

The impact of credit risk management on the sales performance of a selected commercial bank in the Western Cape.

by

Darren Jacobs

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Supervisor: Prof. Andre Slabbert Co-Supervisor: Dr. Michael Twum-Darko

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ABSTRACT

This dissertation explores the macro-economic and micro socio-economic contexts within which CRM is applied and examines its potential impact on loan assessment with historical consideration of many current societal ills as well as new threats that have emerged. This study provides detailed insight into reasons why South Africa has a divided economy. The purpose is to motivate banks to be more proactive in their role as economic reformists, and, subsequently to improve the ability to unlock improved sales performance through strategic economic inclusivity. This quantitative study employed a self-administered questionnaire. The data was analysed using an interpretive approach to descriptive statistics. Participants included sales and credit risk staff within the Cape region of a commercial bank. The potential impact of this study is increased profits, and tangible and sustainable wealth distribution. Areas are identified for further research, or at least for the development of programs for change. Chapter 1 introduces the Terms of Reference and Parameters of the Thesis. Chapter 2 surveys the literature related to this topic. Chapter 3 describes the Methodology employed in the study. Chapter 4 presents an analysis of the data and Chapter 5 makes Recommendations, with Chapter 6 concluding the study.

KEYWORDS: Credit risk management, Risk; Risk tolerance; Sales performance; Relationship banking; Covid-19.

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CHAPTER 1 INTRODUCTION

1.1 Overview of the study

The purpose of this study was to provide an alternative view of the credit risk management (CRM) function, to that of the traditional, by focussing on the context within which it is practiced. It sought to establish the factors that might influence lending decisions, and the impact these factors may have on the sales performance of a bank.

1.2 Subject of the study

The subject of the study was the client services team (CST). These dedicated teams are composed of specialists who contribute specialist knowledge to increase the products and services utilised by existing clients, and to bring new clients onto the bank's books. Each CST is made up of a business manager (BM), who acts as the primary point of contact for all banking needs and provides specific solutions, building on a detailed understanding of the clients' business. The BM will also introduce the specialist sales team to the clients. A service manager, who serves as a secondary point of contact, has oversight of the product and service delivery and is available to support clients with day-to-day requirements. The specialist sales staff, including domestic, global and investments specialists, partner with the business manager to provide specific solutions regarding the transactional and liquidity requirements. Finally, the credit manager (CM), supported by a credit analyst works closely with the business manager and the specialists in making appropriate lending decisions. The value of this integrated approach is said to be in the personalised contact through these skilled business managers and professional service managers; through local knowledge of the client's business, with expert insights from specialists; quicker facilitation of deals and more informed decision-making, which is enabled through the locally based credit managers. The sales team claim not to product push, but to offer customised solutions for specific business needs, ensuring all requests are based on merit.

1.3 Background to the problem

Banks are the pulse of the financial system in most countries. Perhaps therefore credit risk is the greatest risk of all. In South Africa this in no different. The danger that this risk presents is that if not well managed, banks could face closure (Makri & Papadatos, 2013). Reckless lending has in many expert circles been determined as the greater reasons for loan default (Rahman & Hai, 2017). South Africa's growth rate has been low, which naturally increased credit risks, and negatively impacts the sales growth of a bank. Globally the world has been

politically and economically unstable, which has called for greater need for credit risk management wisdom to positively effect and contribute to the financial performance of banks. Profitability of banks has come under threat by its client's inability to repay loans (Haneef, Riaz, Ramzan, Rana, Hafiz, and Karim, 2012). There is, however, great potential for financial growth if banks could strike a balance between managing the risk and exploiting opportunities (Alexiou & Sofoklis, 2009). This approach could better help to assess and, subsequently, predict loan default, thereby avoiding it, while simultaneously using relationship banking strategies; consequently converting potential default into opportunities for growth (Bruni, M.E., Beraldi, P., & lazzolino, G. 2014). Unfortunately, existing research only points to a punitive, defensive approach to credit management. This is understandable given the events and effects of the 2007 global financial crisis. The researcher has identified a gap in the research which seeks to address the reality that South Africa has a vast and largely untapped second economy from a lending point of view, but banks have seemingly not strategized and positioned itself enough through the credit risk management function to exploit it. The research questions in this study interrogates the extent to which a bank positions itself for sales growth by exploiting the second economy.

1.4 Problem statement

Relationship-based banking performance, which is the sales approach of choice for the bank in this research, is measured by the strength of the relationship between the salesperson and the client. A few key drivers of this concept are loyalty, client retention, high satisfaction scores, etc. (Keiningham, T. L., Cooil, B., Andreasson, T. W., & Aksoy, L. (2007); Morgan and Rego 2006). Relationship banking generally focuses on longer term performance outcomes (Palmatier, R. W.; Houston, M. B.; Dant, R. P.; Grewal, D., 2013), which is a greater indicator of sustained performance at a higher level. This reflects accurately in research showing the importance of the quality of the relationship between sales and client (Crosby, L. A., Evans, K. R., & Cowles, D. 1990; Park, J. E., Kim, J., Dubinsky, A. J., & Lee, H., 2010). It also involves the ability to observe the more intangible components of performance. These include the cognitive and emotional approach to the relationship. In the context of this research study, credit risk management is perceived to be punitive because of its scientific approach, ignoring the potential for increased sales performance within the relationship banking approach. This hypothetical problem is exacerbated by the unique South African economy, where exclusive credit extension is facilitated by rigid credit risk systems, leaving no room for building relationships within the second economy, therefore potentially restricting sales growth. The reason that the researcher has embarked on this study was in order to

shed more light on the effects of credit risk management on sales performance. by exploring the contextual framework within which it is exercised,

1.5 Research questions

1.5.1 Primary questions

What impact does credit risk management have on the sales performance of a bank?

1.5.2 Secondary questions

- What impact does the macro-economic environment have on the bank's risk appetite?
- When does the bank share credit market insights with the CSTs?
- What impact does personal risk aversion have on credit risk assessment?
- Which credit assessment skills are required for bank-wide growth?
- What role does credit assessment staff experience play in sales growth?
- What value does credit scoring add to the credit risk management process?
- What impact does credit approval mandates have on the execution of credit assessment?

These questions have been included in the data collection tool with the purpose of establishing an overall view of the impact of the approach to credit risk management.

1.6 Aim of the study

The aim of the study was to draw attention to factors outside of scientific credit risk management research factors which may or may not influence the approach to credit risk management across a sample of sales and credit management staff within the Cape region's business banking division. This was achieved by refering to the relevant literature as well as engaging the business and credit roles within the CST to establish the approach to credit risk: what influences the approach, and how does this approach impact the bank's sales performance?

1.7 Research objectives

The main objective of the research study was to investigate the impact that credit risk management had on the sales performance of a bank. It did so by focussing on the context within which credit risk management is practiced, how it defined individual and organizational culture, and its potential effects on credit management outcomes. The intention was also to highlight the fact that individual attributes play a role in credit decisions.

1.8 Research design and methodology

The data sample was made up of members of the CST. As described before, the CST is made up of credit analysts and credit managers. They report to area credit managers. Both are mainly tasked with effective risk management within the banks desired risk appetite; quality credit granting through the client's business cycle; strategic client portfolio management to optimize allocation and use of scarce resources; embed superior business intelligence including project delivery and execution. Also within the sample were business managers, who report to an area business leader, and who are mainly tasked with achieving financial targets within a sustainable, values driven framework that allows for appropriate growth year on year; growing the banks transactional banking franchise by growing its client base, particularly primary banked clients, and improving client profitability; optimizing distribution, product marketing and cross-selling of bank-wide products. The research was based on an investigative approach in order to eventually interpret a set of subjective data. The study made use of a structured questionnaire and was subject to the detail provided in the sample method/ technique and sample size section.

