statutory requirements

The commencement standard for business rescue states that a company eligible to enter the procedure must ensure that it meets two requirements: being *financially distressed* while maintaining a *reasonable prospect* of being rescued. The first commencement requirement, financial distress, is presented in section 128 (1)(f) of the Companies Act as follows:

(f) Financially distressed, in reference to a particular company at any particular time, means that:

> (i) it appears to be reasonably unlikely that the company will be able to pay all of its debts as they become due and payable within the immediately ensuing six months; or
> (ii) it appears to be reasonably likely that the company will become insolvent within the immediately ensuing six months.

[6] By avoiding the preferential treatment of creditors, the "common property" problem is prevented from causing creditors to opt out of the collective proceedings and behave strategically by anticipating proceedings in a manner undesirable for the majority of affected parties.

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This requirement is the trigger mechanism and is relatively well understood, but may be ignored by management and the board. It primarily deals with the prospective illiquidity of the firm. The above financial distress definition aims to encourage early entry in order to minimise the erosion of assets.

The second requirement, reasonable prospect, screens prospective firms, acting more as a barrier for ineligible candidates. The Act, though, falls short of defining this term explicitly. It could be argued that a need for a precise definition of "reasonable prospect" is crucial, as it proves challenging for directors, practitioners, the courts and affected parties alike to make any deduction as to the degree to which the prospect of rescuing the company is of a sufficient nature. This, like that of its late predecessor, Judicial Management, is a characteristic contributing to its dismal performance (Rajak & Henning, 1999, p. 263; Smits, 1999, p. 85). The uncertainty has resulted in a subjective interpretation of the concept, impinging on the integrity and prosperity of the industry as a whole (Joubert, 2013, p. 563).

The commencement criteria are in addition applied continuously throughout proceedings (s141(2)). In the absence of financial distress or reasonable prospect, at any point, there are grounds to discontinue the process. Given this, the requirements for reasonable prospect are expected to evolve with the complexity of the turnaround situation, adapting to the improved accuracy and availability of information.

Reasonable prospect should be interpreted in context as the "reasonable prospect for rescuing the company", which is confirmed by Joubert (2013, p. 554). The inclusion of the word "rescuing" refers to section 128 of The Act, where the objectives of business rescue are set out. The procedure endeavours to facilitate the rehabilitation of a company that is financially distressed by providing for (Companies Act, 2008: s128):

(i) the temporary supervision of the company, and of the management of its affairs, business and property;
(ii) a temporary moratorium on the rights of claimants against the company or in respect of property in its possession; and

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(iii) the development and implementation, if approved, of a plan to rescue the company by restructuring its affairs, business, property, debt and other liabilities, and equity in a manner that maximises the likelihood of the company continuing in existence on a solvent basis or, if it is not possible for the company to so continue in existence, results in a better return for the company's creditors or shareholders than would result from the immediate liquidation of the company

The Act, in its definition of business rescue above, clearly makes provision for two objectives that may be pursued through proceedings. The first, and notably the more desirable of the two, is the preservation of the company as a going concern. The alternative permits one to seek a possible enhancement of the value by performing a straightforward, piecemeal sale or realisation of the assets that can ensure a Better Return than in Liquidation (BRiL). The two scenarios accommodate a variety of arrangements that are aimed at achieving a result that delivers more value to creditors, a notion indicative of a modern rescue regime (United Nations Commission on International Trade Law, 2005, p. 27). Furthermore, both outcomes have been recognised by South African courts (*Nedbank Limited v Bestvest 153 (Pty) Ltd; Essa v Bestvest 153 (Pty) Ltd*, 2012; *AG Petzetakis International Holdings Limited v Petzetakis Africa*, 2012). Should a company file for proceedings to reorganise its affairs and continue in existence, or face the imminence of failure and have its creditors merely look towards ensuring a better return is awarded, either is deemed acceptable.

The combination of the two objectives resembles what is known as a unitary system approach, in that the intended outcome when commencing proceedings can either seek rehabilitation or BRiL (United Nations Commission on International Trade Law, 2005, p. 17; Westbrook, 2010, p. 68). Bulow and Shoven (1978, p. 442) introduced the coalition model of bankruptcy to explain the logic behind the unitary system approach. The model suggests that in a situation where BRiL constituted the only option for distressed companies, the loss of potentially salvageable or viable businesses would be incurred. If the converse situation were to be established, where reorganisation was the only choice, it would facilitate the rescue of some economically inefficient firms.

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However, where both procedures exist separately, managers will be inclined to prefer the alternative that favours themselves and for equity, irrespective of whether the firm's assets are more or less valuable if it closes or continues operating (White, 1989, p. 138). The dilemma is perpetuated should any stiffening of BRIL procedures occur, as this may result in a firm's shifting towards reorganisation and vice versa (White, 1980, p. 564). Therefore, preserving these two objectives within business rescue and relying on value maximisation as the guiding principle provides for a more advantageous result (LoPucki & Whitford, 1993, p. 752; United Nations Commission on International Trade Law, 2005, p. 26). It is for this reason that an element of flexibility is required to ensure the best results for both the debtor and the affected parties.

If it is proposed that both scenarios be separated in reorganisation, as the opportunity cost forgone by omitting a unitary system would risk not maximising the value of the firm, then should a company pursue reorganisation and it be deemed non-viable, it would still have to submit to offering a higher return than in liquidation. It may be easier to view reorganisation as merely a form of an asset sale and differentiating prototypical liquidation as the selling of the firm's assets to third parties, while in a reorganisation the assets are sold to the creditors themselves (Korobkin, 1991, p. 742). Therefore, we propose that "reasonable prospect" be assessed based on the value maximisation principle. Doing this could fairly discriminate between the two objectives and offer sufficient reason to commence with proceedings.

Preposition 7: Reasonable prospect can use the value maximising principle to fairly distinguish between the two business rescue objectives.

Strategic bankruptcy

Tailoring the internal resources to the external constraints imposed by insolvency laws is a critical strategic problem involving innovative thinking and transformational leadership (Wernerfelt, 1984). A strategic bankruptcy option enables a firm to "implement strategic changes to relationships with customers,

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suppliers, or other trading partners in a manner that positively alters the likelihood of sustainable performance improvements and survival" (James, 2016, p. 492). To do so effectively, management requires strategic knowledge of insolvency laws. However, during volatile periods that are often characterised by financial distress, the decision to commence reorganisation is most often reserved as a last resort (Finch, 2009, p. 211; Haugen & Senbet, 1988, p. 27; Westbrook, 2010, p. 165). While reorganisation may appear an attractive turnaround strategy for directors, it may cause underlying problems for other stakeholders (Evans & Borders, 2014, p. 2741). Misalignment of the firm's turnaround requirements with insolvency laws can result in further deterioration of the firm's value. Therefore, the commencement standard stands to ensure that a number of conditions are present that align the legal support with the needs of the firm. This ensures the optimisation of the procedure for the benefit of the stakeholders. For example, consider a firm that wishes to use business rescue to force a debt compromise while its creditors are willing to comply with informal proceedings that would save costs. The United Nations Commission on International Trade Law (2005, p. 22) outlines a number of generic conditions that should be present when considering reorganisation:

a) "A significant amount of debt being owed to a number of main banks or financial institution creditors;
b) The present or imminent inability of the debtor to service that debt;
c) Acceptance of the view that it may be preferable to negotiate an arrangement, as between the debtor and the financiers and also between the financiers themselves, to resolve the financial difficulties of the debtor;
d) The use of relatively sophisticated refinancing, security and other commercial techniques that might be employed to alter, rearrange or restructure the debts of the debtor or the debtor itself;
e) The sanction that if the negotiation process cannot be started or breaks down, there can be swift and effective resort to the insolvency law".

A commencement standard should, therefore, be crafted to align the turnaround requirements with the privileges afforded by the reorganisation. This approach would maximise the value of the firm and assist with the "common property"

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problem (Korobkin, 1991, p. 741). In addition, it would offer less enticement to directors that seek to abuse proceedings. It is important to bear in mind that the function of insolvency proceedings is not to prevent business failure but rather to maximise economic value in the best possible way.

Proposition 8: When the firm's strategic bankruptcy objectives are aligned with the commencement standard, business rescue is less likely to be abused.

Burden of proof

The burden of proof for reorganisation has profound practical implications for a commencement standard. As part of our theoretical understanding of this requirement, we must consider the duty placed upon various parties to prove or disprove the evidence presented and the degree to which the trier of fact must be satisfied.

Proponent responsibility

The commencement standard must clearly define which party bears the burden of providing the evidence that will contest the commencement criteria. Business rescue provides for a dual gateway in commencing proceedings. Section 131 offers affected parties a court-driven gateway, while section 129 extends to the company's board the power to initiate business rescue proceedings voluntarily. A voluntary filing requires the board to have reasonable grounds to believe that there appears to be a reasonable prospect of rescuing the company (Companies Act, 2008: s129b), while an application to the court must contain sufficient evidence from the applicant for the court to determine if there is a reasonable prospect for rescuing the company (s131a(iii))). It is quite clear that the burden of proof shifts between the two gateways, while there exists an asymmetry of information among the various parties. As discussed above, the value maximisation principle affords either proponent some relief in this regard.

Standard of proof

Routledge (1997, p. 128) remarks that "the door to an attempt to rehabilitate should only be opened when there are sufficient grounds to anticipate a

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successful outcome". A commencement standard is subject to a level of certainty required to reach a decision. Such a standard of proof is provided for in common law based on a "preponderance of evidence", which is the least demanding standard of proof. The legal system assumes this standard splits the risk of erroneous decisions in even fashion between defendants and plaintiffs. Thus, evidence must simply indicate a "more likely than not" probability (Demougin & Fluet, 2006, p. 964). Better described by in the case of *Livanovitch v. Livanovitch* (1926) as:

> *"When the equilibrium of proof is destroyed, and the beam inclines toward him who has the burden, however slightly, he has satisfied the requirement of the law, and is entitled to the verdict. A bare preponderance is sufficient, though the scales drop but a feather's weight."*

The commencement standard is subject to the preponderance of evidence, meaning that evidence, however slight, in favour of commencement criteria would serve as sufficient to begin proceedings (Demougin & Fluet, 2006, p. 964). The term "reasonable prospect", however, follows a historical sequence of terms separated by varying standards of proof set by jurisprudence. Reasonable probability contained in section 427(1) of the Companies Act 1973 was required for a judicial management order (*Noordkaap Lewende Hawe Ko-op Bpk v Schreuder, 1974*). In such a case, the term required a higher standard of proof than reasonable prospect (Burdette, 1999, p; Smits, 1999, p.). This threshold of proof has been largely criticised, as it discouraged prospective companies from filing, thereby preserving the recovery mechanisms only for "special cases" (Kloppers, 1999, p. 426; Loubser, 2010, p. 25). Van Blerk (*Noordkaap Lewende Hawe Ko-op Bpk v Schreuder, 1974*) held that reasonable possibility inferred something that is less sure to happen than something that is probable. The standard of proof set by reasonable prospect has, unfortunately, been poorly defined in law, leading to a discrepancy in interpretations. In the case of *Southern Palace Investments 265 (Pty) Ltd v Midnight Storm Investments 386 Ltd* (2012), however, it was accepted that reasonable prospect is less stringent than reasonable probability.

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The application of the value maximisation principle enables the application of a uniform standard of proof to be applied to any of the affected parties. The preponderance of evidence, therefore, needs only to confirm that reorganisation may be more likely to result in a greater value than that from liquidation.

Proposition 9: The value maximisation principle may offer a fair and reliable standard of proof for the commenced standard.

Discussion and conclusion

In this paper, we offer a theoretically formulated set of criteria for a commencement standard. At present, commencing with the reorganisation of a distressed business is not very satisfactorily achieved by evolving practice. We used the value maximisation principle, stakeholder theory, and legal requirements to structure propositions that could provide the foundation for a commencement standard. We believe the move from practitioner-driven business rescue assumptions to theoretically grounded understanding of its central elements, such as commencement standards, is important for several reasons. The intention for reorganisation can easily cause conflict on the doorsteps to the process, and applying a more objective and robust measurement will assist in this regard.

Entry into proceedings should be based on faith in what one sees rather than what is said. As firms find more creative applications for reorganisation, so the procedure will be required to evolve. The costs borne by creditors and society by uneconomic firms abusing the reorganisation process are substantial. We should be mindful of meddling too much with the “invisible hand”. A theoretical understanding of the commencement standard will, therefore, assist in developing more complex and astute mechanisms for filtering firms. A foundation based on value maximisation affords various opportunities to expand literature and progressively close the illusory gates of ivory.

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The propositions offered in this paper present numerous exciting opportunities for future research on the commencement standard. It is imperative that our understanding of this phenomenon continues to expand theoretically to enable complete and effective adaptation to legislation. The construction of a conceptual framework that mapped the complex relationships among the proposed criteria would assist in further standardisation. Such a framework should also be adjusted for the risks that go with value maximisation in the reorganisation. Ultimately, we believe our propositions must be subjected to empirical testing in pursuit of scientific validation.

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CHAPTER

A liabilities approach to the likelihood of liquidation in business rescue

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Abstract: While reorganisation procedures aim to salvage financially distressed firms, they are often abused, as uneconomic, failing firms commence with proceedings that erode value rather than preserve it. The commencement standard for business rescue is aimed at preventing such abuse, though it is often hampered by vagueness and limited practical application. Drawing on turnaround literature and the requirements of a commencement standard, this study attempts to address these drawbacks by assessing the prospect of reorganisation on commencement. The study identifies from the turnaround literature nine liabilities that could prove fatal. Under the widely-held principle of value maximisation, the researchers then propose a "likelihood of liquidation" framework to evaluate, before the commencement of proceedings, the reasonable prospect of the firm's recovering. The analysis in this paper sets the agenda for future research and provides an opportunity to explore the practical application of the framework.

Keywords: Turnaround, reorganisation, business rescue, reasonable prospect, commencement standard, distress, liabilities

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Introduction

In a firm's most dire moments, management is very likely to consider reorganisation, to implement any last attempts to snatch it from the jaws of liquidation. At this point *les jeux sont faits* (the die is cast), and the firm holds little sway over its fate. For some of these distressed firms, a shot at reorganisation is merely a stalling tactic that ultimately results in the inevitable outcome of its foreclosure. However, for a remote few, it does offer a second chance. Distinguishing between these firms has challenged scholars, directors, practitioners, the courts and affected parties alike.

The protection offered by reorganisation can potentially shelter unworthy applicants and in turn have an adverse effect on the economic and social welfare of a nation (Hansen, 2000). Discriminating between firms that will benefit from reorganisation and those that should be liquidated is a complex task. Holmström and Myerson (1983, p. 9) have identified three stages in which lack of information availability obscures proficiency of decision-making. First, the *ex-ante* stage is the period before individuals are in possession of any private information[7]; the *interim* stage is when private information is obtained but not shared; and, lastly, the *ex-post* stage is when all private information becomes common knowledge. The adaptation thereof by Franks, Nyborg, and Torous (1996) is illustrated in Figure 4 and helps to explain the complexity of the reorganisation decision.

The interim stage is typically when the distress becomes apparent and the decision to reorganise is taken. This period, however, is prone to asymmetric availability of information among creditors, managers, shareholders and the rescue practitioner (Mumford, 2003, p. 57). The decision to commence with proceedings is based on limited insight into the firm's actual prospect of

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[7] Private information may include earnings announcements, management and analysts' forecasts, and other summaries of detailed financial accounting statistics (O. Kim & Verrecchia, 1994, p. 42).

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recovery. The rescue plan is then published in the ex-post stage, resulting in the dissemination of private information across all parties. During the transition between the interim and ex-post stages the direct costs of insolvency (deadweight), such as legal and accounting fees, are incurred (Franks & Torous, 1992, p. 71). If the information in the rescue plan does not align with the creditors' interim perspective, then the reorganisation will be unlikely to continue, resulting in the erosion of value. For this reason, reorganisation proceedings require a framework for assessing the reasonable prospect of successful reorganisation before the commencement of proceedings. At present, there is no available theoretical framework to assess the likelihood of successful reorganisation.

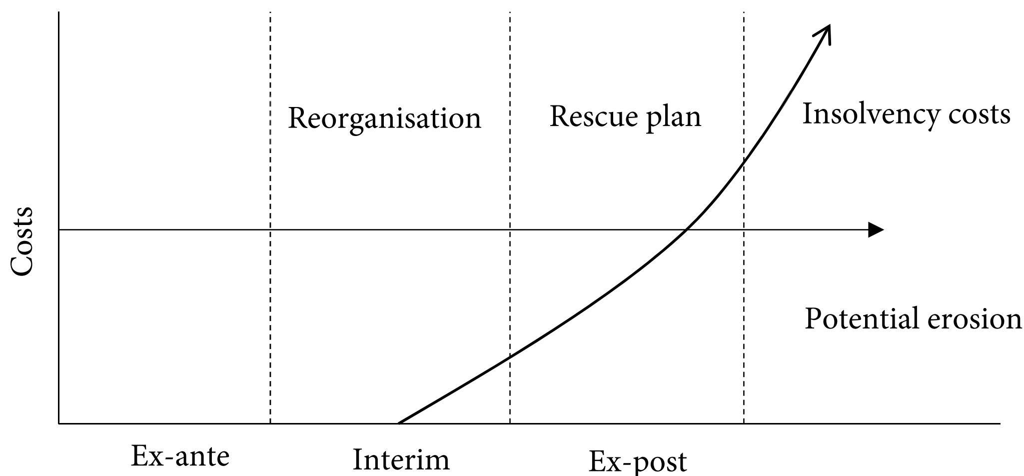

Figure 4: Stages of decision-making under incomplete information and potential value loss (Franks et al., 1996)

Commencement standards are often vague so as to afford access to troubled debtors in a variety of circumstances. Needless to say, this in turn has resulted in abuse by uneconomic firms who have initiated proceedings and squandered assets in the process. A framework is needed that could put defining factors within reach of affected parties and serve to minimise the dissipation of assets and ensure the maximisation of value from the firm (United Nations Commission on International Trade Law, 2005, p. 46).

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Turnaround literature has fortunately expanded research on business failure over the years, revealing a number of useful factors. This paper proposes that these business "failure" factors could be used to compile commencement criteria for reorganisation proceedings. It therefore proposes a "likelihood of liquidation" framework that assesses the prospect of the firm's succumbing to liquidation. The framework would enable decision-makers to consider the relevant factors before commencing reorganisation proceedings, in spite of inadequate information and data accuracy.

The next section of this paper defines reasonable prospect, drawing on the value maximisation principle and organisational liabilities that impede the firm's ability to reorganise. Thereafter, the liabilities are explicated to develop a framework that captures the nonlinear relationships of fatal liabilities.

Defining reasonable prospect

Reorganisation law, as in the case of a business rescue, requires evidence of a reasonable prospect of survival for the firm (United Nations Commission on International Trade Law, 2005, p. 53). The term "reasonable prospect" has, however, not yet been defined in South African law (Joubert, 2013, p. 553). King (1975) closely equates the feasibility of the firm with reasonable prospect, though the term has been marginally separated from its original understanding. In Kane v. Johns-Manville Corp., 843 F.2d 636 (2d Cir. 1988) the US court stated that feasibility is never a guarantee of success but rather an offer of a "reasonable prospect" of it, a notion consistently held by the US courts (Winikka, 2006, p. 733). Reasonable prospect is therefore assumed to be the "emergence of the debtor from reorganization in a solvent condition and with reasonable prospects of financial stability and success" (King, 1975, p. 303).