1.9 Research instrument

The researcher applied quantitative data collection techniques. The study produced descriptive data using a specifically designed questionnaire. For a mini thesis (which is in effect an extended case study), hypothesis testing and inferential statistics are not required. With the use of the Likert scale, providing 5 options ranging from strongly agree to strongly disagree, the participants were presented with a combination of 13 questions and statements, and given the opportunity to choose the most suitable option in response. They were also given an opportunity to elaborate on their choices. The questionnaire also contained two yes/ no response questions.

1.10 Sample frame

The population within the geographical area as previously indicated, was made up of one hundred members of the CST. Based on the nature of the population, random sampling was used. Each of the members within each of the groups are governed by the same performance categories and are exposed to the same daily business processes. Regardless of which members were chosen to be part of the sample, the data would be reliable. The total respondents to the questionnaire were thirty-eight. This is further discussed in paragraph 5.4 in Chapter 5, which deals with the limitations of the study. The response rate achieved is acceptable according to the guidelines provided by CPUT for 50% dissertation.

1.11 Ethical considerations

- Permission was granted to conduct the research (Provincial General Manager of the Western Cape retail and business banking division)
- All data was collected from voluntary participants.
- The anonymity of the data was confirmed in a participation consent form.
- Participants could skip questions they were not comfortable answering.
- All work by other authors was cited.

1.12 Data capture and analysis

The data collected was manually tabulated, and then converted from the table into bar graphs in MS Excel. The bars in each graph represented which percentage of respondents chose respective options available to them.

1.13 Summary

The purpose of the study and the core research objectives were presented in this chapter. The research design and methodology that was used were introduced, together with the research instrument, and the sample frame of participants. Data collection and analysis was also discussed.

1.14 Outline of remaining chapters

Chapter 2. Literature Review

This chapter will explore, in detail, the key concepts related to the study and, in so doing, will seek to create a framework within which successful data analysis may be conducted.

Chapter 3. Methodology

This chapter describes quantitative data collection techniques applied in this study, by employing the questionnaire which refers directly to the objective of this study, which is to better understand the micro conditions of the banking segment in question. This includes discussion regarding the data sample.

Chapter 4. Data analysis

This chapter reveals the findings presented by the data, with its main aim being to answer the research questions.

Chapter 5. Discussion and recommendations

In this chapter, conclusions are drawn, with recommendations for banks in general, and possible areas of future research.

Chapter 6. Conclusion

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

Banks have generally approached credit risk management in a very traditional manner, with little strategic proactivity from a sales growth point of view, and, seemingly, without any tangible consideration for the historical, current, and ever-changing macro-environment. These changes could broadly include political and even sociological changes. Although much research has been done on the management and development of scientific-based methods for calculating risk, very little research has been found which have considered the context within which South African banks have, and still do, put into practice the credit risk management function, with specific attention given to the individual resources utilised in making daily credit decisions. The research questions for this study interrogates the impact that traditional credit risk management has on the sales performance of a commercial bank. As mentioned before, credit risk management has a very scientific and mathematical basis. This study, however, also reviewed literature relating to the context within which risk management is applied, and especially how this context may or may not affect those entrusted with the determination of credit risk. The contribution of this study to the current literature is to highlight the importance of the credit risk management role as a strategic growth resource; also to explore why banks should be making a greater investment in credit risk staff. The context previously referred to is the past and present South African credit market and what may have shaped its current structure; inter-bank competition and its effect on risk-taking behaviour; how human capital in the risk environment is managed in relation to the afore-mentioned context; also, how this might affect the outcome of credit assessments. The researcher has also considered individual attributes that may or may not have an impact on credit risk decisions.

2.2 Conceptual Framework

2.2.1 What is risk?

Risk is described as an "...intrinsic attribute that exists in virtually all fields of human endeavour" by Oje Oke (2018:26). When one considers potential life risks, for example the risk of ill health, among others, one starts realising just how profound this description is. The management of the risk during the Covid-19 pandemic, for example: practicing social distancing, handwashing, and sanitizing, has the primary goal of saving one's own life. There are other, equally vital benefits though. Practicing these habits could also save many other lives. Widespread awareness and practice of non-pharmaceutical intervention could have

reduced infections and hospitalisation and might have seen a sooner easing of the lockdown regulations, subsequently easing the strain on the economy. This study is concerned with the benefits and possibilities that healthy credit risk management interventions create for a bank, not just to save its own life, but to save many other lives as well, by easing economic strain beyond its walls. Yes, the primary goal is to maintain a minimal level of bad debt, and to facilitate the lending of money with the least probability of making a loss on the loan, but what about the benefits and possibilities that exist beyond that?

The risk management department as referred to by Perez (2014:9) has traditionally been designed to continuously report to management on the risk status of its existing business portfolio, which includes assets, liabilities, loans, etc. Perez went on to highlight the significance of such a department's ability to then, through its internal risk management activities, and subsequent actions, either directly or in collaboration with other bank functions, reduce the possibility of loss or to mitigate the size of the potential loss. The goal of credit risk management then, was to extract the greatest monetary value while still maintaining credit risk exposure at acceptable levels. Part of its credit management philosophy is to manage risk levels across the entire group of clients for which there is accountability, but also managing the risk contained in each of the credit items or transactions within that group. Perez also draws attention to how credit risk relates to other risks, and that it cannot be assessed in isolation. A holistic credit risk management approach would therefore benefit an organisation in terms of longer-term success. ("Principles for the management of credit risk - Basel Committee on Banking Supervision"). Its goal is seeking to understand the diversity of risk and to measure and manage it with a strong emphasis on risk reduction/ mitigation, thereby maximizing returns for the risk assumed and contributing to maintaining or improving its external credit rating. Its broad approach to risk is based on 3 three distinct but simple fundamentals, namely:

- risk as opportunity
- risk as threat
- risk as uncertainty

According to Nedbank Business Banking's 2019 credit policy document, its philosophy is to grant, manage and collect credit in line with the decentralized model, previously referred to in Chapter 1 as the CST. In the extension and management of credit, the goal is to conduct quality lending practices and to ensure quality assets. Consequently, Nedbank seeks to support the sales team in their quest to satisfy the qualifying client's needs with acceptable financial solutions. Decision-making is based on flexibility, without sacrificing quality. The term 'open for business' is often heard in the corridors. The bank has delegated the

responsibility to the credit risk team to manage and assess high risk borrowing clients. Its purpose is to secure very high profit levels by employing a circumspect view of risk management. The accountability for this vision lies mostly with the credit manager within each CST which has as its long term strategy the intention to support the overall business strategy of the group and to provide a framework for the group to achieve and maintain the necessary balance between capital preservation and capital optimization through identification of target markets in line with the business strategy and to identify products appropriate to those markets.

2.3 What is sales performance?

Sales performance is objectively evaluating sales actions and comparing them to goals defined in the sales strategy/plan of the organisation. (Bagozzi, Rosa, Celly, and Coronel, 2018). For this to be effective, it should occur either every month or once a quarter (Chernev A., 2018). Lovelock and Patterson (2015) explain that from a marketing perspective, sales may be defined as the amount of money collected from the various sales channels in respect of the products in the market. Sales revenue is thus the sum of all moneys generated from the sale of all products and services available to a client, over a set period (Kotler, Keller, Brady, Goodman, and Hansen, 2016). Sales performance thus characterizes the constant and agreeable exchange of products and services with clients for money or payment. The most prominent goal for every business is therefore to sell as many of their products and services in the market within which it operates.

2.3.1 Customer outreach

An increase in sales is one of the more useful ways to evaluate the performance of a sales team. One other useful metric, especially in the context of relationship banking, is customer outreach (Chernev, 2018). Simply, outreach is the organisation's ability to draw new clients. Growth in client volume is measured by how many new clients are attracted to the organisation over a set period. Growth in sales volume is measured according to how the level actual sales have increased or decreased over a set period (Sukwadi, Inderawati, and Wong, 2016). What is a key driver of this process? The ability of the salesperson to influence the consumer as well as the process.