As illustrated in Figure 4, there exists a clear discrepancy of information availability during proceedings. Thus, the criteria for feasibility become more rigid as data integrity improves and the asymmetry of information diminishes. Recognising this, Roe (1983, p. 534) suggests that the feasibility of the firm be viewed in two parts. The first is the feasibility of the firm. The second is the

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feasibility of the turnaround plan, which ultimately concerns the return to creditors. The proposed turnaround interventions in the plan reflect the risks and rewards that are possible. A vast number of contingent variables may influence the feasibility of the plan and are not discussed here. While a feasible plan allows one to assume the feasibility of the firm, the converse cannot always be assumed. The feasibility of the firm to recover successfully at the hands of a feasible plan is tested by the commencement standard. In consideration of this, it is proposed that, in the context of business rescue, reasonable prospect at commencement be defined as the ability of the firm to maximise value and possibly avoid liquidation. The paper will explore the application of "value maximisation" and the "likelihood of liquidation" as prerequisites for reasonable prospect to exist. In conclusion, a framework is proposed to assess the reasonable prospect of a firm at the commencement of proceedings.

Value maximisation

The principle of value maximisation is embedded in the theory of reorganisation and should be tested for at the commencement of proceedings (Rosslyn-Smith & Pretorius, 2017). The principle prescribes that insolvency proceedings extend beyond better returns to creditors and also ensure the optimisation of the firm's resources. Altman and Hotchkiss (2006, p. 8) postulate that:

> *"If an entity's intrinsic or economic value is greater than its current liquidation value, then from both the public policy and entity ownership viewpoints, the firm should attempt to reorganize and continue. If, however, the firm's assets are worth more dead than alive – that is, if liquidation value exceeds economic value – liquidation is the preferable alternative."*

In some cases, the net present worth of the distressed firm as a going concern may be less than the value of its assets sold separately. The value maximisation principle, therefore, presents a clear approximation of the best course to follow. Economically distressed firms stand to erode value over time, with reorganisation proceedings often disguising the eventual outcome.

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Reorganisation value (R) is the substitute for market value when in reorganisation (Blum, 1950, p. 571) and is defined as the enterprise value of the reorganised debtor – determined, among other factors, by the expectation of accumulated value from the going concern of the company (Pantalev & Ridings, 1995, p. 420). A number of financial techniques have been used to calculate this value, the most notable being the comparable company analysis and the discounted cash flow analysis (J. Kim, 2009, p. 160). In addition, any further value that is derived from the going concern of the firm should be included in the firm's value (King, 1975, p. 308).

The costs of reorganisation (C) are the expenses accrued to recover the firm (bankruptcy costs). Costs are usually separated into direct costs and indirect costs. Direct costs include the legal and other administrative fees accompanying proceedings. Indirect costs consist of opportunity costs, taking the form of decreased productivity, lost sales, and loss of competitiveness, in addition to costs occurring from the inefficient use of resources, information asymmetry, conflict-of-interest problems and judgement bias (Liou & Smith, 2007, p. 78). The cost of reorganisation will, however, tend to vary with firm size, the complexity of the bankruptcy, and the ability of the insolvent firm to pay (Fisher & Martel, 2005, p. 168). Altman (1984, p. 1087) conducted early studies on the costs of proceedings; although these findings yield limited value beyond the United States Chapter 11, they provide some indication of the burden they place on distressed firms. Indirect costs are expected to rise with the time spent in business rescue (Thorburn, 2000, p. 359). Though they are difficult to approximate, these costs must nevertheless be incorporated, as they can erode the potential value of the firm. So, the total reorganisation costs (C) can be calculated as the sum of direct costs and known indirect costs that can be projected fairly. The reorganisation value (R) is calculated after subtracting the costs of reorganisation to express a fair market value.

Liquidation value (L) is used as the benchmark for the value maximisation calculation (White, 1989, p. 130). The liquidation value is based on the auction value of the assets and is regarded as a "limited risk" valuation (LoPucki &

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Whitford, 1993, p. 784). The liquidation value also includes the associated liquidation costs.

Since the reorganisation value may only be realised over a finite trading horizon, the total value captured is associated with a degree of uncertainty. To account for such risk, a likelihood-of-liquidation score (LOL Score) is factored into the reorganisation value. The likelihood of liquidation score is derived from the proposed framework to be discussed in section 0. Since reasonable prospect is subject to a preponderance of evidence (Rosslyn-Smith & Pretorius, 2017), the reorganisation value merely needs to exceed the liquidation value within a timeframe that is exempt from the threat of liquidation in order to conclude that a firm's value is maximised under reorganisation. This is better shown in the following formula:

$$L < R.(LOL\ Score)$$

If the foreseen reorganisation value exceeds the immediate liquidation value of the firm, then the value of the firm is maximised under reorganisation (Ang & Chua, 1980, p. 358). The liabilities discussed in the framework below explore how the likelihood of liquidation can potentially moderate or even mediate the reorganisation value.

Likelihood of Liquidation (LOL)

Since Beaver's study (1966), important contributions on failure prediction models have emerged, such as logit analysis, discriminant analysis and recursive partitioning algorithm (Altman, Haldeman, & Narayanan, 1977; Ohlson, 1980; Shumway, 2001; Zmijewski, 1984). For the most part, these tools have been fairly accurate in predicting failure (Wu, Gaunt, & Gray, 2010, p. 41). They are, however, known for occasionally classifying healthy firms as failing ones, referred to as type II errors (Balcaen & Ooghe, 2006, p. 65). While attempts have been made to modify these predictors to measure the viability of reorganisation at the onset of filing (Barniv, Agarwal, & Leach, 2002; Campbell, 1996), the following inherent problems have been identified when using these predictive models for this purpose. Firstly, decisions tend to be data-driven and fact-based, reliant on

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information reported by the debtor prior to filing. The concern with this approach is that the data is only available about the past, and the only convincing data available relates to the recent past. Since there is no data for the future, a basis is required to assist in understanding the firm's potential future performance (Christensen & Raynor, 2013). An additional complication of financial failure prediction models is that they provide a projection of the firm's performance at a point in time. Entering reorganisation proceedings will certainly involve several interventions and therefore alter the firm's performance (either negatively or positively). A static time-slice view can then offer little insight into the firm's potential performance in reorganisation.

Argenti (1976) maintained that financial models merely reflected symptoms of business failure and yielded limited insight into the causes thereof. Once turnaround interventions are known, application of failure prediction models may prove more beneficial; this, however, is usually only after commencement. Deakin (1977, p. 80) further reiterated the limits of failure prediction models:

> *"By classifying companies at some time prior to the bankruptcy event, one is then making a classification of failing companies, rather than of companies that have already failed … Indeed, if the failure process is a dynamic process, then a company may be able to enter the failing state, yet avoiding the final failed state."*

Interestingly, Barniv et al. (2002, p. 516) noted that non-financial indicators proved more beneficial in predicting reorganisation failure for this reason. Furthermore, the contention is that these models depend on the accuracy of financial data, while firms considering formal turnaround tend to suffer from a lack of data integrity for various reasons (Keasey & Watson, 1987, p. 337; Pretorius & Holtzhauzen, 2008, p. 99). Owing to the limited timeframe to file for proceedings, the absence of data integrity poses a significant threat to data use in a commencement standard. Finally, failure prediction models are primarily focused on the internal components of a firm. Few models consider the external environment or compensate for the potentially harsh conditions faced by a public reorganisation. Hong (1984) suggested that a firm's "intangible assets" or "going

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concern premium" (that being the difference between the value of the firm as a going concern and its value in liquidation $(R - L)$) contributed significantly to the eventual outcome of proceedings.

For these reasons a framework is proposed that examines and could moderate the recovery prospects of a firm petitioning for reorganisation using several liabilities.

Organisational Liabilities

The concept of organisational liabilities originally manifested itself from a resource-based view, suggesting that the alignment of a firm's resources and capabilities with the demands of the competitive environment bears a direct mortality risk (Thornhill & Amit, 2003, p. 500). It has since evolved from the 1960s, when the concept of the "liability of foreignness" was presented in Stephen Hymer's seminal thesis study (1960/1976). The concept has been adapted since the 1960s to explain a multitude of phenomena that threaten a firm's ability to perform its operations. Such works include the liabilities of "newness, adolescence, obsolescence and smallness" (Bruderl & Schussler, 1990; J. Freeman, Carroll, & Hannan, 1983; Henderson, 1999; Kale & Arditi, 1998). This study recognises the definition by Arend (2004, p. 1006) of a strategic liability as "those resources that damage and destroy a firm's ability to generate rents". Arend (2004, p. 1007) adds that a liability emanates costs that cause inefficiency in the firm or arise from the liability's inherent negative market value in the current environment.

In the context of a distressed firm, additional turnaround liabilities exist. These liabilities are defined by Pretorius and Holtzhauzen (2008, p. 93) as the "preconditions required to overcome turnaround situations". These, with other existing organisational liabilities, may be further aggravated by the firm's state of affairs, to the extent that they present a direct mortality risk. This study adds the concept of a "fatal liability", which refers to resources (or lack thereof) that pose an imminent threat to the firm's survival. While each liability could manifest to such an extent, some are less apparent than others at the commencement of reorganisation proceedings.

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Reorganisation proceedings may aggravate certain liabilities, causing some to become fatal to the firm's survival. Limited information on or understanding of these liabilities may prove disastrous for a firm considering reorganisation. In view of the practical constraints (asymmetry of information, data integrity, timeframe) at the commencement of proceedings, the following liabilities, recognised from within existing turnaround literature, have been identified. Each liability could contribute to the likelihood of liquidation in a framework that captures their nonlinear relationships, as discussed below.

Using current turnaround literature, nine liabilities have emerged as relevant factors to be considered before commencing reorganisation. Together they are consolidated into the Likelihood of Liquidation (LOL) Framework. If they are absent, the likelihood of liquidation removes the intrinsic variables associated with failure – to assume a reasonable prospect for recovery of the firm at the commencement of reorganisation. Therefore, a firm considering reorganisation proceedings should aim to minimise the likelihood of liquidation by recognising the threat presented by the following liabilities.

Lack of a Functional Business Model

The firm's business model can be referred to as a business concept, economic model or core of the business. It is "a statement of how a firm will make money and sustain its profit stream over time" (Stewart & Zhao, 2000, p. 290). Without a viable business model, a firm will find turnaround exceedingly difficult, if not impossible (Bibeault, 1999, p. 115; Kahl, 2002, p. 122). For that reason, a viable core operation that leads to profit generation must exist. Profitability essentially is the blueprint that defines how the company creates value for itself while providing value to the customer (Johnson, Christensen, & Kagermann, 2008, p. 60). Numerous studies conducted on distressed firms found profitability (return on total assets) to be statistically significant in distinguishing those that successfully reorganised from those that were liquidated (Campbell, 1996; Casey, McGee, & Stickney, 1986; Routledge & Gadenne, 2000). While it is within the scope of reorganisation to remedy profitability issues, if the business model is inherently unable to deliver sufficient profits it is highly unlikely a going concern

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value will exist. It is worth noting that if an entirely new business model is required, it should consider the possible impact on value maximisation.

Projected profitability, however, may only give insight into the short-term performance of the business and is no guarantee of a sustainable business model (Smith & Graves, 2005, p. 306). Limited financial data on profit forecasts could also hinder the accuracy of this metric. While a turnaround plan is responsible for rectifying an ineffective business model, it can only go so far without impeding the return to creditors. A business model incapable of yielding the necessary profits would be detrimental, as the erosion of assets would most certainly occur. Therefore, prior to commencement, it should be clear how the business aims to sustain its ability to generate profit. The future business model becomes a fatal liability when the business model is no longer relevant, not durable or simply does not exist. Failing this, the business cannot justify its economic relevance and the likelihood of liquidation is imminent.

Insufficient Reorganisational Slack

Reorganisation proceedings are justifiably regarded as expensive, encompassing both direct and indirect costs at a time when the firm possesses limited resources (Francis & Desai, 2005, p. 1204). For this reason, firms seeking reorganisation require the necessary "organisational slack" or "cushion of actual or potential resources" (not limited to financial) to facilitate the turnaround (Bourgeois, 1981, p. 30). Internally obtainable "free cash flow" may sustain the firm for this period (Lehn & Poulsen, 1989). However, it is more common for firms to seek "free assets" to obtain the necessary working capital to deploy turnaround strategies (Hambrick & D'Aveni, 1988, p. 4; Kaplan & Zingales, 1997). Examples of such slack resources are excesses of personnel, inventory, retained earnings or working capital. White (1980, 1983) explains analytically that, all things being equal, firms that successfully reorganise have more free assets – this is a sentiment that has been widely held (Casey et al., 1986, p. 260; Guha, 2016, p. 110; Jacobs Jr, Karagozoglu, & Layish, 2012, p. 125; Routledge & Gadenne, 2000, p. 239; Smith & Graves, 2005, p. 304). The free assets measure concentrates on the share of tangible assets that has not been collateralised. The larger the proportion of free assets, the greater the ability of the firm to obtain the additional financing needed

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to emerge successfully from reorganisation. Stickney, Brown, and Press (1990) provide an elegant proposition for organisational slack as follows:

$$\text{Slack} = \left[1 - \left(\frac{total\ debt}{total\ assets}\right)\right] \times 100$$

Firms with higher values on this ratio have relatively greater access to financial resources and thus greater slack, which lowers the likelihood of liquidation. However, the formula of Stickney et al., or even a "free assets" assessment, could be regarded as too restrictive for use in a commencement standard. Organisational slack can be obtained in other more creative ways, as is typically observed in reorganisation. In some cases, intangible assets such as those of strategic or sentimental value could unlock additional funds for the firm. Secured lenders have been observed furthering additional unsecured Post Commencement Funding (PCF) to facilitate a reorganisation that will return a higher value for their assets (Pretorius & Du Preez, 2013, p. 169). Levinthal and March (1981, p. 309), however, warn that a process of "slack-search" also requires excess resources to conduct.

Organisational slack should thus be judged by the ability of the firm to generate the necessary working capital to fund reorganisation proceedings. Insufficient organisational slack thus creates a liability for the firm's survival in reorganisation. If at commencement a firm remains deadlocked, with no slack available (current and in the projected future), then this would constitute a fatal liability.

Creditor Composition

Admission to the formal reorganisation process shifts the balance of power within the firm and creditors become adjudicators of the firm's fate. The dynamics of this alters the prospect of success significantly by promoting the interests of creditors to the front line (Ayotte & Morrison, 2009). It would seem futile to proceed with any reorganisation attempt without a consenting majority of creditors. Though business rescue warrants only a seventy-five percent majority to approve the plan, a controlling creditor (claim apportioning to twenty-five percent or greater) could veto any possible restructuring effort should

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it not be (or be perceived to be) in their own best interests (White, 1983). For this reason, a dissenting creditor with a controlling vote can be earmarked as a liability. It is, however, possible for a creditor's vote to be set aside, should it be deemed malicious or detrimental to the rest of the stakeholders involved. Section 152(3)(a) of The Companies Act 71 of 2008 (South Africa, 2008) (hereon referred to as "The Act") grants the business rescue practitioner the option to approach the court to this effect, yet the outcome is often uncertain and escalates the cost of the proceedings.

As regards assessing the composition of creditors, they can be sorted into two camps: secured and unsecured creditors. While both camps aim to minimise their losses, their propensity for risk differs significantly. Secured creditors may increasingly oppose the reorganisation as collateral value approaches their claim. For the most part, this is because secured creditors will receive only part of the gain if the value of the reorganised firm increases but bear all the costs if the value depreciates (Bergström, Eisenberg, & Sundgren, 2002, p. 360). Secured creditors are also expected to introduce additional bargaining costs to the process. Theorists recognise that the likelihood of liquidation is higher with an increase in secured creditors (Campbell, 1996, p. 16; White, 1983). Ayotte and Morrison (2009, p. 531) presented a correlation of capital structure and bankruptcy outcomes at different levels of the secured debt-to-assets. Evidence from their study showed that the likelihood of support for reorganisation was higher among unsecured (44 percent) and under-secured firms (47 percent) than it was among moderately over-secured (21 percent) and highly over-secured firms (34 percent).

Eisenberg and Tagashira (1994, p. 114) found empirical evidence to suggest a relation between debt structure and the likelihood of liquidation. Their research indicated that where the average claim was relatively high it would reduce the probability of consummation, whereas smaller claims resulted in less of an incentive to resist the proposed plan.

Judging the composition of creditors as a liability, therefore, should consider the type of security, average claim size and concentration of creditors, considering the rigidity of their relationship. The creditor composition can seal the fate of

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reorganisation before its commencement. For that reason, each of these aspects may present significant liabilities to the firm's survival if not clarified before commencing with the reorganisation. A fatal liability posed by the composition of creditors could comprise one or all the above aspects, depending on the circumstances.

Stakeholder Influence

Turnaround literature clearly acknowledges the critical role of stakeholders in the firm's survival (Arogyaswamy, Barker, & Yasai-Ardekani, 1995, p. 498; D'Aveni & MacMillan, 1990; Smith & Graves, 2005, p. 317). Though the collective view of external stakeholders is a liability on its own (see External Legitimacy), some may exert abnormal influence during proceedings that could obstruct the firm's survival. It is, therefore, necessary to determine which stakeholders are the most influential and how to address the extent of this liability.

Key stakeholders who control needed resources naturally exert a degree of influence over a firm. Reorganisation, however, may extend greater influence on these parties and others in the form of rights or disclosure of information (Pajunen, 2006, p. 1263). It is likely that the relationship with these key stakeholders is already fragile before commencement and could certainly take on further strain as formal proceedings commence (James, 2016, p. 493). Creditors, employees or shareholders are expected to use their rights under insolvency as a remedial tool to influence proceedings in their favour (Baird, 1991, p. 228), while competitors may exploit the firm's vulnerability during proceedings.

The stakeholder response factor proposed by Trahms, Ndofor, and Sirmon (2013, p. 1294) recognises the importance of acknowledging the stakeholders' interests and influence during the turnaround process. For this reason, the degree of tolerance for each key stakeholder should be factored in. Mitchell, Agle, and Wood (1997, p. 854) distinguish stakeholders as follows: (1) the stakeholder's power to influence the firm; (2) the legitimacy of the stakeholder's relationship with the firm; and (3) the urgency of the stakeholder's claim on the firm.

Furthermore, "dangerous stakeholders" who lack legitimacy, thus rendering them coercive and possibly violent to the firm, should be identified. Though it remains

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possible to mend relationships, the extent of the damage may be a too great to rectify in reorganisation (Starbuck, Greve, & Hedberg, 1978, p. 4). Furthermore, reorganisation proceedings will very probably need to grapple with the stakeholders not recognised by proceedings, such as government, critical suppliers, critical customers or society at large.

After investigating the influence of key stakeholders and determining their degree of support, a position should be formed for each. Identifying these stakeholders and determining the extent of their influence over the firm forms part of the preliminary evaluation of the likelihood of liquidation. Should an influential stakeholder be deemed belligerent, this could veto any recovery strategies moving forward and could be considered a liability or potential fatal liability.

Liability of Smallness

Empirical studies have clearly established the relationship between firm size and the likelihood of failure (J. Freeman et al., 1983, p. 692; Joel & Oliver, 1991, p. 191; Pant, 1991). This has been more commonly referred to as the liability of smallness. The effect thereof has been attributed to difficulties in optimising taxes, recruiting and training a workforce, and the handling of the administrative costs of compliance with government regulations (Aldrich & Auster, 1986, p. 181). White (1983, 1989) further added that larger firms have been found to be better equipped to raise distressed financing due to their previous success in raising external capital.

The liability of smallness, however, is particularly relevant in the commencement decision as reorganisation can potentially increase the risk of mortality. Formal turnaround procedures are notoriously expensive and therefore the size of the firm should be considered beforehand. The ability of a firm to absorb the costs of reorganisation has been found to be correlated with its size (Barker & Duhaime, 1997, p. 33). An approximation of reorganisation costs would be dependent on the complexity of the reorganisation and the liquidity needed to cover those expenses (Fisher & Martel, 2005, p. 168). Evidence suggests, however, that there are substantial fixed costs associated with the process, and therefore economies of

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scale with respect to reorganisation costs must be considered (Altman, 1984; Warner, 1977, p. 345). Smaller firms bear this burden as a result of the adverse effect created by economies of scale in direct reorganisation costs (Campbell, 1996, p. 14). For larger firms, administrative expenses are leveraged over a higher value of assets, potentially leading to a greater yield in reorganisation than liquidation (Eisenberg & Tagashira, 1994, p. 113). Smith and Graves (2005, p. 306), in addition, see larger firms to be better off in reorganisation as they account for greater losses for stakeholders, who as a result then devote more interest to proceedings.

In the context of business rescue, there are some additional constraints on firm size. Limited numbers of competent practitioners have resulted in inflated fees, and litigation costs have escalated as there is greater court involvement in the proceedings (Boraine & Wyk, 2015, p. 239; Pretorius, 2014). While these may be attributed to the early years of business rescue, they nevertheless have an effect on the size of firms that can afford to participate in proceedings.

A priori, the liability of smallness is associated with several factors that compound the adverse effect of a small firm's size in reorganisation. The capacity of the firm to bear the expense of reorganisation should be predetermined. A fatal liability may easily emerge as insufficient assets or earning potential exist.

Liability of Data

The liability of data concerns the quality of a firm's information, be it financial, qualitative, operational or consumer related. As alluded to earlier, Argenti (1976, p. 143) exposed the lack of data integrity within distressed firms, an idea that has since then resonated within the literature (Camacho-Miñano & Campa, 2014; Charitou, Lambertides, & Trigeorgis, 2007; Jaggi & Lee, 2002). Pretorius and Holtzhauzen (2008) revealed the extent of the problem on a domestic level. To some extent, this is hypothesised as being the product of firms attempting to avoid insolvency proceedings (Jaggi & Lee, 2002, p. 296). A possible scenario could entail the use of pervasive earnings that management intended to use to "clean" negative signals of financial distress at the expense of the integrity of the firm's annual reports. While academic literature has already agreed that

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turnaround becomes exceedingly difficult, if not impossible, to achieve if there is insufficient data or the data presented is highly questionable (Fredenberger, Lipp, & Watson, 1997; Liou & Smith, 2007, p. 76), this paper suggests that the lack of sufficient data integrity may be used to indicate the likelihood of liquidation at commencement of reorganisation proceedings. The extent of this liability may be amplified with strict timelines, increased stakeholder involvement and the immediate determination of a prospect of survival imposed by reorganisation. Furthermore, the value maximisation goal becomes unrealistic under increased uncertainty of data integrity, potentially advocating value-destroying behaviour (Wruck, 1990, p. 422). Various dimensions can be used to assess the data quality of a firm, such as the extent to which data is accessible, complete or relevant. In addition, the ease of manipulation, objectivity or security may further reduce the trustworthiness of the data. For this reason, the liability that results from a lack of data integrity may severely influence the likelihood of liquidation. If insufficient data is available, this could even result in a fatal liability for the firm.

Liability of Leadership

The liability of leadership refers to the leadership ability and style of the business rescue practitioner, top management team, the "new CEO" or the management successors to successfully rehabilitate the firm (Pretorius & Holtzhauzen, 2008, p. 97). The impact of leadership capabilities on enacting a successful recovery has been widely recognised (Lohrke, Bedeian, & Palmer, 2004; Probst & Raisch, 2005, p. 94; Smith & Graves, 2005, p. 306). In relation to commencement criteria, the liability of leadership relates to the core skill set and management's willingness to continue to be involved beyond the reorganisation process.

The build-up to reorganisation is expected to result in managerial fatigue, causing a decline in morale and an escalation of negative attitudes (Bozeman & Slusher, 1979; Liou & Smith, 2006). Management's willingness to participate in proceedings going forward may be uncertain and key staff are probably looking to jump ship (Probst & Raisch, 2005, p. 91). Retaining core skills and maintaining high morale while personnel are confronted with retrenchment is pivotal to the firm's survival (S. Freeman & Cameron, 1993, p. 12). Though reorganisation can result in a new management structure, certain skilled employees may be difficult

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to replace, particularly when their expertise is crucial to the formulation and implementation of turnaround strategies (Lohrke et al., 2004, p. 64; Smith & Graves, 2005, p. 307). Gauging these individuals' appetite to remain loyal and committed to the firm may provide an indication as to whether they contribute to the liability of leadership or not.

There is widely held support for the removal of existing management teams in line with the turnaround process and restoring stakeholders' confidence (Barker III, Patterson Jr, & Mueller, 2001, p. 237; Kesner & Dalton, 1994; Smith & Graves, 2005, p. 306). External stakeholders, such as shareholders and creditors, are not always capable of sustaining the firm beyond reorganisation (Lohrke et al., 2004, p. 77; Probst & Raisch, 2005, p. 96). Poor executive succession may reduce recovery efforts and result in a greater risk for the firm (Schwartz & Menon, 1985).

The liability of leadership may therefore severely increase the likelihood of liquidation. Determining at commencement the extent of this liability may significantly reduce wasteful turnaround efforts. The key question is, does management want to save the company, or is there a viable succession team available to ensure the going concern premium? If not, this can significantly jeopardise turnaround efforts and possibly result in a fatal liability.

Liability of Obsolescence

Environmental entropy stems from the reduced capacity of the environment to support an organisation (Whetten, 1979, p. 26). Pretorius (2008, p. 22) refers to this as the lack of "environmental munificence", which may vary from economic problems or technological disruption to competitive or social changes. Turnaround literature suggests a strategic response to an unforgiving external environment that would transform and reposition the firm for sustained growth and profitability (Pearce & Robbins, 1993; Schmitt & Raisch, 2013; Smith & Graves, 2005). Repositioning a firm within its environment can be done by implementing new strategic initiatives that would probably require considerable time and costs (Pearce & Robbins, 1993, p. 623). Unfortunately, for firms considering formal turnaround where the severity of distress is high, the cost of

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repositioning or the time required to do so may exceed the going concern premium, and therefore it may prove more economical to liquidate. The environmental entropy can serve as a clear indicator of unfeasibility and prevent "deepening insolvency" from occurring. Trahms et al. (2013, p. 1289) distinguish between two patterns of environmental entropy: first, "environmental jolts", which result in a sudden and discontinuous change in an environment, rendering the firm ineffective or even obsolete. The converse is the slow degradation of the external environment through subtle or incremental changes. One's approach to analysing the decision-maker's perception of a crisis is instrumental in unravelling the true trigger, determining the value and possibility of loss and time pressures at play (Billings, Milburn, & Schaalman, 1980). The following two scenarios assist in diagnosing the severity in either case.

Environmental Jolts

For some firms, the anxious encroachment that typically hovers over delayed actions to reorganise is avoided, as they are instead flung into crisis by unforeseen external events. The concept of an environmental jolt was defined by Meyer (1982, p. 515) as "transient perturbations whose occurrences are difficult to foresee and whose impacts on organizations are disruptive and potentially inimical". The effects thereof often dramatically alter the degree of environmental munificence afforded by the environment (Dess & Beard, 1984, p. 58). The fatal liability posed by environmental entropy may look very different if it is the result of an environmental jolt (as opposed to incremental degradation). An environmental jolt may lead to a permanently unfavourable environment from which the firm must exit in order to survive. Conversely, however, an environmental jolt may result in a temporary disruption, in the face of which it may be possible to simply "weather the storm" (Bradley, Aldrich, Shepherd, & Wiklund, 2011, p. 496; Meyer, 1982, p. 518). In either case, the likelihood of liquidation is imminent if the firm cannot evade the effects of the environmental jolt.

Incremental Degradation

Environmental jolts may be easier to identify; incremental degradation of the external environment can be less obvious. Tichy and Devanna (1986, p. 44) have

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compared this to the "boiled frog" phenomenon: a classic physiological response experiment involving two live frogs, a pot of water, and a Bunsen burner. The frog dropped into an already boiling pot of water reacts instantaneously by jumping out. The frog that is placed in cold water which is gradually heated to boiling point will, however, remain in the pot and ultimately die. The change in the latter frog's environment is so gradual that a serious reaction is never triggered, or at least not until it is too late. While directors may be completely unaware of the environment shifts (or be simply in denial), the threat, if left too late, will no doubt result in the firm's demise. Even the great titans of industry may be toppled by gradual disruptive innovations which wedge themselves into markets (Christensen & Overdorf, 2000). For reorganisation, a fatal liability would be triggered if there were insufficient time or resources to reposition the firm and prevent further degradation of the firm's value.

External Legitimacy

Through the view of stakeholder theory, a firm under distress has key stakeholders who play an intrinsic role in the firm's recovery, as the loss of legitimacy among stakeholders increases the likelihood of liquidation (Smith & Graves, 2005, p. 317). Joel and Oliver (1991, p. 215) showed that improving the external legitimacy of institutional linkages could induce a reverse risk of failure. Shaky stakeholder relationships can, in addition, have a permanent long-term negative effect on performance (Hambrick & D'Aveni, 1988). A firm must maintain its relationships with not only affected parties but also non-financial key stakeholders who may impede its ability to create and capture value (E. Freeman, 1999). In addition, evidence suggests that the importance of stakeholder relationships increases in reorganisation (Trahms et al., 2013, p. 1293). Altman and Hotchkiss (2006, p. 38) highlight a common misconception in reorganisation, which is that though key stakeholders may be expelled by legal powers, they are inevitably a component of success.

The support from stakeholders hinges on open communication and a personal relationship promoted by trust (Pajunen, 2006, p. 1281). If trust is defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the

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trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995, p. 712), then one can assume that it is an integral part of the firm's reorganisation success. The hostility typically present in reorganisation may, however, add additional strain to the firm's integrity, as stakeholders are obliged to participate even under suspicion of fraud, abuse or reckless trading. Argenti (1976, p. 143) highlighted the impact of "creative accounting" practices as:

> *"I have come to believe that this phenomenon is almost invariably associated with failure – we even had creative accounting in the twenty-second largest company in England and the sixth largest in America. I suspect that it is one of the most reliable of all symptoms."*

If the integrity of the firm is not maintained, this may result in external stakeholders withdrawing support from the firm (D'Aveni, 1989; D'Aveni & MacMillan, 1990). At commencement, the integrity of the firm should therefore be evaluated. Should it be so deeply eroded that it becomes too costly to repair, the likelihood of liquidation would be high. The "integrity capacity construct" developed by Petrick and Quinn (2000, p. 4) focuses on four key dimensions: process, judgement, development and system. The construct is defined as "the individual and/or collective capability for repeated process alignment of moral awareness, deliberation, character and conduct that demonstrates balanced judgement, enhances sustained moral development and promotes supportive systems for moral decision-making".

The lack of external legitimacy would simply inhibit the collective support by stakeholders that is required to maintain a going concern. Barker III et al. (2001, p. 239) maintain that there needs to be sufficient "reputational slack" to commence with turnaround efforts. Integrity forms the basis of the trust required to reorganise the firm, and its absence could pose a possibly fatal liability.

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Research methodology

The field of turnaround is widely considered to be a complex and multi-disciplinary topic which is to a large extent fragmented. Given our aim to derive a set of liabilities from the literature, we adopted a qualitative approach using elements of grounded theory (Corbin & Strauss, 1990; Creswell, 2012, p. 274). A thematic approach included extensive discussion about the major themes that arose from analysing the literature. Therefore, this remains a conceptual paper derived from an ontological position that comprised the researchers' views on the nature and essence of the research reality. The researchers adopted an objective realist stance, which accepts that knowledge comes from facts associated with real-life cases and their context. While identifying the liabilities, the researchers were aware of their own individual methodological values, beliefs and philosophical assumptions. These assumptions could influence how the research was conducted and are stated in order to understand the "intellectual climate" in which it took place.

Proposed framework

The aim of this paper is to derive a set of liabilities in a framework that can assess the "likelihood of liquidation" of the firm at the commencement of reorganisation. This will enable decision-makers to consider the relevant factors before commencing reorganisation proceedings. The nine liabilities that have been identified all contribute to the likelihood of liquidation as depicted in Figure 5. Each liability should be diagnosed using a set of indicators. Such indicators however are still to be determined and form part of our suggested future research. The magnitude of each indicator in a particular firm is measured on a Likert scale, with 1 indicating a high contribution to the likelihood of liquidation and 5 indicating little to no contribution. Once there is a value (1–5) for each indicator, an overall score can be calculated for a liability. To account for the varying importance of each indicator and liability we suggest the allocation of weights. The analytic hierarchy process would be an ideal technique to validate suggested weights for the various indicators. As this is an exploratory framework for considering the likelihood of liquidation, we have omitted the indicators and

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their weightings and advocate that a range of weighted indicators should be determined.

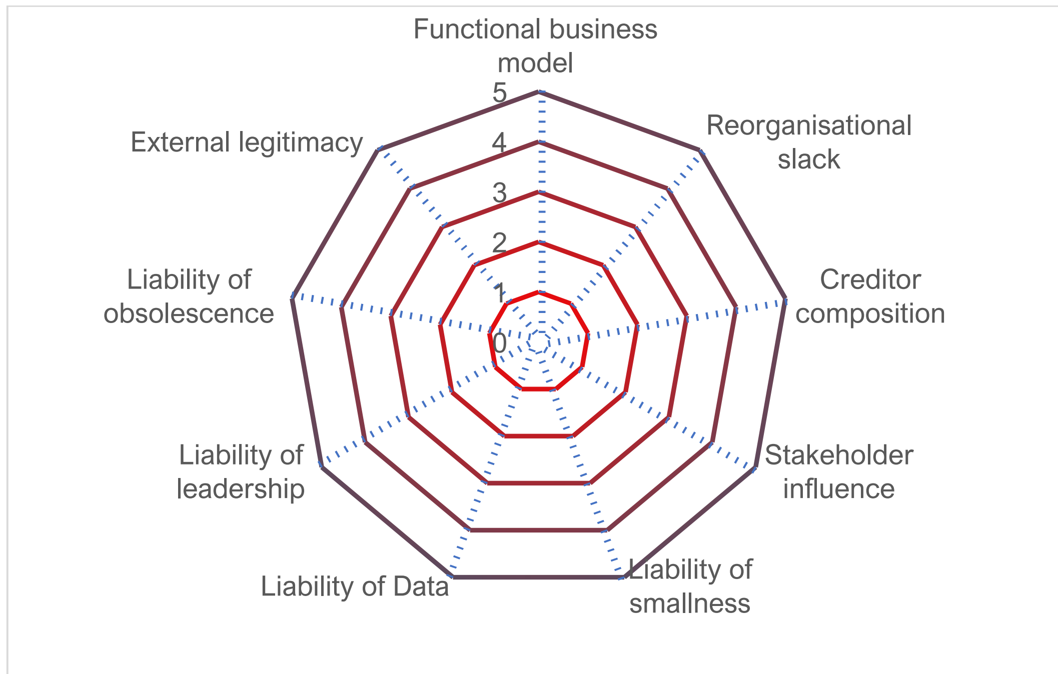

Figure 5 Integrated view of the proposed Likelihood of Liquidation Framework. (own compilation)

The Likelihood of Liquidation Framework illustrated in Figure 5 is therefore the result of all nine liabilities interacting with one another. Using the absence of evidence, the Likelihood of Liquidation Framework removes the intrinsic variables of failure to assume a reasonable prospect at the commencement of reorganisation. The framework captures the relationship of each liability to reveal a holistic impact on the firm's prospect of liquidation. The framework derives an overall impact value known as the LOL Score. The LOL Score is a closed unit interval [0,1] that signals the firms likelihood of liquidation at the commencement of reorganisation proceedings. A value of 0 will indicate a high likelihood of liquidation while a value of 1 will indicate that liquidation is unlikely. The LOL Score can be calculated using the following formula:

$$LOL\ Score = \sum_{i=1}^{N} \frac{(a_i - 1)}{4}$$

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Where N is the number of indicators covering the nine liabilities, a_i is the value for each indicator with i and $a_i \in (1,2,3,4,5)$. The LOL Score is calculated from the sum of the values of all the indicators. As the LOL Score diminishes in value from 1 to 0, so the higher the likelihood of the firm conceding to liquidation there is during reorganisation.

A liability may be classified as either a *non-fatal* or a *fatal* liability based on its value as depicted in Figure 6. If a fatal liability is found the LOL Score is therefore automatically equal to 0 and there is no longer a need to progress further with the equation. Non-fatal liabilities are liabilities with a value greater than one. Indicators of non-fatal liabilities are given a value between 1-5 to discern their impact on the firm (a_i). These liabilities are compounded together to reveal their collective effect on the likelihood of liquidation. A fatal liability is given a score of zero, as it suggests a particular liability poses a significant enough threat in its totality to induce liquidation.

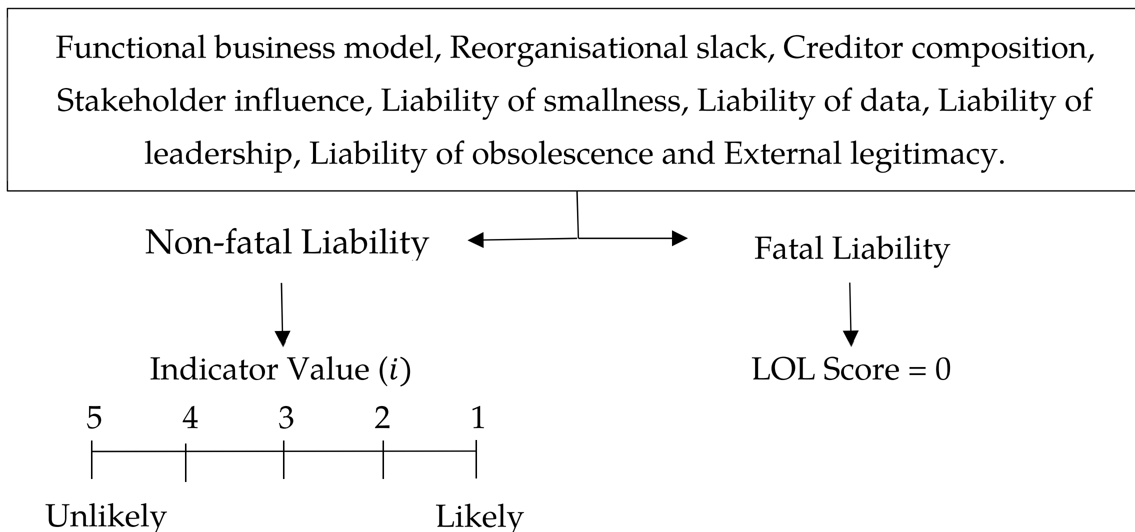

Figure 6 Classifying a commencement standard liability as fatal.