2.3.2 Social influence theory and its effect on salespeople.

Social influence is described as the intentional, or unintentional way people manipulate the opinions, sentiments, and even behaviours of those around them (Turner, 1991). Social influence reflects the techniques, perspective, and traits of the influence and the influencer, who use varying means to influence a person or situation in a certain direction (Rashotte, 2009: 4426). Sales is a framework that is substantially based on the use of social influence, where salespeople are called upon daily, to sway clients towards using their product or service. In addition, salespeople engage in attempting to influence fellow and internal stakeholders, in this instance, the credit management team. It is for this reason that social influence theory is quite relevant in that it defines more clearly the approach of the salesperson in terms of client and internal stakeholder relationships (Cullen, Fan, and Liu, 2014; Forgas and Williams, 2003; Levy, Collins, and Nail, 1998). Social influence theory, a subject born in Social Psychology, has developed over the past three decades (Forgas and Williams 2001; Jones 1990). Basically, social influence theory describes what causes individuals to attempt to influence, how it is manifested, and its related consequences (Levy, Collins, and Nail 1998). Its relevance to this study, however lies in the fact that the need to influence, from a selling point of view, is potentially restricted by the scientific nature of credit risk management. This restriction in influence for making a strong case on behalf of a potential client is exacerbated by a lack of contextual awareness on the part of the sales and credit teams, thus reducing the opportunity for improved sales performance.

2.4 Contextual Framework

2.4.1 The historical context: Post-apartheid neoliberalism and its effects on the South Africa economy

According to Schneider (2018: 308), with the fall of the apartheid government in 1994, new ground would be broken regarding the type of economic system to be applied in South Africa, and how the transformation from racialized capitalism to a non-racialized system would be managed. In the early 1990s, Nelson Mandela and his new democratic government were persuaded by prominent economists of the day, and against their own volition, that South African businesses should pursue neoliberal policies. Neoliberalism is an economic ideology which promotes free market trade, consequently characterized as being anti-state; pro-market; encouraging private ownership and having large monopolistic companies (Bockman: 2019: 660). The one characteristic of this ideology that was of concern in the South African context was that there would still be no income redistribution. This persuasion to move from the nationalization of certain key areas of the economy,

including banks, among others, to neoliberalism, caused the African National Congress, the new ruling governmental party, to effect policies that opened South Africa to international business and saw a subsequent increase in incoming funds. This resulted in denationalisation, with the only obvious advantage being a slight uptick in social spend. This did translate into greater social grants, and housing policies, but it was far from economically and therefeore sociallym transformational. After more than two decades of these policies, the effectiveness of that choice unfortunately, and predictably, worsened the inequality experienced under apartheid and failed to stimulate significant growth and development (Schneider: 2018: 309).

Among the specific consequences is worsening unemployment. Unemployment increased from 4.4 percent in 1994 to 27 percent in 2003. That trend has continued, with an unemployment rate of currently close to 30 percent, exacerbated by among other things, an underperforming economy and continuous threats of downgrades, widespread corruption, and damaging party factionalism (Thomas, 2019: 42). The wealth inequality is another consequence of a policy that has failed in redistributing assets. Orthofer (2016: 23) reported that only 1 percent of the South African population owned at least half of all the country's wealth. It is within this reality that South African commercial banks have operated, and still do, but more specifically it is the context within which credit risk management is practiced.

2.4.2 The global context: South Africa's role in the global financial market

South Africa is considered one of the economic powerhouses on the African continent, and as such it is tasked as leading the way for Africa in the way that it responds to global economic events (Nyoka 2015:17). Having said this, African countries have always had to dance to the tune of European and Western investers. In the wake of the global economic crisis, this investment was expected to diminish over time. What the global market was looking for was evidence that the policies integrated successfully into their own policies for future growth. This spoke directly to the way the South African economy, or any emerging market economy, and by implication its role-players, approached the task of integration.

In the introduction of his book 'Between debt and the devil' (2016:3), Turner says "Too important to be left to the bankers", which he goes on to explain in the context of the global economic crisis of 2008. He argues that the "Too big to fall" (Turner, 2016: 3) institutions like banks and its bankers should have been held to account for reckless lending. Much of the existing credit management literature seems to express similar sentiments. The development of The Basel accords was meant to remedy this. Kapoor and Kaur (2017: 250)

state that Basel norms are standard international recommendations implemented, updated, and revised periodically in response to the need for more sound and stable banking processes. The Basel Committee on Bank Supervision (BCBS) recommended that the role of credit risk management be to maximise a bank's risk-considered return by maintaining credit risk exposure within acceptable parameters. It recommends that banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks.

2.4.2.1 The Basel Accords

At times, however, competition in the banking sector almost forces banks into high-risk activities. Some have suggested that high competition in the investment or liability market increases a bank's risk appetite, and thus consequently reduces its ability to act prudently by aiming for less profits (Keeley, 1990, Hellmann, T. F., Murdock, K. C., Stiglitz, J. E. 2000 and Repullo, 2004). This very competitive environment has caused concern from prudential regulators who have deemed it to be somewhat threatening to the safety of global banking systems in the developed and emerging economies. The most prominent of regulators is the Basel Committee on Banking Supervision, which has, through different phases of capital management regulations, namely the Basel Accords, created a framework which banks across the globe subscribe to in order to maintain healthy levels of capital (Hellmann et al., 2000 and Repullo, 2004). The Basel Accords have already been briefly introduced in this study, but will now be further expounded upon, as it plays a fundamental role in a bank's approach to its credit risk management activities. An ever-evolving financial sector has seen the rise of multiple challenges which led to the development of the Basel Accords over time. According to the South African Reserve Bank however (SARB, 2011), the devastating effect of the subprime financial crisis in South Africa was relatively well buffered by its own macroeconomic policies, and sound regulation in the domestic banking sector (Hatting, 2017: 3). This prudence was informed by, among other things, the introduction of the National Credit Act before the crisis. The Accords introduced several imperatives which required change from banks and the global financial system in general. These changes increased pro-cyclical lending through capital requirements, which encouraged banks to take on more risk (Claessens, L. Laeven, S. 2004).

2.4.2.2 Basel I

In simple terms, the first accord, otherwise known as Basel I, required that strong capital reserves be kept aside by banks to ensure a decrease in inequality across all jurisdictions in the world and to adjust rapidly to the evolution of financial services (BCBS, 2014). This was implemented simply to improve capital ratios that were found to be extremely low. The Basel I document was thus created to help banks implement and maintain minimum capital requirements, thereby lowering the credit risk. At the time, capital risk was identified as the banking industry's primary risk (Lounsbury, 2010).

2.4.2.3 Basel II

Basel accord II was implemented to overcome some inadequacies of the first accord (Kuvalekar, 2016: 16). This accord aimed to ensure that banks maintain adequate levels of capital in order to be protected against financial and operational risks within their business. The introduction of Basel Accord II as a global standard was expected to safeguard banks against the potential challenges that could materialize because of a banking system collapse. This capital accord encouraged and endorsed a rigorous risk management system ensuring that banks hold adequate levels of capital to cover risk in its two core business components, namely, its commercial and investment banking concerns (Kuvalekar, 2016:17). Through Basel II the focus was on overall risk analysis which includes credit risk, market risk and operational risk. The main objective of the accords is to ensure increased sensitivity to risk in capital allocation; to approach operational risk and credit risk as separate risks; to align economic and regulatory capital more closely; to provide incentives for applying improved risk management; and to make the banking system more efficient and vibrant.