One of two outcomes may ensue: a value of 0 for any liability or closed LOL Score interval [0,1]. The latter result cumulates the risks of all the liabilities together. Therefore, recording a low score on several liabilities may collectively increase the likelihood of liquidation. The likelihood of liquidation value can

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then be multiplied by the reorganisation value (R), where it functions as both a mediator and moderator. The greater the likelihood of liquidation, the more the reorganisation value is reduced.

The Likelihood of Liquidation Framework is proposed as a potential method of determining reasonable prospect at the commencement of business rescue, on condition that it fulfils the value maximisation principle. The framework works around the practical constraints associated with gathering data at the commencement of proceedings such as the asymmetry of information, data integrity and timeframe given. It is worth noting that the framework does not limit the firm's turnaround potential but rather works on the reverse assumption that removes the likelihood of liquidation. Therefore, a commencement decision can be determined without the knowledge of the possible turnaround strategies that may be deployed. There is no guarantee in any reorganisation attempt that when a reasonable prospect exists at commencement, it will necessarily translate into successful turnaround of the firm (Bergström et al., 2002; Campbell, 1996; Wruck, 1990). However, the framework may enable practitioners, courts, directors or any affected party to assess the likelihood of liquidation and determine a reorganisation value that justifies entering reorganisation proceedings.

Limitations and future research

The paper affords several future research possibilities. The reorganisation value and costs remain open for further exploration within the business rescue context. Further analysis of each liability is needed to determine a measure of likelihood and what constitutes a fatal liability in practice. The framework currently assumes equal weighting for all the liabilities and therefore could benefit from weighted liability values. A more enticing prospect, however, is testing the accuracy of the framework in reducing the number of uneconomic firms entering reorganisation proceedings.

The proposed framework is evidently not without several limitations. Firstly, the liabilities have been identified from turnaround literature and are yet to be

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proven to be statistically relevant to the commencement standard. The framework has been modelled to a large extent on the South African business rescue procedure. In selecting the liabilities, the researchers used their knowledge and experience of the reorganisation environment supported by a literature review, and the selection is therefore vulnerable to bias. The framework hopefully will entice scholars to expand their views on possible turnaround prediction models and encourage critique and adaptation.

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05

CHAPTER

Determining and prioritising the indicators for the Likelihood of Liquidation Framework.

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Calculating the Likelihood of Liquidation with value-weighted indicators derived by Delphi and the analytic hierarchy process

Abstract: Perhaps the most critical aspects of reorganisation is the commencement decision. There are often a multitude of aspects to consider when considering a formal turnaround process, making the decision to commence proceedings complex. We continue the development of the Likelihood of Liquidation Framework for its eventual use in practice by identifying key indicators for the nine liabilities, then investigating the relative importance of each liability/indicator. We finally propose anchor scale values for each indicator. Practitioners, judges or directors could use the framework as a decision aid when developing an expert opinion on the likelihood of liquidation of a firm intending to commence with reorganisation proceedings. The aim is to speed up the liquidation of economically inefficient firms that attempt to seek shelter in reorganisation.

Keywords: Turnaround, reorganization, business rescue, commencement standard, Analytic Hierarchy Process, Delphi Method, liabilities

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Introduction

In recent years researchers and practitioners have made a significant contribution in the prediction of business failures (Wu, Gaunt & Gray, 2010:36). Business failure can be defined in various ways, taking into consideration the specific interest or condition of the firm under scrutiny. Reorganisation[8] is often an important vehicle for failing firms and their creditors to pursue intensive turnaround strategies. However, we are often under the impression that reorganisation has failed if the firm is subsequently liquidated or sold, whereas this may actually be the best outcome of an efficient process. Reorganisation is aimed at rescuing an economically viable firm that is experiencing temporary financial difficulty – financially distressed (Franks & Torous, 1992). A severely economically distressed firm will not find any salvation in reorganisation, which would simply erode the value of the firm. A commencement standard is therefore designed to screen out severely economically distressed firms that would not benefit from reorganisation proceedings. Such a standard may look to failure prediction models; however, these have been predominately reliant on financial metrics and often fail to consider other crucial elements of economic viability (Rosslyn-Smith & Pretorius, 2017). Furthermore, there is criticism over the lack of methodological rigour in identifying the turnaround potential of firms on which to conduct such analysis (Pandit, 2000:32; Pearce & Robbins, 1993:626). A contribution to research in this field must therefore seek to redress this neglect, forming new ways of filtering the factors from proceedings. This Likelihood of Liquidation Framework was developed to include a broader spectrum of liabilities, to better assess the viability of the firm's recovering through reorganisation.

[8] The word "reorganisation" is occasionally used in a general sense to denote the rehabilitation of a distressed business, but it may also be used more narrowly to refer only to the process of rehabilitation under a formally recognised legal insolvency procedure, whose statutory titles may vary from administration to business rescue or reorganization.

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The Likelihood of Liquidation Framework is a basic arrangement of liabilities used to determine the likelihood that a firm will emerge from reorganisation in a solvent condition and with reasonable prospects of financial stability and success. The framework has been modelled around the South African business rescue reorganisation process, but it can be applied to various other jurisdictions as well.

This paper aims to continue the development of the Likelihood of Liquidation Framework for its eventual use in practice. To do so, we first identify key indicators for the nine liabilities, then investigate the relative importance of each liability/indicator, and finally propose anchor-scale values for each indicator. The indicators were derived using a strong and widely used managerial tool known as the Delphi method. The relative importance of each element was allocated using a powerful mathematical model known as the Analytic Hierarchy Process (AHP). The enhanced framework is expected to provide some indication of the reasonable prospect of a firm prior to the commencement of business rescue proceedings. If effective, this framework stands to reduce the number of economically distressed firms that abuse proceedings, and ultimately to preserve firm value.

The Likelihood of Liquidation Framework

The Likelihood of Liquidation Framework (LOL) consists of nine liabilities that were derived from existing turnaround literature. Each liability represents an acute vulnerability of a firm during the formal turnaround process. The framework consolidates all these liabilities to assess the prospect of the firm's succumbing to liquidation. If a liability is absent, LOL removes each intrinsic variable associated with failure in order to assume a reasonable prospect, at the commencement of business rescue, for the recovery of a firm. This is provided the value-maximisation principle remains satisfied. The framework allows decision-makers to consider the relevant factors before commencing reorganisation proceedings, given the fact that information and data accuracy are often limited at that time. The nine liability factors are: the functional business model; reorganisational slack; creditor composition; stakeholder influence;

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liability of smallness; liability of data; liability of leadership; liability of obsolescence; and external legitimacy.

Each liability contributes to the overall likelihood of liquidation. In some circumstances, a liability may be unlikely, while in others it may serve as a "fatal liability", thereby suggesting liquidation is almost certain. The intensity of each liability is determined by its indicators, which were derived using the Delphi Method.

Methodology

The study deployed a mixed-methods research design that assisted in completing the LOL Framework. In line with Creswell (2012:543), an exploratory sequential mixed-methods design, or two-phase model, was considered best suited to the task. This method involves first gathering qualitative data to explore a phenomenon and then collecting quantitative data to explain relationships found in the qualitative data. Therefore, the researchers were able to identify measures actually grounded in the data obtained from study participants. The study consisted of two primary research techniques, Delphi and AHP, which fell into a sequence of steps as depicted in Figure 7. The use of these two methods in exploratory sequential mixed-methods design was reinforced by Khorramshahgol and Moustakis (1988) when they termed the methodology the Delphic hierarchy process.

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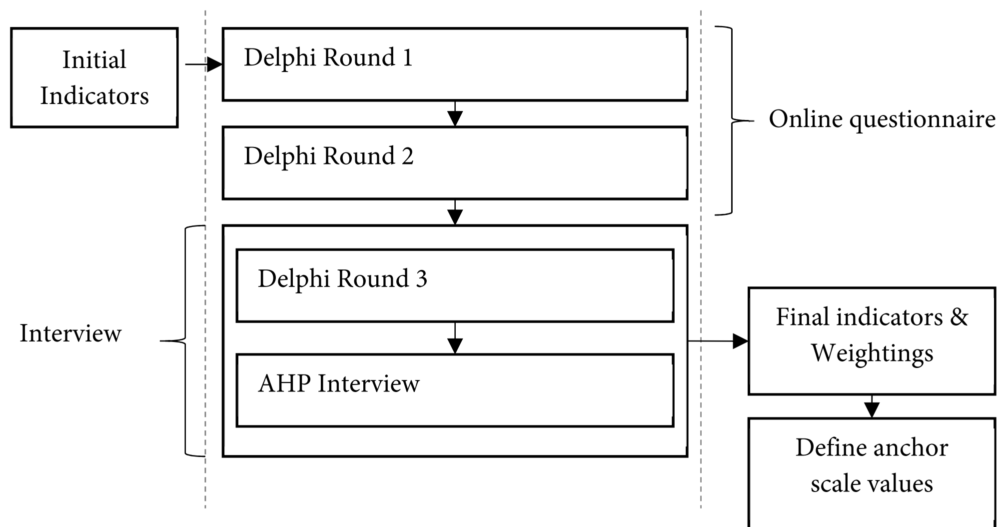

Figure 7: An overview of the research process used (own compilation).

An initial set of between five and seven indicators were derived for each liability by the researchers from the literature. Each indicator was given a title and definition; these were presented to the participants in the first round of the Delphi study. The participants consisted of 11 experts who were purposefully selected based on their knowledge and experience in the field of business turnaround. The sample size was also considered acceptable for both studies, as they remain exploratory in nature (Cheng & Li, 2002:197; Okoli & Pawlowski, 2004:18; Wong & Li, 2008:12). These experts were considered eligible to be invited to participate in the Delphi study as they shared related backgrounds and experiences concerning the target issue, were capable of contributing helpful inputs, and were willing to revise their initial or previous judgements for the purpose of attaining consensus. The researchers closely examined and seriously considered the qualifications of participants in addition to their acclaim and respect within the target groups of experts. The participants ranged from academics and business rescue practitioners to corporate recovery consultants. The methodology and findings from the two primary research techniques are described next.

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The Delphi Method

The Delphi method is a widely used and accepted method for attaining convergence of opinion regarding real-world knowledge solicited from experts in certain fields. The technique can be mostly attributed to Dalkey, Brown and Cochran (1969), who maintain that "two heads are better than one, or... *N* heads are better than one" (Dalkey *et al.*, 1969:6). According to Dalkey et al, there are three features to Delphi: anonymity; controlled feedback; and statistical group response. Anonymity is preserved by using a questionnaire and thereby lessening the impact of dominant individuals. Controlled feedback is ensured by conducting the study in a sequence of rounds whose results are shared with the participants at the end of each round to promote objectivity. Finally, a broad definition of the response aims to decrease group pressure for conformity, as towards the conclusion of the rounds there may still be a significant spread of individual opinions, keeping in mind that the inclusive group response is designed to ensure that the opinion of every participant is incorporated in the final response.

Linstone and Turoff (2002:5) outline the process of a conventional Delphi study as firstly "designing a questionnaire which is sent to a larger participant group. After the questionnaire is returned, the researcher summarises the feedback and, based upon the results, develops a new questionnaire for the participant group. The participant group were given at least an opportunity to re-evaluate their original answers based upon examination of the group response. To a degree, this form of Delphi is a combination of a polling procedure and a conference procedure which attempts to shift a significant portion of the effort needed for individuals to communicate from the larger participant group to the smaller monitor team."

This study made use of an online questionnaire for the first and second rounds, which ran participants through a video tutorial explaining the LOL Framework, objective of the study and what their role was in the Delphi process. The participants were asked to evaluate and add indicators in consideration of the SMART criteria (Specific, Measurable, Attainable, Realistic, and Time-sensitive).

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SMART

The SMART criteria assisted the participants in assessing/suggesting indicators that were relevant to the study's objective. Each of the SMART elements is defined as follows:

Specific: Indicators should be detailed and as specific as possible. Loose, broad or vague indicators are not desirable. *Measurable*: In order to clearly determine a value, indicators should not be ambiguous but rather as clear and concrete as possible. It is important for an indicator to be measurable. The measure may be quantitative or qualitative, but measurement should be against a standard of performance and a standard of expectation understood by an industry professional. *Attainable and aggressive*: Success or failure is only fairly attributed against practical indicators. Indicators should not be out of reach. They should be reasonable and attainable within the typically hostile and chaotic environment experienced in business rescue. However, setting indicators is a balance between this degree of "attainability" and challenge and aspiration. *Realistic and result-oriented*: Extending the concept of attainability, a goal should be realistic. It is possible that a goal could be set that is attainable, but not realistic in the particular working conditions. Being realistic in the choice of indicators is helpful in examining the availability of resources and selecting indicators. *Time-sensitive*: Indicators should be selected in view of the strict timelines afforded in business rescue. Being time-sensitive is key in measuring success along the pathfinding of the information required by an indicator.

During the first round, participants were obligated to suggest two of their own indicators before being presented with the initial set compiled by the researchers. Participants then had the opportunity to accept, reject or modify each indicator while providing their reasoning as well. Participants could add new indicators at any point during all three rounds.

To assist the participants, the researchers compiled the first set of indicators, derived from the literature and the researchers' knowledge and experience. These initial indicators ranged in nature from standard to controversial. They aimed to trigger innovative thinking and provide critical mass for the Delphi participants

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to work from. During each round, the participants were asked to accept, modify or reject each indicator, with reasoning and with a confidence level. New indicators could be suggested at any point during the study. After each round the researchers reviewed all the indicators and incorporated all the participants' input, based on the soundness of reasoning and level of confidence. A new set of indicators then emerged and were presented to the group, with any modifications being clearly highlighted. Thereafter, each round offered individuals an opportunity to modify or refine their judgements, based on their reaction to the collective views of the group.

A satisfactory level of consensus was defined in this study when the participants could no longer add new indicators, and accepted the remaining indicators. Minor modifications or rejections with low confidence levels and weak reasoning were regarded insufficient to warrant changes in the last round.

Findings

The first round of the Delphi study resulted in the most significant number of changes and additions by the participants. Synthesising new indicators proved difficult because of the varying perspectives of the participants; however, this brought new and intriguing views to the fore. The number of indicators ranged from 56 in round one to 67 in round two and 41 in round three. The first round focused less on consensus and more on exposing all the differing positions advocated and the principal pro- and con- arguments for those positions. The average level of confidence increased progressively through the rounds as consensus emerged. A satisfactory consensus level was reached in round three, with the final indicators emerging from the study listed in Table 3.

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Table 3 Final indicators and definitions from round three of the Delphi study.

Indicator	Definition
Functional Business Model	
Customer Demand	The likelihood of liquidation is expected to increase as demand diminishes for a firm's product. Does the firm still pose viable communication, distribution, and sales channels with its customers? Unless rectified, growth in turnover below inflation or industry norms would increase liquidation likelihood.
Value Proposition	A central construct in reorganisation is the firm's ability to produce value-adding activities to support the repayment of debts. If the firm's value proposition cannot be established, then the likelihood of liquidation should be assumed to be high (indicated by insufficient, or decrease in, gross margin).
Resource Alignment	Are the firm's key resources and capabilities aligned with the demands of the competitive environment, or does it possess the ability to realign or acquire the needed resources? Significant misalignment or lack of resources would signal a higher likelihood of liquidation.
Cash Cycle Sustainability	Is the cash conversion cycle (including the impact of new credit terms) aligned to the operating model of the company? In other words, can the firm afford the capital cost of its cash-flow cycle?
Revenue Streams	Does a clear and defined revenue stream exist for the firm? If clarity cannot be found on how and through what pricing mechanisms a business generates its earnings, then liquidation likelihood will rise.
Reorganisational Slack	
Total Financial Slack	The total slack available for a firm can provide an indication of a firm's capacity to free short-term slack. Businesses with unavailable resources at the time of the turnaround attempt would be more constrained in their ability to initiate appropriate remedial

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	measures. Therefore, firms with more financial slack have a better chance of surviving and staging a turnaround. Slack = (1-(Total debt /Total assets)) X 100). Firms with lower values have depleted their debt capacity more and therefore increased the likelihood of liquidation.
Free Assets	Distressed companies with sufficient free assets are more likely to avoid liquidation because these increase their ability to acquire the additional funds necessary to enact a successful turnaround, and they encourage the continued support of existing lenders, as sufficient assets are available to repay loans if required. Free assets percentage = (Total tangible assets - Secured loans) / Total tangible assets.
Operating Free Cash Flow	Operating Free Cash Flow can be used to determine the firm's future slack position. OFCF = EBIT(1-tax rate) + depreciation - CAPEX - working capital - other assets.
Operational Status	If business operations have ceased, accessing short-term sources of slack will be unlikely, thus increasing the likelihood of liquidation.
Debt Composition	The risk tolerance of current investors can indicate the propensity to fund PCF. The lower the degree of variability in investment returns that an investor is willing to withstand, the less chance of PCF and the higher the likelihood of liquidation.
Creditor Composition	
Secured Creditors Proportion	Secured creditors are likely to demand payments or claims equal to the market value of their lien assets in return for supporting the debtor's rescue plan. Further, each secured creditor will favour negotiating individually with the debtor on the value of its claim and its treatment under the rescue plan. The additional bargaining costs generated by additional secured creditors are hypothesised to increase the likelihood of liquidation. A higher proportion of secured debt to unsecured debt may favour a risk-averse behaviour

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	and result in a higher likelihood of liquidation. Thus, the ratio of secured to unsecured debt is an indicator.
Average Claim Size	Where the average claim size is relatively high, proceedings may be manipulated by a small number of creditors, thus reducing the powers of the practitioner. A fragmented creditor base or supply creditors are less likely to disrupt/manipulate proceedings and therefore will decrease the likelihood of liquidation. Average claim size = total value of claims/number of claims.
Over-indebtedness	Likelihood of liquidation is expected to be high, with little prospect of a dividend pay-out to unsecured creditors.
Claim Age	Long outstanding creditor claims may result in less support for rescue. Accounts payable ageing report could indicate overstretched terms that will hinder creditor support. The older the claims, the greater the likelihood of liquidation.

Stakeholder Influence

Governing Stakeholders	The lack of interest/support from governing stakeholders, based on their network position and cohesive/legitimate power to drive and support proceedings, will increase the likelihood of liquidation.
Stakeholder Salience	The degree to which managers/practitioners give priority to competing stakeholder claims. Stakeholder salience will increase with influence, legitimacy, and urgency. The lack of voting power may aggravate this further. The greater the priority given to latent stakeholders, as those having low salience arising from only one attribute, the greater the likelihood of liquidation.
Dangerous Stakeholders'	Where urgency and influence characterise a stakeholder who lacks legitimacy, that stakeholder will be coercive and possibly violent, making the stakeholder "dangerous," literally, to the firm. "Coercion" is suggested as a descriptor because the use of coercive power often accompanies illegitimate status. An increase in number

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	of dangerous stakeholders will lead to a higher likelihood of liquidation.
Financial Institutions	This indicator evaluates how other banks and financial institutions perceive the credibility of the firm. The collateral and other conditions that other banks and financial institutions require from the business can be considered as the criteria. Poor support from financial institutions can increase the likelihood of liquidation.
Conflict of Interest	Influential stakeholders with conflict of interests may inhibit turnaround activities and increase the likelihood of liquidation. Cross-surety positions, dual shareholder positions or shareholder/management relationships may cause this.
Liability of Smallness	
Firm Size	Larger companies are more likely to recover than smaller firms, due to economies of scale of direct administration costs. As a company's turnover or Public Index Score falls below a viable threshold, so the likelihood of liquidation is expected to increase.
Raising Capital	Larger firms have been found to be better equipped to raise distress financing, due to their previous success in raising external capital or better ability to attract distress financing because they lack a weighted balance sheet. Prolonged attempts at raising PCF would erode the company value and therefore increase the likelihood of liquidation.
Reorganisation Costs	Smaller firms may not be able to absorb the cost of the rescue, in particular, the practitioner and legal fees. If the firm is restricted by means of its size from absorbing these costs, then the likelihood of liquidation is believed to be high.
Reorganisation Complexity	The extent of decline and degree of turnaround complexity could exceed the cost/benefit. The likelihood of liquidation is expected to rise with the severity of distress and complexity.

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Liability of Data	
Accessibility	This dimension reflects the ease of data attainability. Turnaround is virtually impossible without timely access to critical information. The longer it is expected to be to gather the necessary information required to perform a rescue, the greater the likelihood of liquidation.
Completeness	Performing any sort of turnaround or restructuring based on incomplete information is reckless. If insufficient information cannot be obtained timeously, then the likelihood of liquidation should be assumed to be high.
Data Ethics	Acts of upwards earnings management, fraud or any sort of data manipulation by management could suggest an overall lack of data integrity. Such behaviour may bring the integrity of the firm's financials into question, leading to a higher likelihood of liquidation.
Tax Integrity	Filed income tax returns should correlate to actual financial information. If discrepancies exist, this may indicate data integrity issues and result in a higher likelihood of liquidation.
Audit Lag	Average audit lag (in months) over the 3-year period preceding rescue may suggest poor accounting systems. The practice of delaying the submission of the accounts may be more widespread and could be one important manifestation of the manipulation of the accounting framework. Such behaviour coupled with qualified audits could indicate the integrity of data to be low and therefore increase the likelihood of liquidation.
Liability of Leadership	
Loss of Skills	Loss of key management with institutional memory makes it difficult to resolve issues and run the business. Staff attrition over the past six months will lead to a higher likelihood of liquidation.

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Management Competencies	Poor managerial skills have been associated with firm failure. Liquidation likelihood is expected to rise as management ability weakens.
Board Composition	The composition of the Board of Directors should include both independent and non-independent directors. The less balanced the board, the higher the liquidation likelihood.
Leadership Orientation	The inability of the leadership of the company (CEO/Entrepreneur/Top management) to acknowledge distress and restructure responsibly towards a new vision to rescue the firm will increase liquidation likelihood.
Liability of Obsolescence	
Government Policies, Taxation and Regulation	Changes in legislation or tax reforms may render the firm unviable. If these changes affect the firm directly, then the likelihood of liquidation should be adjusted accordingly.
Urgency of Decline	The urgency of decline looks at the rate of decline caused by environmental degradation. A rampant descent may indicate an inability to adapt to the external environment and liquidation likelihood will be high.
Technology Adoption	Does the firm possess the ability to adapt to the technological disruptions in the external environment? If the company cannot absorb new technologies in time, the likelihood of liquidation is deemed high.
Product Relevance	Changes in the external environment may result in the product becoming obsolete. As the relevance of a product in a market declines, so the likelihood of liquidation increases.
External Legitimacy	

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Process Integrity Capacity	This is the alignment of the firm's moral awareness, deliberation, character and conduct on a sustained basis, so that reputation becomes a major intangible asset to be carefully nurtured and protected. The more individuals and groups in the firm exhibit these moral processes, the stronger the aggregate business process integrity capacity will become and the smaller the likelihood of liquidation.
System Integrity Capacity	This is the aligned implementation of organisational policies that institutionalise ongoing moral improvement within and between organisations and enable extra-organisational contexts to provide a morally supportive framework for integrity-building environments through statistically measured performance improvements. Collective commitment work cultures, for example, emerge by the regular practice of principled moral reasoning in everyday business decision-making, but they are sustained only if system integrity capacity processes are institutionalised.
Supplier Experience	Will key suppliers continue to support the firm during rescue based on their experience? If the relationship with key suppliers is too badly damaged, then the likelihood of liquidation is higher.
Internal Credibility	How do employees of the firm perceive the company itself? If the consensus of employees is very negative, it may lessen the external legitimacy of the firm and result in a higher likelihood of liquidation.
Public Perception	Negative public perception of the firm or its product resulting from rumours, court proceedings or fraud allegations may hamper recovery efforts and increase the likelihood of liquidation.

During the study, participants questioned indicators in their entirety as well as more detailed aspects of the definitions. The inclusion of the SMART criteria certainly helped the participants build consensus faster, as these were often referenced during all three rounds. In an interesting turn of events, the

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participants showed a preference for non-financial metrics in describing indicators. This may be the result of data integrity issues, time constraints and data lead times, which are prone to information deficiency at commencement. The 41 indicators in Table 3 provided a non-exhaustive list obtained from numerous experts with domain knowledge that assess the likelihood of liquidation of a firm before commencing with reorganisation proceedings.

AHP

The analytic hierarchy process was developed by Thomas L. Saaty as a decision-making theory. It is a structural method that helps to elicit preferences of expert opinion from decision makers using a multi-criteria decision-making method. This allows decision makers to rank, select, evaluate, and benchmark a wide variety of decision alternatives using the systematic procedure (Forman & Gass, 2001; Golden, Wasil & Harker, 2012; Saaty & Vargas, 2012). The model utilises a hierarchical structure which consists of an objective, criteria, sub-criteria, and alternatives. Based on pairwise comparison judgements, AHP integrates both criteria importance and alternative preference measures into a single overall score for ranking decision alternatives (Saaty, 1990). The versatility of the AHP method means it can incorporate both qualitative and quantitative approaches to solve complex decision problems (Cheng & Li, 2002). AHP therefore offers a holistic analysis of complex relationships inherent in a problem and assists the decision maker in assessing whether the evaluation criteria are of the same order of importance, so that the decision maker can compare such homogeneous alternatives accurately.

AHP harnesses domain knowledge from experts and forms a systematic framework for conducting structured group decisions for a large number of both quantitative (financial ratios) and qualitative (non-financial) criteria (Park & Han, 2002:3). The AHP approach has been applied to a variety of complex decisions in the business domain, including the problem of granting corporate credit, portfolio management, and the assignment of sovereign debt ratings, among other business decision problems (Bolster, Janjigian & Trahan, 1995;

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Clark, Foster, Hogan & Webster, 1997; Lee, Kwak & Han, 1995; Levary & Wan, 1999).

Using the AHP method for group decision making involves merging responses using geometric means (Lee *et al.*, 1995:4; Saaty, 2008:95). Dyer and Forman (1992) highlight three benefits for AHP in group decision-making. First, it accommodates both tangible and intangible characteristics, individual values and shared values in the group decision process; second, it assists in structuring a group decision, so that the discussion centres on objectives rather than on alternatives, and third it enables the discussion to continue until all available and pertinent information has been considered.

This study applied the AHP methodology to exploit domain knowledge in acquiring weights from domain experts. The study used the AHP method to specify numerical weights representing the relative importance of each liability and indicator in the LOL Framework. Participants were asked to consider the importance of one element over the other in consideration of the following objective: "its importance in increasing the likelihood of liquidation of a firm on commencement of business rescue". The LOL Framework was integrated with AHP by using the liabilities as criteria and the indicators identified by the Delphi process as sub-criteria. Pairwise comparison judgements were made concerning the attributes of one level of hierarchy, given the attribute of the next-higher level of hierarchy; AHP consists of three principles: namely, decomposition, comparative judgement, and priority synthesis (Saaty, 1990).

AHP is also able to solicit consistent subjective expert judgement using a consistency test. The consistency of the results is measured using a consistency ratio (actually an "inconsistency ratio"). In this study the liabilities and indicators were regarded as highly interrelated and therefore a high consistency ratio was allowed. A consistency ratio of less than 10% is considered adequate to interpret the results (Carnero, 2005:546). Saaty and Vargas (2012) recommend using a normalised eigenvector approach, which is best implemented by computer software such as AHP-OS.

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The group consensus indicator quantifies the level of agreement on the outcoming priorities between participants. The consensus indicator is a derivative from the concept of diversity based on Shannon alpha and beta entropy (Jost, 2006). The measure reflects the homogeneity of priorities between the participants and can also be interpreted as a measure of overlap between priorities of the group members. Note, though, that group decision-making aims to obtain the consent, not necessarily the agreement, of the participants by accommodating views of all parties involved to attain a decision that will yield what will be beneficial to the entire group (Herrera-Viedma, Cabrerizo, Kacprzyk & Pedrycz, 2014:4). The consensus indicator, however, should be strictly distinguished from the consistency ratio.

The relative importance of the criteria and sub-criteria was rated on the nine-point scale proposed by Saaty (1990:15), as listed in Table 4. The scale distinguishes the levels of relative importance from equal, moderate, strong, very strong, to an extreme level, by 1, 3, 5, 7, and 9, respectively. The intermediate values between two adjacent arguments are represented by 2, 4, 6, and 8.

Table 4 The AHP pairwise comparison scale (Source: Saaty (1990:15))

Intensity of Importance	Definition	Explanation
1	Equal Importance	Two indicators/ liabilities contribute equally to the objective
3	Moderate importance	Experience and judgement slightly favour one indicator/ liability over another
5	Strong importance	Experience and judgement strongly favour one indicator/ liability over another
7	Very strong importance	An indicator/ liability is favoured very strongly over another; its dominance demonstrated in practice
9	Extreme importance	The evidence favouring one indicator/ liability over another is of the highest possible order of affirmation
(2,4,6,8 values in-between)		

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A comparison matrix is created by comparing pairs of criteria and sub-criteria (Saaty, 1990:12). The pairwise comparison assists in judging independently the contribution of each criterion to the objective. The priority synthesis computes a composite weight for each alternative, based on preferences ascertained through the comparison matrix. Alternatives in this study took the form of various variables obtained from a distressed firm. Using the composite weight, the relative priority of each alternative can be obtained. A sensitivity analysis is applied to show how criteria-weighting deviations can affect the changes in ranking of alternatives.

A questionnaire-based field survey was used to collect the participants' ratings. Through individual interviews with participants the data was concurrently transferred into an online application to test, in real time, the consistency of the data (Goepel, 2017). This was done for several reasons. The first was to reduce the time burden on participants, as the number of pairwise comparisons was substantial. Secondly, the participants were alerted to when they exceeded the maximum consistency ratio and could make the necessary alterations without being influenced by the software's recommendations. During the interview, participants were allowed to re-examine their comparisons, calculated weights, and the final results derived from their initial and subsequent responses. They were also allowed to assess the results and inspect the reasonableness of the rankings until they were completely satisfied with the outcome. Finally, the interview also allowed the researchers to capture deeper insights into each participant's choices, which led to some fascinating findings.

Using the AHP method for group decision making involves merging responses using geometric means (Lee *et al.*, 1995:4; Saaty, 2008:95). Dyer and Forman (1992) highlight three benefits for AHP in group decision-making. First, it accommodates both tangible and intangible characteristics, individual values and shared values in the group decision process; secondly, it assists in structuring a group decision, so that the discussion centres on objectives rather than on alternatives, and thirdly it enables the discussion to continue until all available and pertinent information has been considered.

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Findings

The output showcased in Tables 3 to 5 represents the final judgements of the group. Obviously, these tables were the result of many debates, persuasion, and discussions. For example, there were occasions when some participants debated the meaning of their high inconsistency of choices, which gave researchers deeper insight. It became obvious early on that AHP could contribute significantly more than just prioritising elements.

To analyse the survey findings, the aggregation of individual judgements was done by calculating the geometric mean of the elements of all decision matrices using this consolidated decision matrix to derive the group priorities computed using a software package (Aull-Hyde, Erdogan & Duke, 2006:291; Goepel, 2017). The AHP calculations therefore have been omitted in line with modern articles (Chen, Ng, Huang & Fang, 2017; Herrera-Viedma *et al.*, 2014; Okwir, Ulfvengren, Angelis, Ruiz & Guerrero, 2017; Raviv, Shapira & Fishbain, 2017). The local priority weights of all the liabilities and indicators were first calculated and then combined with all successive hierarchical levels in each matrix to obtain a global priority vector. A list of the global priorities for each indicator are presented in Table 7. The higher the mean weight of a global priority vector, the greater the relative importance. Therefore, this serves to distinguish the more important indicators from the less important ones. Beyond the global priorities, the AHP survey revealed a number of interesting and unexpected results.

Table 5 Consolidated group weightings and ranking for the liabilities from AHP.

Liability	Priority	Rank
Functional Business Model	10.0%	5
Reorganisational Slack	14.7%	2
Creditor Composition	9.1%	7
Stakeholder Influence	8.4%	8
Liability of Smallness	9.3%	6
Liability of Data	11.2%	4
Liability of Leadership	14.5%	3
Liability of Obsolescence	16.1%	1
External Legitimacy	6.6%	9

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Surprisingly, participants considered External Legitimacy (6.6%) to be the least important liability. The External Legitimacy concerns the integrity of the business as perceived by its external stakeholders. The low ranking of this liability may stem from the fact that the participants considered direct stakeholders of the firm to be more significant and influential in increasing the likelihood of liquidation. The AHP group consensus of 43.2% across the liabilities is regarded by Goepel (2013) as very low, signifying a high diversity of judgements. Though participants were not able to add or remove any liability, the indicators selected in the Delphi process ultimately defined each liability. This probably explains the broad range of indicators that evolved from the Delphi process.

The consolidated group weightings for the liabilities (main criteria) are listed in Table 5. Participants reported that the Liability of Obsolescence (16.1%) is the most important liability in increasing the likelihood of liquidation of a firm on commencement of business rescue. The liabilities carried by Reorganisational Slack (14.7%) and Liability of Leadership (14.5%) weighed in slightly less, respectively. The consolidated priorities for the indicators concerning Liability of Leadership are listed in Table 6. This liability seems to be mostly influenced by the Management Competencies (43.8% local priority) indicator, which also emerged with one of the highest global priorities. During the interviews, participants reiterated this by affirming that the competency of management plays a significant role in ensuring the firm's success. While the business rescue practitioner can substitute for the leadership of a firm, this indicator may suggest that in practice this is unlikely to happen fast enough. This supports the work of Lohrke, Bedeian and Palmer (2004:79) and Smith and Graves (2005:306), in that top management competency will directly affect the likelihood of reversing organisational decline.

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Table 6 Consolidated Priorities for the sub-criteria with respect to Liability of Leadership.

Liability	Priority	Rank	Glb Prio.
Loss of Skills	25.3%	2	3.67%
Management Competencies	43.8%	1	6.35%
Board Composition	11.3%	4	1.64%
Leadership Orientation	19.7%	3	2.85%
	100%		14.51%

The weightings for the liabilities ranged between 16.1% and 6.6%, which suggests a relatively even distribution. The strongest liability, Liability of Obsolescence (16.1%), is mostly made up of Urgency of Decline and Product Relevance indicators.

Two indicators that emerged as the most influential within the LOL Framework were Management Competencies (6.3%) and Product Relevance (6.3%). The latter indicator bears a close resemblance to the Customer Demand (2.2%) indicator; however, it exhibits a key distinction that we suspect accounts for its higher status. Customer Demand focuses on diminishing demand for a firm's product resulting from internal factors such as a breakdown in communication, distribution, and sales channels with its customers, while Product Relevance is orientated around changes in the external environment that may result in the product's becoming obsolete. The distinction highlights an important feature of the LOL Framework, in that it is more concerned with factors that will have a certain impact on the outcome of liquidation, rather than factors that could be rehabilitated in rescue.

Remaining within the Liability of Obsolescence, the third most influential indicator was the Urgency of Decline (5.1 %). Francis and Desai (2005) echo this finding by explaining that when the erosion of resources is severe (magnitude) and rapid (time), turnaround becomes exceedingly difficult. Interestingly, participants with a predominately business background favoured this indicator. The urgency of decline at the commencement of proceedings can indicate the time and resources available to attempt any rehabilitation efforts.

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Our study reported a positive overall consistency ratio of 2.4%, which is far below the recommended 10% acceptable margin (Carnero, 2005:546) and can be regarded as reasonably consistent. Though the participants individually pushed the limits of the ratio, the consolidated matrix ratio was more than acceptable. Miller (1956) warns us about the human limits on our capacity for processing information while dealing with several criteria, and as the study involved numerous interrelated indicators this was a difficult task for participants.

A group consensus of 54.8% across all the indicators indicates a high diversity of judgements (100% refers to absolute consensus). This was a particularly interesting finding, considering that all the indicators emerged from the Delphi study that involved the same group of participants. This finding may suggest that our perception of "reasonable prospect" of a firm varies between experts and could account for the conflict that arises around this term. The consensus indicator allows for deeper analysis of sub-groups (clusters) of participants with high consensus among themselves, but with a low consensus with other sub-groups. Bard and Sousk (1990:227) remind us, however, that "from the standpoint of consensus building, the AHP provides an accessible data format and a logical means of synthesising judgement. The consequences of individual responses are easily traced through the computations and can be quickly revised when the situation warrants".

Group consensus was highest in the Liability of Leadership (74,6%), Stakeholder Influence (74.1%) and Creditor Composition (71.1%). Curiously, participants from financial backgrounds weighted Operational Status of the firm far higher than the other participants. Conversely, the chosen business rescue practitioners signalled indicators such as Secured Creditors Proportion and Dangerous Stakeholders proportionally more. AHP accommodated each participant's views in order to attain a decision that yielded what would be beneficial to the entire group and not necessarily to the particular individuals involved. The global priorities listed in Table 7 reflect the views of a balanced group of experts on the importance of each indicator in increasing the likelihood of liquidation of a firm on commencement of business rescue.

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Proposed framework

To recap, the objective of this study is to continue the development of the LOL Framework for its eventual use in practice. The results from the Delphi process identified 41 key indicators for the nine liabilities. AHP investigated the relative importance of each liability/indicator from which weights were derived. Finally, to complete the LOL Framework, we propose anchor scale values for each indicator.

Assigning values to the LOL indicators

To transform the qualitative indicators into a form more suited to computing the likelihood of liquidation, we adopted a five-point scale to assess the magnitude of an indicator. For each indicator, the researchers have recommended anchor values listed in Table 7. The anchor values aim to provide a standardised approach to assessing the magnitude of an indicator in a firm. The popular Likert scale (1–5) was applied between the two values in equal intervals to measure the proportion of severity of the indicator. The scale values are anchored, with 1 contributing significantly to the outcome of liquidation and 5 indicating an unlikely impact on the eventuality of liquidation. The unlikely anchor value of 5 reflects the position where the indicator has no contributing effect to the LOL Score. Therefore, the indicator is measured on a monotone increasing semantic differential scale consisting of 5 negative adjectival statements (see Table 7). The anchor scale value chosen to best describe an indicator's manifestation in a firm is referred to as an indicator's value (a).

Table 7 LOL indicators with relative priorities and anchor scale values.