2.4.2.4 Basel III

Basel III guidelines were introduced in December 2010. The financial crisis of 2008 was the main reason behind the introduction of Basel III. A need arose to create more strength in the banking system as banks in the developed economies were under-capitalised, over-leveraged and had a greater reliance on short term funding. The level and quality of capital prescribed by Basel II was viewed as insufficient in avoiding any further risk. The third accord aimed at making most banking activities, such as their trading book activities, more

capital intensive. The purpose was to promote a more resilient banking system by focusing on four vital banking parameters: Capital, Leverage, Funding and Liquidity (Roy *et al.*, 2013)

2.4.2.5 Responding to the global financial crisis.

The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization ('Principles for the management of credit risk' - Basel Committee on Banking Supervision"). In pursuit of goals based on the recommendations of Basel III, banks have set out to understand the diversity of risk and to measure and manage it with a strong emphasis on risk reduction/ mitigation, thereby maximizing returns for the risk assumed and contributing to maintaining or improving external organizational credit rating. Its broad approach to risk was based on three distinct but simple fundamentals, namely risk as opportunity, threat, and uncertainty, with the view to achieving acceptable levels of capital liquidity. This requirement served as somewhat of a catalyst in the development of financial innovation which introduced the world of financing to technical credit scoring methods. (Hooman, A.; Marthandan, G.; Yusoff, W. F. W.; Omid, M.; Karamizadeh, S. (2016:378) document many of these methods and note that, because of the spectialization of credit management as a discipline and as a resuly of growing interest in the credit industry, credit scoring was developed as an essential component in managing credit data, especially in banks where this is managed in large volumes. Because of this, it has become increasingly easier for banks to assess the ability of borrowers to honour their agreed debt commitments. Over the last few decades, the global development of liquidity management has witnessed changes which were introduced in a phased approach. Each phase addressed capital requirements regulations as per the Basel Accords. The credit scoring practice, however, seems to have come about because fostering good social credit relationships became guite expensive. Banks chose rather to make use of the credit scoring approach to mitigate potential risk inherent in either client groups, or individual transactions. Credit scoring is a technique in assessing the probability of default of loan applications. Using an applicant's historical information and statistical methods, credit scoring attempts to identify and isolate the effects of various applicant traits on mal-managed financial affairs. The technique suggests a score which is then used by the bank to rank the applicants risk profile. Depending on this ranking or score, the bank either grants or declines the loan application. But no model is perfect, and some bad accounts will actually receive higher scores than some good accounts (Mester 1997: 3) A consequence of the afore-mentioned measures was articulated by Brownbridge (Spring 2015: 153) where it was reported that most banks in Africa have met and, in fact, exceeded the base standard for capital held under Basel 3, and

that raising the minimum capital adequacy requirements, indeed, benefited African countries over the long term. It helped their banking systems to achieve and maintain healthy levels of capital to protect it against all relevant risks, especially because larger and more advanced economies generally face lower risks. One key driver of this, from a South African point of view, is the National Credit Act of 2005, which was developed to reduce and manage consumer over-indebtedness (Migiro, 2017: 27). The advantages of subscribing to the Basel guidelines were very clear, but did it allow the unique South African economy to become more inclusive? Certainly not. The global crisis of 2008 made access to financial resources further beyond the reach of the second economy.

2.4.3 The economic context: An overview of the South African credit market

When considering a bank's culture, the researcher thought it vital to consider the environment within which it was established, and how that environment has developed over time. South Africa has a very rich and diverse culture, forged by an oppressive and racist social and political history. This culture naturally extended into policy making and governance. This culture, inevitably, has had a major impact on how the credit market has developed.

2.4.3.1 Two economies - two credit markets

In its policy making proposal, South Africa's Department of Trade and Industry (DTI) gave some insight into the country's current credit market. It suggests that South Africa is operating in a credit market that not only does not support the current and future sociopolitical transformation, but more pertinently the economic landscape, that exists in the country. It argues that the country's economy is split between those who can afford credit, and those who cannot, and that the current credit granting criteria perpetuates this split. The two economies are distinguishable by characteristics such as its ability to satisfy credit approval criteria, the cost of credit because of these criteria, and perhaps more importantly, the unconscious lack of developmental support for consumers both private and commercial, in their pursuit of wealth creation and in seeking to build a strong financial legacy (DTI, 2018).

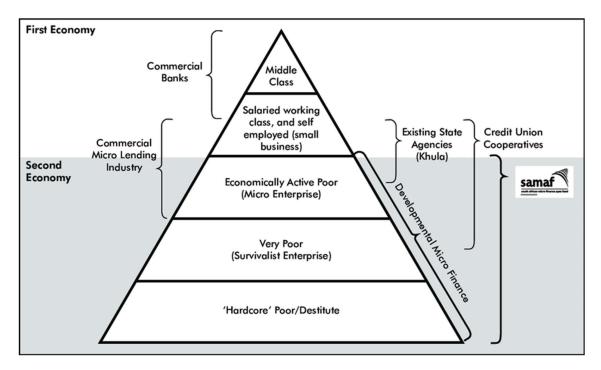


Figure 2.1: South Africa's split economy, Source: The South African Micro-finance Apex Funds (DTI initiative)

The above figure is a graphical illustration of the split South African economy referred to by the DTI. It expanded on this by explaining the outcome of research it performed on this divided credit market. The research highlighted that the one market within this economically split landscape was made up of low-income earners, otherwise commonly referred to as the previously disadvantaged. The disadvantage refers here to limited access to quality education, and therefore restricted access to high paying jobs. The consequence was the inability to create a strong financial track record resulting in very expensive credit options, if at all. The previously disadvantaged group was, and still is predominantly black. The access to credit, especially from banks and established credit providers, was therefore reserved for only 15% of the population, which is the percentage of high-income earners, conversely, predominantly white. This stark contrast is demonstrated by the fact the 72% of all credit granted, was to the 15% of the population previously identified, to the tune of R261 billion, whereas the 67%, which accounts for much of the rest of the credit market, received only 6% of the credit extended, with a meagre R21 billion, by comparison. This very disturbing split in South Africa's economy clearly demonstrates the extent to which access to resources and poverty can be worsened by what seems to be an exclusive credit market. Existence of these two markets mirror South Africa's legacy of poverty and poor access to credit.

It was expected that the regime change in 1994 would bring substantial change to this legacy. The fall of apartheid was meant to be the answer to the call of the poor and

oppressed, a defining moment in our economic history, and the restructuring of our consumer market. It was not to be, though. Apartheid continued its impact on the country by simply persisting in economic form (Goodman: 2017; A1), with the two socially and racially distinct credit markets still firmly intact (The South African Microfinance Apex Fund (DTI initiative)).

2.4.4 The social context: South Africa's societal challenges

A consequence of this divided economy, one among many of the aspects that affect the success of a country, namely the social aspect, was arguably the most critical. People are all products of their society. A society has a unique culture. People follow its ethos, they learn its language, they follow its religion, and they subscribe to its traditions, etc. This culture has had a direct influence on the way people have lived and what they have consumed. This consumption was mostly viewed in economic terms. So, by extension the consumer was viewed in economic terms as well. According to Smit, P.J, Cronje, G.J.J., Brevis, T. & Vrba, M.J (2013:74) however, consumption should equally be viewed as a function of human behaviour. This approach considered the beliefs, the attitudes, and values, to name but a few. This behaviour could change over a period of time (Smit *et al*, 2013:74).

South Africa is a large country, and at the time of this research has a population of 54 million people (Bertelsmann Stiftung, BTI 2016:2). The country has a very diverse composition. It is made up of several types of people referred to in racial terms as Black, Coloured, Asian, Indian, and White (Smit *et al*, 2013:270). It is for this reason that the country is often referred to as the rainbow nation. There are eleven official languages, representing all the ethnic groups. At the time of the study, 34.7% of its citizens are poverty-stricken, and on average people only live to 56 years old (Bertelsmann Stiftung, BTI 2016). The low life expectancy is largely attributed to the AIDS pandemic in the country (Smit *et al*, 2013:75), a scourge exacerbated by the lack of primary health care and medication.