Indicator	**Global Priority**	**Anchor scale values:**	
		1= likely;	5 =Unlikely
Functional Business Model (5) 10%			
Customer Demand	2.22%	None	Sufficient
Value Proposition	1.86%	Uncertain	Established
Resource Alignment	0.77%	Misaligned	Aligned
Cash Cycle Sustainability	3.30%	Misaligned	Aligned

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Revenue Streams	1.84%	Unclear	Clearly defined
Reorganisational Slack (2) 14.7%			
Total Financial Slack	2.04%	No slack	Sufficient slack
Free Assets	2.21%	Low free assets percentage	High free assets percentage
Operating Free Cash Flow	5.23%	Low	High
Operational Status	2.84%	Non-operational	Operational
Debt Composition	2.37%	Risk-averse creditors	Risk-seeking creditors
Creditor Composition (7) 9.1%			
Secured Creditors Proportion	3.72%	High secured to unsecured debt	Low secured to unsecured debt
Average Claim Size	2.30%	Large	Small
Over-indebtedness	2.33%	High	Low
Claim Age	0.78%	Old	Young
Stakeholder Influence (8) 8.4%			
Governing Stakeholders	0.81%	Weak support/interest	Strong support/interest
Stakeholder Salience	1.43%	Misaligned	Aligned
Dangerous Stakeholders	2.24%	Present	None
Financial Institutions	3.14%	Averse to BR	Neutral
Conflict of Interest	0.80%	High	Low
Liability of Smallness (6) 9.3%			
Firm Size	1.93%	Small (PI score)	Large
Raising Capital	2.65%	No experience	Extensive
Reorganisation Costs	2.98%	High	Low cost
Reorganisation Complexity	1.72%	Complex	Simple
Liability of Data (4) 11.2%			
Accessibility	1.79%	Difficult	Attainable
Completeness	1.68%	Inadequate	Adequate
Data Ethics	4.50%	Unreliable	Reliable
Tax Integrity	1.99%	Questionable	Sound
Audit Lag	1.26%	Extensive	Acceptable

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Liability of Leadership (3) 14.5%			
Loss of Skills	3.67%	High	Low
Management Competencies	6.35%	Poor	Sufficient
Board Composition	1.64%	Disproportionate	Balanced
Leadership Orientation	2.85%	Weak	Sufficient
Liability of Obsolescence (1) 16.1%			
Government Policies and Regulation	2.36%	Unfavourable	non-prejudicial
Urgency of Decline	5.15%	Rapid	None
Technology Adoption	2.32%	Poor	Norm
Product Relevance	6.31%	Irrelevant	Satisfactory
External Legitimacy (9) 6.6%			
Process Integrity Capacity	1.57%	Weak	Satisfactory
System Integrity Capacity	0.86%	Weak	Satisfactory
Supplier Experience	2.30%	Poor	Normal
Internal Credibility	1.15%	Negative	Acceptable
Public Perception	0.74%	Negative	Acceptable

LOL Score

The LOL Score is a closed unit interval [0,1] that signals the firm's likelihood of liquidation at the commencement of reorganisation proceedings. A value of 0 will indicate a high likelihood of liquidation, while a value of 1 will indicate that liquidation is unlikely. It is important to note that the LOL Score is not a prediction of failure but an indication at a particular point in time of the likelihood of liquidation; it should be used to determine whether reorganisation is suitable for the value maximisation of the firm. The LOL Score can be calculated using the following formula:

$$LOL\ Score = \sum_{i=1}^{N} \frac{(a_i - 1)}{4} w_i$$

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Where N is the number of indicators (41), a_i is the value for each indicator with i and $a_i \in (1,2,3,4,5)$ and w_i is the weight for each indicator i. The LOL Score is calculated from the sum of the weighted values of all the indicators. As the LOL Score diminishes in value from 1 to 0, the higher is the likelihood of the firm conceding to liquidation during reorganisation.

The LOL Framework, in addition, considers the notion of a "fatal liability" which refers to resources (or the absence thereof) that pose an imminent threat to a firm's survival. Should any indicator be deemed significant enough in its totality to induce liquidation, then it may be deemed a fatal liability. The identification of a fatal liability therefore results in an LOL Score of 0.

Conclusion

It has been a stated desire of academics and practitioners to be able to assess the turnaround potential of a firm prior to any sort of formal restructuring procedure being initiated. The task, however, remains highly complex, and though turnaround research has made significant strides over the past years, there is still little consensus on the matter. As reorganisation grows in popularity within an environment prone to rapid and radical discontinuous change, so the need to screen out severely economically distressed firms becomes more urgent. This paper has presented a value-weighted assessment framework that estimates the likelihood of the firm entering liquidation. The important features of the framework are that it is timely in its application, considers the availability of accurate data, is inexpensive to implement and easy to interpret. Practitioners, judges or directors can use the framework as a decision aid when developing an expert opinion regarding the likelihood of liquidation of a firm intending to commence with reorganisation proceedings. The aim is to speed up the liquidation of economically inefficient firms that attempt to seek shelter in reorganisation.

Prior studies have concentrated on predicting the insolvency filing event or discriminating between healthy and financially distressed firms. This study utilises a robust new liquidation identification methodology that links collective

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expert decision-making with both financial and non-financial metrics. The LOL Framework does not limit the firm's turnaround potential, but rather works on the reverse assumption that removes the likelihood of liquidation. Therefore, a commencement decision can be determined without knowledge of the possible turnaround strategies that may be deployed. However, there is no guarantee in any reorganisation attempt that when a reasonable prospect exists at commencement it will necessarily translate into successful turnaround of the firm.

Limitations and future research

This study does have limitations that should be revisited in future studies. First, the sample size of the study was limited, due to the intensive contribution required by experts in the field. Future research may wish to isolate various liabilities and gather data from more experts. Secondly, during AHP analysis the notion arose that experts might exhibit perspectives on reasonable prospects that are stereotypical of their organisation. Future research may want to explore this phenomenon further. Non-financial indicators seem to be more useful for practitioners, creditors and judges in assessing reasonable prospect. This relates to another important public policy issue of the relevance of accounting disclosure. It is recommended that the indicators identified here be allowed to inspire new perspectives on the "going concern" qualification. Lastly, the LOL Framework lacks statistical evidence of its effectiveness in assessing the likelihood of liquidation. We strongly suggest that the framework be expanded on in future studies. The LOL Score has the potential to assist in estimating the recovery rate in reorganisation. It is therefore hoped that this research will provide a stimulus for further work that will help increase our understanding of this highly complex yet intriguing aspect of insolvency.

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06

CHAPTER

Summary of main findings and conclusion

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Chapter 6

Water is valuable to the thirsty man but costly
to the drowning man.

— Unknown

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Introduction

Corporate cemeteries are littered with collapsed companies, many of whom held leading market positions and employed the sharpest minds, but were unable to avoid disaster. As fate would have it, each company is destined to experience some degree of decline during their lifetime. The few that are fortunate to adapt and reinvent themselves remain battle hardened, but for the others, their circumstances are less forgiving, and warning signals come too late. Fortunately, a new emphasis on rehabilitation has developed over the last decade or so and turnaround has emerged as the main priority in dealing with troubled companies. As a "rescue culture" expands across borders, so reorganisation laws become bolder and more complex. The dominion of restructuring encroaches further into liquidation as firms are resurrected by presumptuous prosecutes of success. However, reorganisation cannot satisfy the hopes of all who find themselves drowning in a pool of debts. The doors to reorganisation should only open to those that remain economically viable.

Therefore, as the study has highlighted, distressed firms should reorganise only if the value created by continuing is expected to exceed the value that would be preserved by liquidation. The failure by a commencement standard to discriminate between non-viable (economically distressed) companies and firms in temporary financial difficulty (financially distressed) has major economic ramifications. An ill-defined commencement standard poses a significant threat to the success of reorganisation. In South Africa, abuse of the procedure is taking place, as many companies and practitioners feed off creditors' claims to sustain undeserving firms. This has been echoed through various court cases during the past few years[9].Reorganisation proceedings aim to ensure the rescue of worthy

[9] Oakdene Square Properties (Pty) Ltd v Farm Bothasfontein (Kyalami) (Pty) Ltd (609/2012) [2013] ZASCA 68; Swart v Beagles Run Investments 25 (Pty) Ltd and Others 20115 SA 422 (GNP); Standard Bank of South Africa Limited v Gas 2 Liquids (Pty) Limited (45543/2012) [2016] ZAGPJHC 38; 2017 (2) SA 56 (GJ); Blue Star Holdings (Pty) Ltd v West Coast Oyster Growers CC (2544/2013) [2013] ZAWCHC 136; 2013 (6) SA 540 (WCC).

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companies and save jobs when possible. This research aimed at giving further clarity to the reasonable prospect of a firm and in so doing assisted in defining the commencement standard for business rescue. This will provide legislators, courts, practitioners and other affected parties with a means to screen potential firms and ultimately increase the efficiency and effectiveness of business rescue in South Africa and other jurisdictions. Recognising the importance of a commencement standard, this research sought to answer the following research objectives:

1. Provide a contextual background for a commencement standard that reflects both the legal and economic functions it serves.
2. Develop a comprehensive theoretical foundation for a commencement standard to business rescue on which future academic research can be based within management sciences.
3. Develop a practical framework that can be used by practitioners, courts, directors or any affected party to assess the reasonable prospect of success at the commencement of business rescue proceedings.

To address each of these objectives the study firstly embarked on a literature review in Chapter 2 that reported on the theoretical components of a commencement standard. This chapter discussed the various structural features of a commencement standard for reorganisation. The literature review was then expanded upon in Chapter 3 to develop a theoretically grounded foundation for the commencement standard. The value maximisation principle, stakeholder theory, and legal requirements were used to structure propositions that delivered a theoretical foundation for a commencement standard. In Chapter 4, under the principle of value maximisation, the components of a commencement standard and turnaround literature were analysed to develop a Likelihood of Liquidation Framework. The framework identified nine liabilities that can be used to assess the prospect of reorganisation at the commencement of proceedings. Chapter 5 continued with the development of the Likelihood of Liquidation Framework by identifying key indicators for the nine liabilities. An investigation into the relative importance of each liability and indicator was completed before attaching anchor

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scale values for each of the indicators. The findings of these chapters are briefly summarised next.

Summary of main findings

The commencement standard is intended on reducing the abuse of the reorganisation procedure at the onset of proceedings. The threshold applied must balance its objective while ensuring it does not delay, deter or increase the costs of proceedings to the detriment of worthy applicants. The wide-reaching outcomes of reorganisation compelled a broader analysis of its function within insolvency law and society. Therefore, the study started by developing a theoretical foundation for a commencement standard in Chapter 3 within the context of business rescue. Since the business rescue process has mostly been practically constructed, academic literature has been without a clear foundation to base its research efforts in respect to the commencement standard. What is known about the business rescue phenomenon has been mostly practitioner-driven. It is only recently that scholars are turning to develop a theory-driven understanding of the business rescue process. To date, academics have written relatively little on commencement standards and the unique circumstances experienced at this critical juncture. Therefore, it was crucial to develop a theoretically grounded commencement standard so that the theories driving reorganisation would serve to improve the effectiveness of this tool by reducing abuse, asset erosion and deepening insolvency. To do so, the first paper explored the utility and relevance of the value maximisation principle, stakeholder theory and the legal requirements pertaining to the commencement standard. The paper then proposes the following nine propositions.

1. Applying the value maximisation principle may prevent uneconomical firms from commencing reorganisation proceedings.
2. Applying the value maximisation principle may reduce the abuse of reorganisation proceedings with high levels of asymmetric information at commencement.
3. Applying the value maximisation principle may encourage early approximation of the reorganisation value of the firm.

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4. Applying the value maximisation principle may cultivate a value-creating mindset for reorganisation proceedings.
5. Applying the value maximisation principle may promote social welfare salt interests before commencing proceedings.
6. The commencement standard should incorporate elements of stakeholder theory to improve the suitability of reorganised firms.
    a. The commencement standard should incorporate stakeholder power to influence the firm.
    b. The commencement standard should incorporate the legitimacy of the stakeholder claim.
    c. The commencement standard should incorporate the urgency of the stakeholder's claims on the firm.
7. Reasonable prospect can use the value maximising principle to fairly distinguish between the two business rescue objectives.
8. When the firm's strategic bankruptcy objectives are aligned with the commencement standard, business rescue is less likely to be abused.
9. The value maximisation principle may offer a fair and reliable standard of proof for the commenced standard.

The propositions place two central theories behind the commencement standard, allowing future research a theoretical base from which to expand. As firms find more creative applications for reorganisation, so the procedure will be required to evolve. The costs borne by creditors and society by uneconomic firms abusing the reorganisation process are substantial. A theoretical understanding of the commencement standard will, therefore, assist in developing more complex and astute mechanisms for filtering firms.

The value maximisation principle requires that the reorganisation value (R) be greater than the liquidation value (L) of a firm in order to proceed with reorganisation proceedings. If the foreseen reorganisation value exceeds the immediate liquidation value of the firm, then the value of the firm is maximised under reorganisation.

$$R > L$$

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The liquidation value (L) is however regarded as a "limited risk" valuation. To make for a fairer comparison, the reorganisation value (R) should factor in the likelihood of liquidation. Drawing on turnaround literature, the components of a commencement standard in Chapter 2 and the propositions outlined in Chapter 3, a new framework is prosed in the second paper (Chapter 4) to assess the likelihood of liquidation at commencement of proceedings. Business "failure" factors are used to compile a set of commencement criteria for reorganisation proceedings by removing the intrinsic variables of failure to assume a reasonable prospect at the commencement of reorganisation. In Chapter 4, the paper proposes the Likelihood of Liquidation Framework (LOL) that assesses the prospect of the firm's succumbing to liquidation by combining the following nine liabilities:

1. Functional business model
2. Reorganisational slack
3. Creditor composition
4. Stakeholder influence
5. Liability of smallness
6. Liability of data
7. Liability of leadership
8. Liability of obsolescence
9. External legitimacy

The liabilities identified consider both the internal and external environment of the firm within the conditions faced by a reorganisation. If the liabilities are absent, the likelihood of liquidation removes the intrinsic variables associated with failure – to assume a reasonable prospect for recovery of the firm at the commencement of reorganisation. Therefore, a firm considering reorganisation proceedings should aim to minimise the likelihood of liquidation by recognising the threat presented by these liabilities.

In addition, this paper introduced the concept of a "fatal liability", which refers to resources (or lack thereof) that pose an imminent threat to the firm's survival.

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While each liability could manifest to such an extreme extent, some are less apparent than others at the commencement of reorganisation proceedings.

The framework works around the practical constraints associated with gathering data at the commencement of proceedings such as the asymmetry of information, data integrity and the given timeframe. In doing so, the framework does not limit the firm's turnaround potential but instead works on the reverse assumption that removes the likelihood of liquidation. The indicators were derived from experts experienced in commencement decisions and the practical limitations thereof. Therefore, a commencement decision can be determined without the knowledge of the possible turnaround strategies that may be deployed.

In Chapter 5, the last paper is presented that continues the development of the Likelihood of Liquidation Framework for its eventual use in practice. The study firstly identifies key indicators for the nine liabilities and then investigates the relative importance of each liability and indicator before finally proposing anchor-scale values for each indicator. The indicators were derived from a robust and widely used managerial tool known as the Delphi method. The relative importance of each element was allocated using a powerful mathematical model known as the Analytic Hierarchy Process (AHP). The enhanced framework is expected to provide some indication of the reasonable prospect of a firm prior to the commencement of business rescue proceedings. If effective applied, this framework stands to reduce the number of economically distressed firms from abusing proceedings and ultimately preserve firm value. The following formula is presented in Chapter 5 for the calculation of the *LOL Score*:

$$LOL\ Score = \sum_{i=1}^{N} \frac{(a_i - 1)}{4} w_i$$

Where N is the number of indicators (41), a_i is the value for each indicator with i and $a_i \in (1,2,3,4,5)$ and w_i is the weight for each indicator i. The *LOL Score* is calculated from the sum of the weighted values of all the indicators. As the *LOL Score* diminishes in value from 1 to 0, so the higher the likelihood of the firm conceding to liquidation during reorganisation.

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The commencement standard, therefore, uses a trigger component to entice early initiation of proceedings. The viability component (reasonable prospect) of the standard needs to be determined to ensure reorganisation is in the best interests of all the stakeholders. Figure 8 uses the maximisation principle and *LOL Score* to determine the viability of a firm for the purposes of commencing with proceedings.

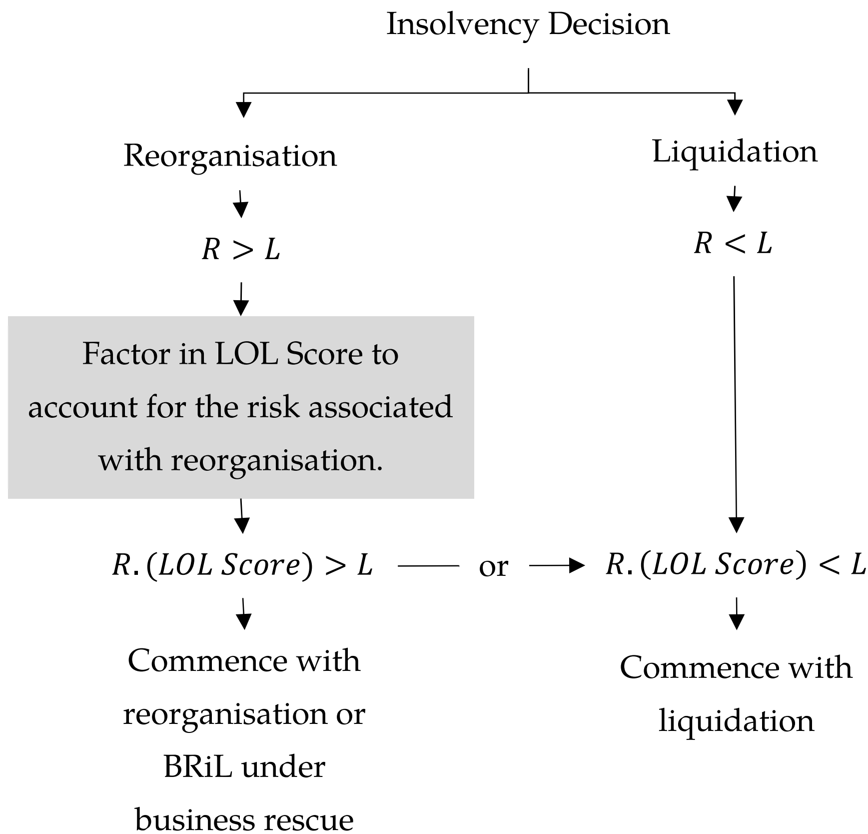

Figure 8 Making the commencement decision using the value maximisation principle and LOL Score. (own compilation)

After determining the reorganisation and liquidation, the LOL Framework can be used to calculate a *LOL Score*. The *LOL Score* can be used to gauge the reasonable prospect of a firm or factored into the reorganisation value to ensure the value of the firm is maximised in reorganisation.

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Conclusion

International insolvency laws are evolving rapidly as the advantages of effective reorganisation are proven. Allowing unviable businesses to linger under the protection of the reorganisation while resisting liquidation even when it is the optimal remedy for value maximisation, is economically harmful. Business failure should be seen as a natural affair, with reorganisation there only to protect and support those firms whose foreclosure would result in more harm than good. Therefore, it has taken decades to craft what is now modern reorganisation, though it is by no means close to perfected. The configuration of more effective commencement standards are utilising new techniques while being grounded in older systems. The Likelihood of Liquidation Framework was designed to adapt to these changing circumstances and offer a tool for practitioners, academics and the courts to assess the prospects of reorganisation success. The tool seeks to make the commencement decision fast and simple while giving conscious attention to the business principles and stakeholders. Business rescue is a new discipline and faces numerous challenges.