Poverty is most prevalent among the 38 million (previously classified) Black population. Black people constitute the majority of South African citizens. The vast majority of South Africans live and move in the second economy which has been previously described. The second economy has become a society. Its citizens have taken on its culture and beliefs and have become breadline consumers; excluded from most, if not all, economic freedoms.

2.5 The role of banks in the South African economy

Banks are the core of every economy. Banks that are prudent and healthy are key in economic development, especially in a country such as South Africa. However, the health of a bank may quickly be imperilled through risks which threaten them. These risks include credit risks (risk of repayment default), market risk, operational risk, trade union risk, liquidity risk, interest risk, portfolio risk and legal risk. This study has focussed on credit risk. Credit risk is arguably one of the most dangerous risks for every bank (Mokatsanyane, D., Muzindutsi, P. F., Viljoen, D., 2017: 102). Within the South African context, banks are generally private business entities, with one of its main strategic goals being to achieve healthy profit margins. However, a bank plays a vital economic role in that it serves as a financial intermediary, by taking cash deposits from individuals which it attracts through a suite of investment products, and lending it to various types of businesses, through various credit extending products. It rewards those who have a savings culture by paying relative interest on these deposits and encourages commercial and economic growth by funding the strategies of various types of businesses through these credit extending products. The benefit to the bank in taking deposits is the ability to build up cash reserves to fund its own investment activities, and other strategic financial objectives, but more importantly, and in the context of this study, to lend to businesses in most industries, at a premium. These businesses then use it for growth strategies, among other things. Depending on the type of business, this can range from the purchase of property from which to operate a business, to the purchase of machinery and/ or technology, to providing a product or service to the consumer market. These credit facilities which are extended are almost always determined by the borrower's risk profile. This risk profile indicates the likelihood that the borrower will not be able to honour the terms of the loan. The difference between what is invested and borrowed is referred to as the spread, or, what profit the bank makes.

2.6 The impact of restricted access to bank funds.

The developing South African economy is predominantly made up of small businesses (Mutandwa, E., Taremwa, N. K., Tubanambazi, T., 2015: 2). One of the main barriers to obtaining finance, according to the owners of these businesses, is said to be the difficulty in satisfying the financial requirements laid down by traditional credit risk management. The consequence of this is slowed growth (Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V., 2008; Nichter and Goldmark, 2009; Buera, F. J., Fattal Jaef, R. N. and Shin, Y., 2015). According to the research one of the reasons that satisfying the requirements has proven a challenge was because these businesses operate in very risky environments.

An example of this would be spaza shops in the townships. Banks generally do not have any risk appetite for providing funding for such high-risk businesses on top of the fact that its CRM policies and processes were probably not designed to accommodate the risk challenges which these businesses may pose. Most of these businesses are informal. With traditional CRM focussing very intently on a business's track record, this part of the economy struggles to convince banks to fund their strategic goals due to a lack of financial statements and well documented business plans and forecasting. These circumstances would seemingly make it very difficult for banks to conclude an acceptable level of risk when providing finance.

2.7 The effect of competition among South African banks on risk taking.

South Africa's financial service sector is quite unique. It is sophisticated in terms of how fast it has become highly concentrated. It has been noted that in recent times, the big four banks in South Africa have witnessed increasing, even unavoidable pressure from the previously smaller banks like Capitec. However, when asked about his perception on losing market share to Capitec bank as an example, Nedbank CEO, Mike Brown, argued that the focus should not be on increasing market share only, but also on the quality of business created (Lefifi, 2013). This spoke to first applying sound credit risk management and then reaping rewards like market share because of prudent risk policies. This is only one point of view though, as one may contradict the argument that as market power increases, the incentive to engage in riskier policies decreases significantly. In addition to this sentiment, Boyd and De Nicolo (2005) noted that much of the literature concluded that when confronted with increased competition, banks realistically choose more risky portfolios.

2.7.1 Competition and risk-taking theory

Competition is a major contributor to strong and effective markets. It encourages businesses to keep innovating, increases productivity, and allows for the effective allocation of resources. A competitive environment creates an acute awareness of the major players in the industry and forces business to operate optimally in terms of fairness. It also creates pressure to present the best possible range of goods and/ or services, at the best prices. This makes competition the essential driver of productivity growth in any economy. In addition to improving quality, competition has a great advantage to customers in that it increases the options available to them. Industrial organisation theory argues that market concentration is directly linked to the amount of competition that exists between firms (Moyo, 2018: 1).

Competition could also be viewed through the lens of access to financial services which alludes to financial inclusion. The split credit market, exemplified in South Africa, has been identified as a major challenge in emerging markets, as well as in other developing economies. Financial inclusion is referred to as the extent to which individuals, households, and businesses are granted access to basic financial services (Gopalan, S., Sasidharan, 2015). There is said to be a link between financial inclusion and banking competition through the role of the financial intermediary taken on by commercial banks in an economy. As vital as this is, current literature does not identify this as a defining relationship though. Increased competition discourages incentives for banks to invest in soft information. A higher level of competition lowers investments in banking relationships and leads to deteriorating access to credit.

2.8 The concept of relationship banking

There has been a considerable number of new entrants to South Africa's financial services industry, which has created a very open banking market. One such example is Discovery bank, which is considered non-traditional in that its delivery model is structured very differently to those of the four major banks. The low cost of maintaining a non-traditional, mainly online infrastructure, enabled them to invest more in business development, giving them more agility in response to market changes. Not to be left in the wake of these new entrants, the four big banks (Barclays Africa, Standard Bank, Nedbank, and FirstRand) have continued its progressive pursuit of innovations to keep them relevant in what has become a very competitive market. Part of this innovation has come by way of employing new ways of conducting business, by making substantial investments in delivering products and services digitally, thus increasing competitiveness from a customer's point of view. Of course, the four main banks have the distinct advantage of having the lion's share of the available business and corporate banking market. The hard work though, is to protect whatever advantage exists. One contemporary method to do this is by the concept of relationship banking. This method requires the development of strong and reliable customer insights. Data analytics enables this. Data analytics is a process of managing client information to the extent where it enables the bank to develop new products and services more accurately and effectively, and to improve its ability to meet the customer needs. A milestone for many banks in the relationship with a client is successful onboarding: the internet banking channels must be in place and the debit card is locked and loaded. Then, somehow, the relationship recedes into the background and is relegated to client maintenance, and not much more contact happens (Sparks: 2017:45). This behaviour is clearly not what will keep a bank competitive in the

environment described. In his article on relationship banking (Average vs Extraordinary), Joe Accardi expressed the essence of the effect of being extraordinary:

'If your relationship is average, the door is open, your client will regularly take meetings with your competitors to hear what they have to offer. If your relationship is extraordinary, however, and you are viewed as an asset to their business, that same client is likely to not make time to meet. They will respond to your competitors, "I appreciate your interest, and thank you, but I'm all set with my banking. I don't want to waste your time. This is what our clients should be saying to competitors' (Accardi, 2018: 40)

The CST is based on a concept which Nedbank refers to as "whole view banking" and which operates on the "one stop shop" principle. This means that all the client's requirements are met by a group of specialists spanning most, if not all of the client's potential requirements.

2.8.1 Relationship banking - the model for business longevity



Figure 2.2: The relationship banking model. Source: Nedbank Business Banking Relationship Approach document

The above is an illustration of the relationship model applied by each CTS. Each of the CST members play a vital role in successful relationship management or partnership with the client. Albeit made up of different skill sets, the overall client experience should be of utmost importance. According to Gridley (2017: 4) the benefits of being an extraordinary relationship manager should be to produce sustainable, long-term results. Lenders must strive to create opportunities for responsible yet remarkable growth. Clients must feel that they can approach their relationship manager with questions, concerns, or ideas, and know that they will receive honest and insightful feedback. It then goes without saying that the relationship manager must be of a certain calibre in order to be able to deliver this kind of experience. and that the calibre of the entire CST should be of the same extraordinary standard. Beyond the required traits of the CST, is the longevity required in staying in the life of the client. This has a major benefit to the client as well. The interest rates charged increases up to a point, stabilizes and thereafter starts decreasing. According to estimates, this tipping point occurs after 25 months (López-Espinosa, G., Mayordomo, S.,Moreno, A., 2017: 17). The onboarding of a client takes around 4 to 6 weeks, which means their tipping point is still far down the road. This mutually beneficial relationship therefore needs to be given time, and more importantly, the kind of investment described by Accardi.

2.8.2 The intelligence required for effective relationship banking.

It has already been mentioned that there is a need for banks to be able to manage client information to the extent where it enables the bank to develop new products and services accurately and effectively, and to improve its ability to meet the customer's needs. According to Lee Bromfield, former deputy chairperson, Actuarial Society of South Africa Banking Committee "Banks are recognizing that gaining a deep understanding of their customers will not only help mitigate risk, but also provide them with the edge in a highly competitive environment." In a report in which PWC discussed the evolving banking landscape, with reference to the 4 big banks in South Africa, it cites changing technology as one of the main reasons for a much greater focus on data analytics. The availability of data analytics exponentially increased what banks know about a customer's financial trends, and by implication, the bank's ability to proactively respond to those trends. One example would be ABSA's application of credit scoring in their medical aid division. The data technology would use client insights obtained through, among other methods, client completed questionnaires to try and predict what level of credit a client would qualify for, but also to predetermine the potential for defaulting on repayments.

Banks could further draw an advantage from the data insights approach, by using the data to possibly distinguish between a high value and a low value client. The strategies developed are therefore directly supported by these insights. Some examples of these strategies are reduced interest charges on certain products, facilities or rewarding clients for extra spend and using loyalty or reward programmes to increase customer retention. Unfortunately, the strategies which target low-income clients are quite traditional in that it hardly intends to develop low-income clients into high income clients. The strategy for low-income clients inevitably is one that protects the bank from default, instead of allowing the growth from low to high to become part of its longer-term sales growth strategy.

2.9 The traditional approach to credit risk management

Credit risk is most simply defined by the Risk Management Group of the Basel Committee on Banking Supervision (1999: 1), as the potential that a client who borrows money will not be able to meet the financial requirements set out in the agreement. As the Basel accord is the most recognizable regulatory framework for credit risk management, this definition is the most appropriate. There are 3 basic components to traditional credit risk management, namely, checking the credit limit, then making the credit decision, and then implementing the decision. According to Valaskova (2014) credit risk is the extent to which a borrower presents the potential for non-payment on funds applied for. Gavlakova and Kliestik (2014) state that credit risk management is the management of credit sale. In simple terms, applying for credit gives one the ability to fund a purchase while being able to pay for it later. Credit risk manages the rules that determine how much will be given, and over what period. Credit risk management, therefore, is about lending money to a juristic or natural person, and to ensure compliance with repayment terms.

2.9.1 The approach required to support the relationship banking model in a rapidly changing environment.

In the current banking environment, which is increasingly influenced by technology and the concept of Big Data, the development and management of a more strategic, non-traditional credit risk approach/ model demands that credit staff are naturally more knowledgeable, and that they possess greater levels of practical experience. Some studies relating specifically to the calibre of credit staff also points to the importance of opinion and sentiment, which is not consistent with the credit scoring approach discussed in an earlier section.

Credit assessment studies have largely analysed group sentiment as opposed to that of individual members within a credit risk management team. Individual sentiment was seen to

not carry as much credibility and was thus undervalued as marginal and peculiar opinions. With this method the aspect of sensitivity was removed, and with it the potential for a superior assessment system (Hsieh, 2003). So, whilst the scientific methods carry weight, it nonetheless needs to include objective methods (Chiou and Shen, 2011 and Lee *et al*, 2016). The invaluable human contribution should therefore be applied in the design of any credit assessment model, so that it is able to meet the requirements of the humans applying for the credit in the first place. This used to be thought to be vital in the context of the split economy of South Africa.

2.9.2 The human element of effective credit risk management within a relationship banking model

With modern and scientific methods of measuring risk in full supply, the management of most, if not all risks, has also been lifted to a certain higher level. According to Dinh and Kleimeier (2007), the success of lending is not exclusively attributed to the financial status of the borrower, which includes his or her risk profile, but rather on qualitative factors such as social status, personality, and reputation, to name but a few. Whilst the global financial crisis brought strategic risk-taking choices at upper management level into the spotlight, not enough attention was given to how important the role of services employees was in the risk management process (Laeven and Levine, 2009; Pathan, 2009; Jiménez et al, 2013; Raviv and Sisli-Ciamarra, 2013). This was one of the motivating factors for this study. According to a very popular risk management model, namely, "Three Lines of Defence" model (Institute of Internal Auditors, 2013), the primary risk management engagement is to be accepted by the credit risk managers. These are they on whose shoulders lie the final credit decision. Cohn et al (2017) expressed the importance of professional norms relating to credit risk management, and with it launched discussions regarding which type of employee would be the best fit, and hence the most successful at satisfying enhanced risk management expectations.

The first part of this study dealt with the context within which the credit risk management operates, but as previously indicated, the greater focus of the study was to delve a little deeper and to provide a wider view of the "desirable" risk management behaviour traits required from credit risk services staff. The attributes identified to be important to this end were experience, skill, and personal risk tolerance.

There is hardly any sphere in human life where controls or checks and balances are perfect. It is no different with risk management. Even so, not many credit risk staff in a big corporate

setting such as a bank make any meaningful contribution to decisions regarding risk appetite. Rather they are merely engaged in following the risk process and ensuring that compliance ratings are all clear (Financial Stability Board, 2014; Basel Committee on Banking Supervision, 2015). Along with credit policy, credit mandates are formulated to allocate limits or constraints within which the size and type of loans are decided on - the proverbial rulebook. Yes, of course the mandates and policies seek to safeguard the bank against bad debt, with ripple effects into the industry, and ultimately into the economy, It however still has shareholder requirements. It is for this reason that desirable risk management behaviour should go beyond just compliance (Tarullo, 2014). In the modern banking environment credit staff should also be contributing by operating in the realm where they apply themselves in a more proactive and thoughtful manner. A manner that allows them to take more accountability, especially within the South African economic narrative.

2.10 What is risk tolerance?

The significance of social issues, and how people are subjects of society has been emphasised thus far. Research has shown that this extends into the world of risk too. We all respond to risk in a very personal and unique way, and some are more willing to accept risk than others (Yao et al, 2011: 879). Financial risk tolerance, according to Hallahan, Faff and McKenzie (2003: 484), is a concept which is guite common in the financial environment, and refers to a client's propensity for risk. Also known as risk appetite, risk tolerance measures the willingness to take on risk, with a specific view of future wealth (Davies and Brooks, 2014). Harlow and Brown (1990: 51) also define risk tolerance as "... the degree to which an investor is willing and able to accept the possibility of an uncertain outcome to an economic decision". Hallahan, et al (2004: 57) describes risk tolerance as "... a person's attitude towards accepting risk". Multiple global studies and research have been conducted to uncover the factors that influence risk tolerance or, alternatively, to evaluate whether these factors may affect the willingness to accept risk (Van de Venter, Michayluk and Davey, 2012; Faff, Hallahan and McKenzie, 2011; Hallahan et al, 2003). The results showed that risk tolerance is associated with, among other things, one's sex, age, marital status, level of education, income levels, financial knowledge, and tenure. This was significant to the researcher in that it supported the notion of possible risk management deviation as a result of factors outside of mathematical CRM processes.