Implications for further research (limitations)

The study covered a broad spectrum of topics and unearthed some exciting research opportunities. While a number of them were certainly tempted to distract the researchers, they remain available for exploration by scholars in the future. The propositions offered in Chapter 3 extend themselves to a number of exciting opportunities for further research on the commencement standard. It is imperative that our understanding of this phenomenon continues to expand theoretically to enable complete and effective adaptation to legislation. The propositions outlined are subject to empirical testing in pursuit of scientific validation and international standardisation.

It should be clear from Chapter 3 that the value maximisation principle is deeply entrenched within insolvency literature; research on the reorganisation value and costs of business rescue in South Africa, however, remain limited. Without a clear understanding of the costs of business rescue, the value maximisation principle is severely restricted.

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Each liability presented in Chapter 4 offers scholars the opportunities for empirical research in both a South African and in an international context. The Liability of Data seems to be particularly dangerous within South African distressed companies. The proposed framework is evidently not without several limitations. Firstly, the liabilities have been identified from turnaround literature and are yet to be proven to be statistically relevant to the commencement standard. The framework has been modelled to a large extent on the South African business rescue procedure, with the potential to be expanded to be applicable to other jurisdictions. In selecting the liabilities, the researchers used their knowledge and experience of the reorganisation environment and supported the literature, and the selection is therefore vulnerable to bias. The framework hopefully will entice scholars to expand their views on possible turnaround prediction models and encourage critique and adaptation.

Analysis of data from the AHP study revealed some exciting research opportunities. Researchers may wish to isolate various liabilities and gather data from more experts. Secondly, there seem to be the signs that experts may exhibit unique perspectives on reasonable prospects that are stereotypical of their organisation. Future research may want to explore this phenomenon further. Non-financial indicators seem to be more useful for practitioners, creditors and judges in assessing reasonable prospect. This relates to another important public policy issue of the relevance of accounting disclosure. It is recommended that the indicators identified be allowed to inspire new perspectives on the going concern qualification. Lastly, the LOL Framework lacks statistical evidence of its effectiveness in assessing the likelihood of liquidation. It is strongly suggested that the framework be expanded on in future studies. The LOL Score is by no means exact and accepts that it may be difficult to determine at the outset the firm's potential to be reorganised. However, this tool will provoke a deeper insight in reasonable prospect, with the potential to improve reorganisation success. It is therefore hoped that this research will provide a stimulus for further work that will help increase our understanding of this highly complex yet intriguing aspect of insolvency.

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Implications for practitioners

To begin with, the study provides a cross-border perspective on how to evaluate various commencement standards across jurisdictions. If possible, practitioners may select a regime that allows for the most convenient and predictable access to proceedings. The study offers practitioners a business perspective on the commencement standard that encourages strategic behaviour consistent with the underlying logic of reorganisation. Application of the maximisation principle emphasises to practitioners that the fundamental reasoning for reorganisation to change and redistribute individual rights is because reorganisation maximises the economic value of the firm.

The Likelihood of Liquidation Framework aims to help practitioners assess the viability of a firm under the practical constraints associated with the commencement decision. The indicators were designed given the limited time available, the conflicts of interest and asymmetric information between equity and debt holders. Business rescue practitioners are encouraged to use this tool to screen prospective firms before taking appointments.

Implications for policy-makers

For policy-makers, the study delves deep into the practical constraints of the commencement standard as well as the underlying economic logic. In view of these findings, policy-makers are encouraged to adapt and reconfigure commencement standards to achieve the desired outcomes best. The commencement standard is an integral part of reorganisation and needs to be carefully crafted to prevent abuse while inciting timely entry. The propositions outlined in Chapter 3 connect two well-established theories to the notion of a commencement standard. If followed, these theories may provoke new insights and broaden the application of reorganisation in our economy.

The Likelihood of Liquidation Framework may assist policy-makers in defining the term *reasonable prospect*. It is not necessary for reasonable prospect to guarantee remarkable financial success, or, for that matter, even contemplate the reorganised firms existing beyond the economic lifespan of its major assets. The framework follows that all that is needed is to show a means by which the

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reorganised firm will avoid liquidation or successive restructurings. Viability in this sense therefore looks to confirming that fundamental business principles are in place before proceeding with scrupulous recovery plans at the expense of creditors.

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APPENDICES

Appendix 1 – Sections 128, 129 & 131 of Chapter 6 of the Companies Act 71 of 2008
Appendix 2 – Letter of consent
Appendix 3 – Video guide to LOL Framework
Appendix 4 – Qualtrics survey
Appendix 5 – AHP survey

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Appendix 1 – Sections 128, 129 & 131 of Chapter 6 of the Companies Act 71 of 2008

128. Application and definitions applicable to Chapter.—

(1) In this Chapter—

(a) **"affected person"**, in relation to a company, means—

(i) a shareholder or creditor of the company;

(ii) any registered trade union representing employees of the company; and

(iii) if any of the employees of the company are not represented by a registered trade union, each of those employees or their respective representatives;

(b) **"business rescue"** means proceedings to facilitate the rehabilitation of a company that is financially distressed by providing for—

(i) the temporary supervision of the company, and of the management of its affairs, business and property;

(ii) a temporary moratorium on the rights of claimants against the company or in respect of property in its possession; and

(iii) the development and implementation, if approved, of a plan to rescue the company by restructuring its affairs, business, property, debt and other liabilities, and equity in a manner that maximises the likelihood of the company continuing in existence on a solvent basis or, if it is not possible for the company to so continue in existence, results in a better return for the company's creditors or shareholders than would result from the immediate liquidation of the company;

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(c) **"business rescue plan"** means a plan contemplated in section 150;

(d) **"business rescue practitioner"** means a person appointed, or two or more persons appointed jointly, in terms of this Chapter to oversee a company during business rescue proceedings and "practitioner" has a corresponding meaning;

(e) **"court"**, depending on the context, means either—

(i) the High Court that has jurisdiction over the matter; or

(ii) either—

(aa) a designated judge of the High Court that has jurisdiction over the matter, if the Judge President has designated any judges in terms of subsection (3); or

(bb) a judge of the High Court that has jurisdiction over the matter, as assigned by the Judge President to hear the particular matter, if the Judge President has not designated any judges in terms of subsection (3);

(f) **"financially distressed",** in reference to a particular company at any particular time, means that—

(i) it appears to be reasonably unlikely that the company will be able to pay all of its debts as they become due and payable within the immediately ensuing six months; or

[Sub-para. (i) substituted by s. 81 (a) of Act No. 3 of 2011.]

(ii) it appears to be reasonably likely that the company will become insolvent within the immediately ensuing six months;

(g) **"independent creditor"** means a person who—

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(i) is a creditor of the company, including an employee of the company who is a creditor in terms of section 144 (2); and

(ii) is not related to the company, a director, or the practitioner, subject to subsection (2);

(h) **"rescuing the company"** means achieving the goals set out in the definition of "business rescue" in paragraph (b);

(i) **"supervision"** means the oversight imposed on a company during its business rescue proceedings; and

(j) **"voting interest"** means an interest as recognised, appraised and valued in terms of section 145 (4) to (6).

(2) For the purpose of subsection (1) (g), an employee of a company is not related to that company solely as a result of being a member of a trade union that holds securities of that company.

[Sub-s. (2) substituted by s. 81 (b) of Act No. 3 of 2011.]

(3) For the purposes contemplated in subsection (1) (e) or in any other law, the Judge President of a High Court may designate any judge of that court generally as a specialist to determine issues relating to commercial matters, commercial insolvencies and business rescue.

129. Company resolution to begin business rescue proceedings.—

(1) Subject to subsection (2) (a), the board of a company may resolve that the company voluntarily begin business rescue proceedings and place the company under supervision, if the board has reasonable grounds to believe that—

(a) the company is financially distressed; and

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(b) there appears to be a reasonable prospect of rescuing the company.

(2) A resolution contemplated in subsection (1)—

(a) may not be adopted if liquidation proceedings have been initiated by or against the company; and

(b) has no force or effect until it has been filed.

(3) Within five business days after a company has adopted and filed a resolution, as contemplated in subsection (1), or such longer time as the Commission, on application by the company, may allow, the company must—

(a) publish a notice of the resolution, and its effective date, in the prescribed manner to every affected person, including with the notice a sworn statement of the facts relevant to the grounds on which the board resolution was founded; and

(b) appoint a business rescue practitioner who satisfies the requirements of section 138, and who has consented in writing to accept the appointment.

(4) After appointing a practitioner as required by subsection (3) (b), a company must—

(a) file a notice of the appointment of a practitioner within two business days after making the appointment; and

(b) publish a copy of the notice of appointment to each affected person within five business days after the notice was filed.

(5) If a company fails to comply with any provision of subsection (3) or (4)—

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(a) its resolution to begin business rescue proceedings and place the company under supervision lapses and is a nullity; and

(b) the company may not file a further resolution contemplated in subsection (1) for a period of three months after the date on which the lapsed resolution was adopted, unless a court, on good cause shown on an ex parte application, approves the company filing a further resolution.

(6) A company that has adopted a resolution contemplated in this section may not adopt a resolution to begin liquidation proceedings, unless the resolution has lapsed in terms of subsection (5), or until the business rescue proceedings have ended as determined in accordance with section 132 (2).

(7) If the board of a company has reasonable grounds to believe that the company is financially distressed, but the board has not adopted a resolution contemplated in this section, the board must deliver a written notice to each affected person, setting out the criteria referred to in section 128 (1) (f) that are applicable to the company, and its reasons for not adopting a resolution contemplated in this section.

[Sub-s. (7) substituted by s. 82 of Act No. 3 of 2011.]

130. Objections to company resolution. —

[Omitted]

131. Court order to begin business rescue proceedings.—

(1) Unless a company has adopted a resolution contemplated in section 129, an affected person may apply to a court at any time for an order placing the company under supervision and commencing business rescue proceedings.

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(2) An applicant in terms of subsection (1) must—

(a) serve a copy of the application on the company and the Commission; and

(b) notify each affected person of the application in the prescribed manner.

(3) Each affected person has a right to participate in the hearing of an application in terms of this section.

(4) After considering an application in terms of subsection (1), the court may—

(a) make an order placing the company under supervision and commencing business rescue proceedings, if the court is satisfied that—

(i) the company is financially distressed;
(ii) the company has failed to pay over any amount in terms of an obligation under or in terms of a public regulation, or contract, with respect to employment-related matters; or
(iii) it is otherwise just and equitable to do so for financial reasons,
and there is a reasonable prospect for rescuing the company; or

(b) dismissing the application, together with any further necessary and appropriate order, including an order placing the company under liquidation.

(5) If the court makes an order in terms of subsection (4) (a), the court may make a further order appointing as interim practitioner a person who satisfies the requirements of section 138, and who has been nominated by the affected person who applied in terms of

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subsection (1), subject to ratification by the holders of a majority of the independent creditors' voting interests at the first meeting of creditors, as contemplated in section 147.

(6) If liquidation proceedings have already been commenced by or against the company at the time an application is made in terms of subsection (1), the application will suspend those liquidation proceedings until—

(a) the court has adjudicated upon the application; or

(b) the business rescue proceedings end, if the court makes the order applied for.

(7) In addition to the powers of a court on an application contemplated in this section, a court may make an order contemplated in subsection (4), or (5) if applicable, at any time during the course of any liquidation proceedings or proceedings to enforce any security against the company.

(8) A company that has been placed under supervision in terms of this section—

(a) may not adopt a resolution placing itself in liquidation until the business rescue proceedings have ended as determined in accordance with section 132 (2); and

(b) must notify each affected person of the order within five business days after the date of the order.

[Full text of the Companies Act 71 of 2008 can be found at https://www.gov.za/documents/companies-act]

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Appendix 2 – Letter of consent

The Likelihood of Liquidation Framework: Measuring the Liabilities of the Firm

Research conducted by:
Mr Wesley Rosslyn-Smith
Cell: 084 866 4555

Dear

You are invited to participate in an academic research study conducted by Wesley Rosslyn-Smith, a staff member at the Department of Business Management at the University of Pretoria.

The purpose of the study is to develop a set of indicators that can be used to measure the liabilities identified in the likelihood of liquidation framework.

Please note the following:

- This is an **anonymous** study survey as your name will not appear on the questionnaire. The answers you give will be treated as strictly **confidential** as you cannot be identified in person based on the answers you give.
- Your participation in this study is very important. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Please answer the questions in the questionnaire as completely and honestly as possible. This should not take more than 40mins minutes of your time
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.

Please contact my study leader, Prof Marius Pretorius (marius.pretorius@up.ac.za or 082 822 6333) if you have any questions or comments regarding the study

Please sign below to indicate that:

1. You have read and understand the information provided above.
2. You give your consent to participate in the study on a voluntary basis

× SIGN HERE

clear

<< >>

Expert Delphi Study

Powered by Qualtrics

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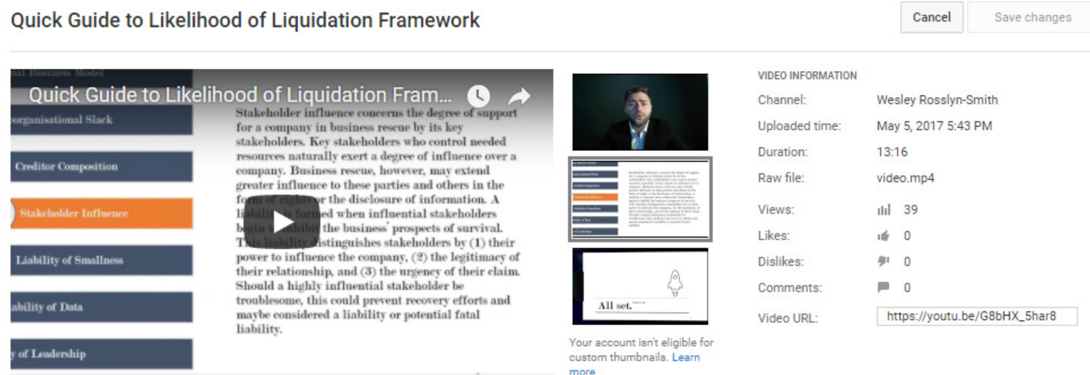
Appendix 3 – Video guide to LOL Framework

Unlisted YouTube Video (not public)

Access URL: https://youtu.be/G8bHX_5har8



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Appendix 4 – Qualtrics survey

Delphi Survey (Round 1)

Introduction

Thank you ${m://FirstName}. That's the tedious part done!

We really appreciate your time and assistance with our research. If you have any questions or technical issues please feel free to contact Wesley on his direct mobile number: **064 866 4555**.

Remember, you can stop and continue with this survey at any point during this week (closes this Sunday).

We will now commence with the Delphi study. Under each liability, you will be asked to provide two indicators that you consider the best measures of that liability. Then, you will be presented with an initial set of indicators that have been derived from literature for that liability. Your task is to refine these indicators using the SMART (Specific, Measurable, Attainable, Realistic and Time-sensitive) criteria presented earlier. In doing so, you may choose to reject, accept, modify any of the indicators as you deem appropriate. You will need to specify at what level of confidence your decision was made and provide a short explanation or justification for your decision.

Functional business model

Functional Business Model

A business model incapable of yielding the necessary profits would be detrimental as the erosion of assets would most certainly occur. Some aspects of a business model pose more of a threat than others. Therefore, prior to commencement, it should be clear how the business aims to

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	Indicator name	Confidance Level	Define your indicator
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Customer Demand The likelihood of liquidation is expected to increase as demand diminishes for a firm's products/services. If no demand exists then liquidation is deemed imminent.	O	O	O		
Value Propositions A central construct in reorganisation is the firm's ability to produce value adding activities to support the repayment of debts. If the firm's value proposition cannot be established, then the likelihood of liquidation should be assumed high. *Growth in price-cost margin in past two years*	O	O	O		
Key Resources Does the company still possess the key resources critical to its business model? Without these key resources, the likelihood of liquidation is expected to be high.	O	O	O		
Capital productivity A firm's productivity will affect its capacity for absorbing the effects of decline and enable its recovery strategies. *Capital productivity = Firm capital productivity/Industry average productivity* *Productivity is gathered by dividing both the firm's and the industry's sales by property, plant, and equipment	O	O	O		
Efficiency They found that cutbacks and increases in efficiency were important factors for successful turnarounds as these actions improve profitability in the short run and allow the company to release resources that may be used elsewhere. They can also play an important political role in winning back stakeholder support and help raise external resources to fund other strategies. Downsizing is normally a critical factor in such a strategy and therefore an indicator thereof. *Downsizing = Tangible assets (now) /Tangible assets (1yr prior) / Tangible assets (1yr prior)*	O	O	O		
Resource alignment How well are the firm's resources and capabilities aligned with the demands of the competitive environment? Significant misalignment would signal a higher likelihood of liquidation.	O	O	O		
Going concern qualification Has the Company received a 'Going Concern' qualification? A qualified opinion for some reason other than going-concern qualification may be related to future bankruptcy status. A qualified opinion may be related to bankruptcy status along with more than one dimension. For example, if the qualification is due to the adoption of an inappropriate revenue recognition policy, the qualification could be viewed as a symptom of financial distress (management is trying to increase reported earnings) or as lower quality of earnings.	O	O	O		

Please make sure you have answered **all** the indicators above. Remember to leave comments if you reject or suggest the indicator be modified.

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	Indicator	Confidence Level	Define your indicator
+ Indicator 3			
+ Indicator 4			
+ Indicator 5			
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

Reorganisational Slack

Reorganisational Slack

A company seeking business rescue requires the necessary 'organisational slack' or 'cushion of actual or potential resources' (not limited to financial) to enable the turnaround. Reorganisational slack is the existence or ability of the business to generate the necessary working capital to fund the business rescue. Since business rescue brings additional costs to an already financially distressed company, the amount of slack is increased. A liability is created when insufficient organisational slack exists and the company cannot survive in business rescue. The less slack, the greater the likelihood of liquidation.

Please provide two indicators that you consider the best measures of this liability.

- Give an indication of how confident you are of your decision
- Provide an explanation of how this indicator is relevant and how to calculate it.

	Indicator name	Confidance Level	Define your indicator
+ Indicator 1			
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Financial Slack Slack resources help a firm absorb the effects of performance downturns or variability and provide a base of resources to take effective actions. Firms with immediately available (or unavailable) resources at the time					

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	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Excess personnel Excess personnel are an ideal source of slack, as they may be excess but are also embedded in the organisation through allocation to specific routines and tasks. Working capital tied up in operations is another source of absorbed slack, as recovering it could require changes to established routines and affect customer and supplier relationships. More specifically, then, downsizings aim to reduce 'absorbed' slack and transform it to 'available' slack through cost savings and increased cash flow. The cost of absorbing such slack or lack of excess personal could increase the likelihood of liquidation.	O	O	O		
Credit Access (Secured) The equity-to-debt ratio, which roughly indicates the extent of unused borrowing capacity available to the firm. The measure tends to signal potential resource availability rather than resources available for instantaneously buffering operations. That is, the higher the firm's equity-to-debt ratio, the more potential it has when to secure more capital. A company with a very low equity-to-debt ratio would not have access to much more capital. *Debt - Equity Ratio = Total Liabilities / Shareholders' Equity*	O	O	O		
Current ratio Our second measure, working capital (current assets minus current liabilities) as a percent of sales, is also a measure of unabsorbed slack. That is, it gauges the firm's cushion for meeting immediate resource needs.	O	O	O		
Litschert & Bonham Slack Measure Slack = the variation from the average among comparable companies on: ROE, ROTA, Net Sales, and Gross Profit as a percent of Sales.	O	O	O		

Can you provide any more indicators for this liability?