2.10.1 The effect of personal risk tolerance on credit risk management

Risk aversion has been defined as an individual's natural inclination to find the biggest return for certain levels of risk (Pratt, 1964). Recently, risk aversion has been a point of concentrated interest within the financial services environment because of its possible impact on financial investment and management (Disatnik & Steinhart 2015). Further to the aspects noted before, regarding the factors influencing risk tolerance, research has also shown career stability, emotional state, and even physical traits as having an influence on the level of personal risk tolerance or aversion, and how this could predict risk assessment outcomes (Ball, Eckel, & Heracleous 2010; Ho et al, 2015; Nguyen & Noussair, 2014; Nieboer, 2015; Wang, Zhou, & Chang, 2013). As mentioned before, there is a theory that understanding individual risk tolerances and attitudes could give greater insight into and provide developments in forecasting more general economic behaviour (Sebai 2014). Understanding individual risk aversion could thus cast a clear and critical light on its possible implications for the bank, and more specifically on its financial and corporate management. The link between acceptable or desired risk management behaviour and personal risk tolerance does not manifest itself clearly, but it is something that seems inevitable, and certainly worth exploring. This was of particular interest to the researcher in the context of the country's history, its diversity, various cultures, and experiences of the multitude of different communities, and the possibility that all of these could influence the risk management process because of the potential impact on personal risk tolerance.

2.10.2 The effect of nationality on risk tolerance

Reference has already been made to South Africa's polarising past, and it is well known globally. Many social and economic inequalities however are being brought to light now more than ever. The most recent birth of the Black Lives Matter movement in the United States of America has enabled a very clear look at the depths of inequality faced by many South Africans. In the same way that society shapes human behaviour, nationality also without a doubt affects the way we approach life in general and this has many varied expressions in a country as diverse as South Africa. The researcher found this to be a fundamental factor influencing the financial attitudes of individuals in our economy. Each country has a unique culture, which subsequently has a unique effect on the economic and financial aspects of life (Statman and Weng, 2010). In Statman's 2010 study, seeking to establish a connection between national culture and risk tolerance in 23 countries, he found that risk tolerance was quite low in countries where uncertainty avoidance was quite high, a characteristic which can certainly be attributed to South Africa. Weber and Hsee (1998) also showed that respondents from China, the USA, Germany, and Poland had differing risk preferences. This

data was measured according to the purchasing prices of risky financial products. Fan and Xiao (2006) also did a comparative study on samples of city-dwelling Chinese and American employees relating to risk-taking attitude and behaviour. The study revealed that the Chinese had a greater tolerance for risk in both attitude and behaviour, than their American counterparts.

2.11 The impact of Covid-19 on the approach to risk

What is Covid-19? The Africa centre for disease control defined Covid-19 as a coronavirus disease 2019 (COVID-19) that is a communicable respiratory disease caused by a new strain of coronavirus that causes illness in humans.'

In December 2019, citizens of Wuhan, one of China's main cities, populated by 11 million people, discovered an infection by a new coronavirus which causes severe acute respiratory disease. Initially the Chinese authorities were very secretive about the virus fearing what impact the knowledge of such a virus would have. They were eventually compelled to share this knowledge after several Wuhanese fell ill, with some eventually dying. Towards the end of January 2020, China broke the news of the virus to the world, and the subsequent lockdown of the city. Driven by fear, around 5 million infected Wuhanese fled, sparking the worldwide spread of the virus.

2.11.1 The economic impact of pandemics

As may be seen in South Africa, one of the most devastating effects of a pandemic on an economy is the massive cost that it incurs. Costs such as the reduction or eradication of income, less trading for businesses in general, but there arethose that have been directly affected by the lockdown regulations, for example, the liquor industry. The media constantly reminds citizens of this major impact. Many reports highlight other costs which may arise through a pandemic. To date the world has known many pandemics. One example is the well documented pandemic, HIV/AIDS, which has been particularly rife in South Africa, a country with one of the highest infection rates in the world. Haacker (2004) details the economic impact of the HIV/AIDS pandemic in his report, while Santaeulalia-Llopisv (2008) zooms in on the impact on development. Yach, Stuckler, and Brownell (2006) addressed the cost of obesity and diabetes as it grows globally.

Why is the impact of pandemics a vital focal point? Some researchers have, because of the impact of costs related to the COVID-19 crisis, cautioned all to be prepared for more

pandemics and epidemics into the future, with the aim of reducing these costs. In a somewhat prophetic manner, Bloom, Cadarette, & Sevilla (2018) accurately described the economic concerns relating to COVID-19 that have now become a reality, namely, the severe costs incurred by the health system in general; the medical treatment of those unfortunate enough to have contracted the disease, and managing it's uncontrollable spread; the immense strain it has placed on the health infrastructure, the simultaneous treatment of Covid-19 patients and day to day medical patients during the pandemic; the loss of productivity or economic activity; the impact on the tourism industry; the loss of foreign direct investment. This reality is also noted by Fan, Jamison, & Summers (2018) who called for "...an unmet need for greater investment in preparedness against major epidemics and pandemics." COVID-19 revealed itself to South Africa through its ravaging of other parts of the world. Fears increased as the virus spread and threatened to reach South African shores, which it, eventually did. While the virus revealed itself, South Africa made some revelations of its own.

Firstly, the main strategies employed by most around the world was to keep a social distance of at least one and a half meters, and to regularly wash or sanitize one's hands. The reality for 13% of South Africans is that they live in overcrowded, informally established townships, where social distancing is all but impossible, and access to clean running water is non-existent.

Secondly, as mentioned before, South Africa has one of the highest HIV/AIDS infection rates in the world, and to compound the challenge, not all are using the antiretroviral drug designed to combat the disease. This reality ignited the fear regarding the extent to which South Africa was vulnerable in the face of COVID-19.

Thirdly, it was well publicised in the media that the resources of wealthier countries such as the USA, UK, and Spain, etc., were already thinly stretched. In South Africa, a country with resources nowhere near that of the afore-mentioned countries, the public health infrastructure has battled to keep up with the effects of the pandemic.

COVID-19 has been indiscriminately active among men and women from all walks of life, having crossed many borders, and at a very rapid rate. As indiscriminate as the virus has been, it has had a very disproportionate effect on South African's poverty-stricken citizens as well as those with underlying illnesses, such as HIV/AIDS and Tuberculosis. South Africa has fast become one of the most vulnerable countries to COVID-19 infections in the world.

2.11.2 The current impact of Covid-19 on banking

The financial services industry, by its very nature, suffered the effects of difficult economic times more than other industries. It is a time when the risk of losses due to client loan defaults are more prevalent, as well as seeing an increase in the withdrawal of investment funds to mitigate the financial effects of these challenging times. The research found that during a pandemic in countries such as South Africa, specifically referencing the HIV/AIDS pandemic, the cost incurred to undergo treatment forces investors to withdraw large sums, and even to withdraw entire deposits, to fund the treatment of their illness. It stands to reason then that the knock-on effect extends into the realm of credit extension and the credit risk management criteria that goes with it.

In a theoretical model developed by Lagoarde-Segotand Leoni (2013), the likely demise of emerging market banks increase, as a global pandemic worsens. During a pandemic, banks are less likely to lend to the poor, or entrepreneurs, or to those who already do not satisfy credit risk criteria, because these groups would have been exposed to the financial pressure referred to as aggregate shock (Skoufias, 2003). Only time will tell what impact COVID-19 will have on how banks redevelop or modify its lending policies. Perhaps more pertinent to this study, it will be interesting to see how long banks will hold onto its traditionally exclusive, and conservative lending policies once the COVID-19 pandemic has ended.