Yes

No

Thank you ${m://FirstName}. We really appreciate your additional input. Please provide the details of the additional indicators that have not been identified by the researchers.

	Indicator	Confidence Level	Define your indicator
+ Indicator 3			
+ Indicator 4			
+ Indicator 5			
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

Creditor Composition

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- Provide an explanation of how this indicator is relevant and how to calculate it.

	Indicator name	Confidance Level	Define your indicator
+ Indicator 1			
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Secured creditors proportion Secured creditors are likely to demand payments or claims equal to the market value of their lien assets in return for supporting the debtor's rescue plan. Further, each secured creditor will favour negotiating individually with the debtor the value of its claim and its treatment under the rescue plan. The additional bargaining costs generated by additional secured creditors are hypothesised to increase the likelihood of liquidation. In addition, numerous secured creditors also increase the likelihood of liquidation because they are in the best position to block a proposed rescue plan. *The ratio of secured debt to assets*	O	O	O		
Controlling vote A controlling creditor (claim apportioning to twenty-five percent or greater of the total claims) could veto any possible restructuring efforts should it not be (or perceived to be) in their own best interests. For this reason, the greater number of dissenting creditor with a controlling vote will increase the likelihood of liquidation.	O	O	O		
Oversecured creditors As the secured creditor becomes substantially undersecured, its interests are better aligned with maximising the value of the estate because it captures nearly all the upside from a successful rescue. The higher the ratio of oversecured debt to total secured debt, the greater the support for reorganisation. *Oversecured debt ratio = total value of oversecured debt / total value of secured debt*	O	O	O		
Average claim size Where the average claim is relatively high, creditors may have the incentive to organise to resist the debtor's effort to confirm a plan that does not satisfy them. Smaller average claims supply creditors with less incentive to invest to oppose the debtor's proposed plan. *Average claim size = total value of claims / number of claims*	O	O	O		

Can you provide any more indicators for this liability?

Yes

No

Thank you ${m://FirstName}. We really appreciate your additional input. Please provide the details of the additional indicators that have not been identified by the researchers.

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	Indicator	Confidence Level	Define your indicator
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

Stakeholder Influence

Stakeholder Influence

Stakeholder influence concerns the degree of support for a company in business rescue by its key stakeholders. Key stakeholders who control needed resources naturally exert a degree of influence over a company. Business rescue, however, may extend greater influence to these parties and others in the form of rights or the disclosure of information. A liability is formed when influential stakeholders begin to inhibit the business' prospects of survival. This liability distinguishes stakeholders by (1) their power to influence the company, (2) the legitimacy of their relationship, and (3) the urgency of their claim. Should a highly influential stakeholder be troublesome, this could prevent recovery efforts be considered a liability or potential fatal liability.

Please provide two indicators that you consider the best measures of this liability.

- Give an indication of how confident you are of your decision
- Provide an explanation of how this indicator is relevant and how to calculate it.

	Indicator name	Confidance Level	Define your indicator
+ Indicator 1			
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Stakeholder influence A stakeholder's influence, based on network position, is defined through its betweenness centrality and its inter-stakeholder resource dependencies. The more secure the continuing support of governing stakeholders in a rescue, the lower the likelihood of liquidation	O	O	O		
Stakeholder legitimacy A generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions. Illegitimate stakeholders with a high influence will increase the likelihood of liquidation.	O	O	O		
Stakeholder Urgency The degree to which stakeholder claims call for immediate					

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	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Dangerous stakeholders' Where urgency and influence characterise a stakeholder who lacks legitimacy, that stakeholder will be coercive and possibly violent, making the stakeholder "dangerous," literally, to the firm. "Coercion" is suggested as a descriptor because the use of coercive power often accompanies illegitimate status. Increased dangerous stakeholders will lead to a higher likelihood of liquidation.	O	O	O	▾	
The relationship with financial institutions Evaluates how other banks and financial institutions perceive the credibility of the firm. The collateral and other conditions that other banks and financial institutions require from the business can be considered as the criteria.	O	O	O	▾	

Can you provide any more indicators for this liability?

Yes

No

Thank you ${m://FirstName}. We really appreciate your additional input. Please provide the details of the additional indicators that have not been identified by the researchers.

	Indicator	Confidence Level	Define your indicator
+ Indicator 3		▾	
+ Indicator 4		▾	
+ Indicator 5		▾	
+ Indicator 6		▾	
+ Indicator 7		▾	
+ Indicator 8		▾	

Halfway Break

You are nearly done!

We just have five more liabilities we need your input on. Please remember that you have until Friday to complete the survey. Please be as critical as possible! This study will only have a high impact with your help!

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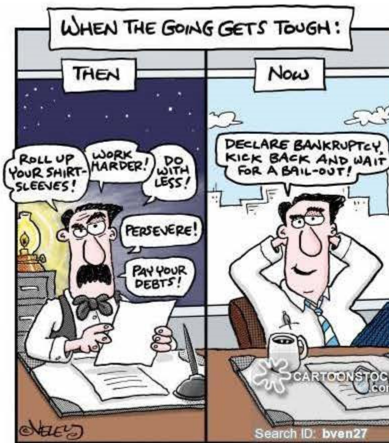

Liability of Smallness

Liability of Smallness

The liability of smallness is associated with several attributes of a small business that are compounded in business rescue. Each of these attributes works against a company in business rescue. For example, larger companies are usually able to absorb the costs of business rescue better. Smaller companies may find it difficult to recruit skilled rescue practitioners. Therefore, the likelihood of liquidation is expected to rise with smaller businesses.

Please provide two indicators that you consider the best measures of this liability.

- Give an indication of how confident you are of your decision
- Provide an explanation of how this indicator is relevant and how to calculate it.

	Indicator name	Confidance Level	Define your Indicator
+ Indicator 1			
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Firm size 1 Research suggested that larger companies are more likely					

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	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Firm size 2 Public Index Score is used as a measurement of a company's size in terms of the Companies Act. The PI score is calculated as: • *a number of points equal to the average number of employees of the company during the financial year;* • *one point for every R1 million (or portion thereof) in third party liability of the company, at the financial year end;* • *one point for every R1 million (or portion thereof) in turnover during the financial year; and* • *one point for every individual who, at the end of the financial year, is known by the company-* • *in the case of a profit company, to directly or indirectly have a beneficial interest in any of the company's issued securities; or* • *in the case of a non-profit company, to be a member of the company, or a member of an association that is a member of the company.*	O	O	O		
Inexperience of raising capital As larger firms have been found to be better equipped to raise distressed financing due to their previous success in raising external capital. For smaller businesses, this could hamper efforts in raising PCF. Prolonged attempts at raising PCF would erode the company value and therefore increase the likelihood of liquidation.	O	O	O		
Reorganisation costs Smaller firms may not retain the potential reorganisation value to cover the cost of rescue. If the value generated by rescue activities cannot exceed the cost thereof, then the likelihood of liquidation is believed to be high	O	O	O		
Reorganisation complexity The extent of decline and degree of turnaround complexity could exceed to the affordability of a small business.	O	O	O		

Can you provide any more indicators for this liability?

Yes

No

Thank you ${m://FirstName}. We really appreciate your additional input. Please provide the details of the additional indicators that have not been identified by the researchers.

	Indicator	Confidence Level	Define your indicator
+ Indicator 3			
+ Indicator 4			
+ Indicator 5			
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

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Please provide two indicators that you consider the best measures of this liability.

- Give an indication of how confident you are of your decision
- Provide an explanation of how this indicator is relevant and how to calculate it.

	Indicator name	Confidance Level	Define your indicator
+ Indicator 1			
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Credit history Historical credit management could indicate if the firm possesses the ability to manage its debt. If lacking, raising PCF may prove very difficult and could jeopardise any rescue attempts thus increasing the likelihood of liquidation.	O	O	O		
Accessibility This dimension reflects the ease of data attainability. Turnaround is virtually impossible without the timely access to critical information. The longer it is expected to gather the necessary information required to perform a rescue, the greater the likelihood of liquidation.	O	O	O		
Completeness Performing any sort of turnaround or restructuring based on incomplete information is reckless. If incomplete information is presented on commencement of proceedings, then the likelihood of liquidation should be assumed high as any attempt to rescue the firm from partial information is unacceptable.	O	O	O		
Integrity of annual reports Has the Company received a qualified audit report in current year?	O	O	O		
Upwards earnings management Management of distressed firms has incentives to manage earnings upwards, for example to avoid debt covenant violation and conceal their distressed condition. Acceleration of sales, alterations in shipment schedules, and delaying of research and development (R&D) and maintenance expenditures are earnings management methods available to managers. Such behaviour may bring the integrity of the firm's financials into question leading to a higher likelihood of liquidation.	O	O	O		
Tax Integrity Filed income tax returns	O	O	O		
Auditor loyalty Average audit lag (in months) over the 3-year period preceding rescue may suggest poor accounting systems. The practice of delaying the submission of the accounts may be more widespread and could be one important manifestation of the manipulation of the accounting framework. Such behaviour could indicate that the	O	O	O		

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	Indicator	Confidence Level	Define your indicator
+ Indicator 3			
+ Indicator 4			
+ Indicator 5			
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

Liability of Leadership

Liability of Leadership

The liability of leadership refers to the ability and style of the business rescue practitioner, top management team, the 'new CEO' or the management successors who are required to successfully rescue that business. Management fatigue or the loss of key skilled staff may increase the likelihood of liquidation. The liability created by poor leadership skills or management reluctance to save the business is a liability shared by all stakeholders and should be considered before commencing with proceedings.

Please provide two indicators that you consider the best measures of this liability.

- Give an indication of how confident you are of your decision
- Provide an explanation of how this indicator is relevant and how to calculate it.

	Indicator name	Confidance Level	Define your indicator
+ Indicator 1			
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Outflow of directors Failing companies tend to have both fewer directors and to experience a net outflow of directors in the period leading up to eventual failure. The likelihood of liquidation	O	O	O		

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	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Turnover rate in BoD A higher turnover rate in BoD (Board of Directors) members and CEO in a firms' 5-year period prior to rescue increases liquidation likelihood	O	O	O		
Management reliance The liability of leadership is intensified if the firm is too dependent on a top management team that is believed to be contributing to distress. Changes in the top management team may be key to performing a successful turnaround however it is unviable to remove them then the likelihood of liquidation would increase.	O	O	O		

Can you provide any more indicators for this liability?

Yes

No

Thank you ${m://FirstName}. We really appreciate your additional input. Please provide the details of the additional indicators that have not been identified by the researchers.

	Indicator	Confidence Level	Define your indicator
+ Indicator 3			
+ Indicator 4			
+ Indicator 5			
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

Liability of Obsolescence

Liability of Obsolescence

The liability of obsolesce originates from the reduced capacity of the external environment to support a business. This is sometimes referred to as 'environmental munificence' which may consist of economic problems, technological disruptions, competitive or social changes. As the environmental becomes more unfavourable so the likelihood of liquidation is expected to increase. It is important that the recovery efforts are not ignorant to changes in the environment. A sudden technological disruption or steady incremental changes to an industry may prove it obsolete.

Please provide two indicators that you consider the best measures of this liability.

- Give an indication of how confident you are of your decision
- Provide an explanation of how this indicator is relevant and how to calculate it.

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- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Strategic partnerships In periods of low environmental munificence, firms find themselves with fewer options to obtain resources. Securing strategic partnerships may signal a greater likelihood that firms will survive.	O	O	O		
Government policies, taxation and regulation Changes in legislature or tax reforms may render the firm unviable. If such changes are present in the external environment, then the likelihood of liquidation should be adjusted accordingly.	O	O	O		
The price and stability of market supply Input costs may be increasing in volatility. If such behaviour is expected to continue to wreak havoc on the firm, then liquidation should be seen as a better alternative.	O	O	O		
Consumer Price Index (CPI) High rates of inflation may indicate problems in the economy. In addition, employee wages (a significant expense for most businesses) were linked to the rate of inflation over much of the period of this study. Further, this variable is significantly related to business failure rates. For these reasons, a positive association is expected between the CPI and the likelihood of liquidation	O	O	O		
GNP-deflated annual growth rate Industry growth was measured as the GNP-deflated annual growth rate in a firm's industry's shipments during the last 3 years of the firm's performance. This growth rate was calculated with a firm's industry defined by the 4-digit SIC code assigned to the firm if at least 50 percent of the firm's revenue originated from operating segments in that SIC code.	O	O	O		
Environmental munificence variable The weighted industry average of the dominant industry along with the percentage of firm sales attributed to it. We collected data for this variable for each firm two years prior and current and transformed it into a continuous variable (positive values indicate a growing industry; negative values denote a contracting industry) *Industry growth = (Industry Shipments two years prior =Industry Shipments current)*	O	O	O		
Urgency of decline The severity of decline and how rapidly it occurred can create a crisis situation for a struggling firm. Firms in these situations have a harder time taking effective organisational actions due to the magnitude of the problem, the state of their resources and the time constraints involved. *Urgency of decline = suddenness of decline X severity of decline* The number of years it took for a firm to go from a healthy financial position measured at Time 1, to the lowest point in its decline cycle measured at Time 2. A lower number of years indicates a rapid descent.	O	O	O		
Rate of environmental degradation A high rate of environmental degradation could suggest an insufficient time for repositioning the firm. If the environment cannot support the required turnaround strategies, the likelihood of liquidation should be assumes high to avoid unnecessary erosion of value in the firm.	O	O	O		
Subsidiaries During an environmental jolt, there is a higher likelihood of liquidation for independent organisations than for subsidiary organisations.	O	O	O		

Can you provide any more indicators for this liability?

Yes

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	Indicator	Confidence Level	Define your indicator
+ Indicator 5			
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

External Legitimacy

External Legitimacy

External legitimacy concerns the perceived integrity of the business by its external stakeholders. The lack of external legitimacy would reduce the collective support by stakeholders and make turnaround exceedingly difficult. Society and the general public will assess how aligned the business's values and beliefs are with theirs. If a business has been found to have deceived customers or suppliers, then it is highly unlikely they will support its recovery efforts. External legitimacy is less focussed on the stakeholders but more in the company itself. As a business' integrity fades, so the likelihood of liquidation increases.

Please provide two indicators that you consider the best measures of this liability.

- Give an indication of how confident you are of your decision
- Provide an explanation of how this indicator is relevant and how to calculate it.

	Indicator name	Confidance Level	Define your indicator
+ Indicator 1			
+ Indicator 2			

Review the following indicators suggested by the researchers.

- Give an indication of how confident you are of your decision.
- If you choose to **reject** an indicator, please explain why.
- If you choose to **modify** an indicator, please explain how it can be modified.

	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
Process integrity capacity This is the alignment of the firm's moral awareness, deliberation, character and conduct on a sustained basis so that reputation becomes a major intangible asset to be carefully nurtured and protected. The more individuals and groups in the firm exhibit these moral processes, the stronger the aggregate business process integrity capacity will become and the smaller the likelihood of liquidation.	O	O	O		
Judgment integrity capacity Business judgment integrity is formed by the conscious balancing of management, ethics and legal theories in the formation of business policies and practices. A business judgment that overemphasises or	O	O	O		

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	Decision			Confidance Level	Suggested modification/ Comments
	Reject	Accept	Modify		
System integrity capacity This is the aligned implementation of organisational policies that institutionalise ongoing moral improvement within and between organisations and enable extra-organisational contexts to provide a morally supportive framework for integrity-building environments through statistically measured performance improvements. Collective commitment work cultures, for example, emerge by the regular practice of principled moral reasoning in everyday business decision making, but they are sustained only if system integrity capacity processes are institutionalised. The lack of institutionalised systems suggests little moral integrity and therefore a higher likelihood of liquidation should exist.	O	O	O		
Relationship quality of major suppliers Will key supplies winning to support the firm under new conditions and increased levels of uncertainty	O	O	O		
Internal credibility Measures how the firm and its shareholders are perceived by their stakeholders (customers, suppliers, competitors, etc.), in terms of trustworthiness and meeting the monetary and nonmonetary promises.	O	O	O		

Can you provide any more indicators for this liability?

Yes

No

Thank you ${m://FirstName}. We really appreciate your additional input. Please provide the details of the additional indicators that have not been identified by the researchers.

	Indicator	Confidence Level	Define your Indicator
+ Indicator 3			
+ Indicator 4			
+ Indicator 5			
+ Indicator 6			
+ Indicator 7			
+ Indicator 8			

Thank you

Thank you ${m://FirstName}! We really appreciate your assistance with this research!

If you have any comments or suggestions regarding this study please let us know.

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Appendix 5 – AHP survey

AHP-OS Home Latest News

Pairwise Comparison AHP-OS

Pairwise Comparison LOL Framework

Please do the pairwise comparison of all criteria. When completed, click *Check Consistency* to get the priorities.

AHP Scale: 1- Equal Importance, 3- Moderate importance, 5- Strong importance, 7- Very strong importance, 9- Extreme importance (2,4,6,8 values in-between).

With respect to *LOL Framework*, which criterion is more important, and how much more on a scale 1 to 9?

	A - wrt *LOL Framework* - or B?			Equal	How much more?
1	Functional Business Model	or	Reorganisational Slack	1	2 3 4 5 6 7 8 9
2	Functional Business Model	or	Creditor Composition	1	2 3 4 5 6 7 8 9
3	Functional Business Model	or	Stakeholder Influence	1	2 3 4 5 6 7 8 9
4	Functional Business Model	or	Liability of Smallness	1	2 3 4 5 6 7 8 9
5	Functional Business Model	or	Liability of Data	1	2 3 4 5 6 7 8 9
6	Functional Business Model	or	Liability of Leadership	1	2 3 4 5 6 7 8 9
7	Functional Business Model	or	Liability of Obsolescence	1	2 3 4 5 6 7 8 9
8	Functional Business Model	or	External Legitimacy	1	2 3 4 5 6 7 8 9
9	Reorganisational Slack	or	Creditor Composition	1	2 3 4 5 6 7 8 9
10	Reorganisational Slack	or	Stakeholder Influence	1	2 3 4 5 6 7 8 9
11	Reorganisational Slack	or	Liability of Smallness	1	2 3 4 5 6 7 8 9
12	Reorganisational Slack	or	Liability of Data	1	2 3 4 5 6 7 8 9
13	Reorganisational Slack	or	Liability of Leadership	1	2 3 4 5 6 7 8 9
14	Reorganisational Slack	or	Liability of Obsolescence	1	2 3 4 5 6 7 8 9
15	Reorganisational Slack	or	External Legitimacy	1	2 3 4 5 6 7 8 9
16	Creditor Composition	or	Stakeholder Influence	1	2 3 4 5 6 7 8 9
17	Creditor Composition	or	Liability of Smallness	1	2 3 4 5 6 7 8 9
18	Creditor Composition	or	Liability of Data	1	2 3 4 5 6 7 8 9
19	Creditor Composition	or	Liability of Leadership	1	2 3 4 5 6 7 8 9
20	Creditor Composition	or	Liability of Obsolescence	1	2 3 4 5 6 7 8 9

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Thank you.

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