2.11.3 The impact of Covid-19 on South African businesses and employment

A more lenient approach would be more than welcome, given the very dire situation South Africa's businesses have found themselves in due to very strict Covid-19 lockdown regulations. According to a Stats SA's second business impact survey, 89.6% of responding businesses' turnover was lower than their normal expected range, up from 85.4% in the first survey. The diverse industries most negaticely impacted in terms of declining turnover was electricity; gas and water supply; mining; community; social and personal services; trade; transport, storage, and communication; and manufacturing. Workforce stability was unsurprisingly bleak too, with more than 30% of businesses reporting short term staff layoffs due to Covid-19. This was greater than the 20% reported in the first survey. One quarter (25%) of businesses reported a reduction in working hours, down from 28% in the first survey. From a trading activity point of view, just under half (48%) of businesses reported a break in trading for the last 16 days in April 2020, while nearly 10% of businesses reported a complete and permanent shutdown of operations. The industries reporting the most closures included construction (14%); community, social and personal services (12%); agriculture,

hunting, forestry, and fishing (12%). Lastly the report shows that 30% of businesses could survive less than a month with no turnover, while more than half (55%) indicated that they could probably only survive for between one and three months without turnover. Just 7% of businesses reported that they could avoid shutting down beyond three months.

2.12 Summary

The literature reviewed in this chapter outlined the context and history of the South African economy, and the consequences of its split structure, and how this structure informs credit extension. Also, it shed light on what risk is, and how this risk was viewed from both an organisational and individual point of view. It gave insight to the uniqueness and diversity of the South African population, and how this could affect the credit risk management process. It also considered briefly how human attributes and global pandemics could affect credit risk management outcomes.

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The aim of this study was to discuss the economic and political context within which credit risk management function exists, with the intention of understanding and describing the factors that may have contributed to the credit risk environment. It seeks to stimulate the notion that the most advanced credit risk management model could not yield its intended results if due consideration is not given to the interpersonal framework within which it is applied. Finally, it seeks to define current culture and its effects on credit management outcomes, with the intention of establishing and recommending best practices. The researcher thus set out to create an alternative point of interest by surveying the research literature relating to the factors which could, arguably, affect the credit risk process negatively. Credit risk management has traditionally been extensively studied from a mathematical or scientific viewpoint, with very little focus on the role players within the credit risk management construct. The researcher has attempted to draw attention to the more intuitive, human element in the practice of credit risk, and the factors, both macro and micro, which may contribute to the application of credit risk management.

3.2 Research paradigm, design, and approach

This research was supported by an interpretive approach to investigate a perceived problem. Interpretivism drawn from anthropology, which suited this research in that the researcher wanted to draw attention to how societal and cultural history could affect human behaviour and financial decision making. The researcher chose the quantitative analysis approach, using the Likert-scale questionnaire. The Likert scale, known as an orderly scale, allowed respondents to select an option which most supported their responses to the research questions and statements. In this instance the researcher found it to be the most useful tool in determining the respondent's attitude towards a certain question or statement. Descriptive statistics, which is the term for analysis that helps define or present data in a way which is meaningful. This analysis makes possible patterns in the data apparent. Descriptive statistics is vital in allowing the researcher to create a coherent narrative.

The intention of this tool was to measure the extent to which the respondents agreed or disagreed with a question or statement. The time available to the researcher was another key factor in determining the research approach. Due to the nature of work done in the

sample, the quantitative method of research was more suited than the preferred qualitative method. With credit and sales staff constantly seeing clients and assessing applications, data collection needed to be kept concise and simple to collect. Another consideration was the geographic spread of the sample. The sample was spread across the greater Cape region and arranging interviews and discussions would prove to be impractical.

3.3 Population and sample

The researcher used random sampling. Random sampling is a method used to derive a representative sample unit from a population by the selection of a sample unit based purely on chance, and every part of the population has an equal opportunity of being included. There are no biases towards the sample using this method. The population chosen for the study CSTs of the greater Cape region. This region includes the sub-regions of Cape southern and northern suburbs, the Cape winelands districts and the Cape Inland and Garden Route. As indicated in Chapter 1, the size of the population was 100, which is acceptable as the basis for an expanded case study for the purposes of a 50% dissertation. The sample was made up of credit managers and business managers specifically. The BM acts as the primary point of contact for all banking needs and solution information. Through a relationship banking model, also previously represented in Chapter 2 of the study, business managers build on a detailed understanding of the business environment. The business manager also introduces clients to, and partners with the specialist supporting team.

The core performance points of the BM include:

- 44% Financial growth actual Rand growth versus targeted Rand growth year on year
- 37% Client growth i.e., number of new clients acquired year on year, productpenetration, managing client attrition rates with the threshold being 60%
- 14% Risk management of which 20% is allocated to risk management discretion and 15% allocation to client on-boarding turnaround times, and 5% to adherence to the NCA.
- **5%** Personal effectiveness role-relevant training; compliance.

The CM, who forms part of the afore-mentioned specialist team, works closely with the BM, and fulfils the function of credit due diligence on all deals pursued by the BMs. S/he scrutinises the feasibility of all deals using the risk measuring tools and compliance related processes and mandates available. Each CM is responsible for the clients of 3 BMs. Each

BM services a portfolio of 45 client groups with each group consisting of, from one, to multiple business entities.

The core performance points of the CM include:

- 30% Financial growth actual Rand growth versus targeted Rand growth year on year
- 25% Client growth i.e., number of new clients acquired year on year, product-penetration, managing client attrition rates with the threshold being 60%.
- 40% Risk management of which 20% is allocated to risk management discretion and 15% allocated to client on-boarding turnaround times; and 5% to adherence to the NCA.
- 5% Personal effectiveness role-relevant training; compliance.

3.4 Data collection instrument

Considering that the population for this study was spread across a large geographical area, the most logistical and practical choice of instrument was the questionnaire. It was sent via a group email. Within the email infrastructure there are numerous homogenous recipient groups, in which the credit manager and business manager communities are included. In this way the researcher was able to target only relevant recipients. Respondents were to return the completed questionnaires within a set period. To instil confidence, and as an added motivation to participate, the questionnaires were accompanied by the letter of approval for the study in which the Regional General Manager, to whom all respondents ultimately reported, outlined the nature of the study. The first emailed request was sent on 4 April 2019, with the deadline for returning completed questionnaires set for 12 April 2019. The initial response was not positive at all, and the researcher would, over the next 6 to 8 months, have quite a challenge in collecting the data. The reasons for this will be expounded upon in detail under the limitations section of this chapter. As mentioned in the introduction to this chapter, the researcher used 13, 5-point Likert-scale questions, allowing the respondents to choose the option most suited to their opinions about the impact on their macro and microenvironments, and how engaged they are with each. Each question included the optional opportunity for the respondents to explain the reason for their selection.

3.4.1 Pilot test

Pretesting of the questionnaire was done to test the clarity of the questions, and to ensure that it did not present any bias or unethical practice. The researcher approached the 3 credit managers in his local office to participate in the pilot process. The 3 credit managers were chosen as they were a perfect representation of the target population. They reviewed the draft questionnaire and found them to be both clear and unbiased.

3.5 Data analysis

The data collected was manually tabulated, and then converted from the table into bar graphs in MS Excel. The bars in each graph represented what percentage of total respondents chose each of the respective options available.

3.6 Limitations

The first limitation to this study was that the sample for this study was restricted to only one bank within the financial services industry. The data collected would thus only be applicable to this bank's culture, within its credit risk management environment. The responses, however, could be representative of what is experienced within the broader industry, thus creating the opportunity for broader applicability of the findings (Appleton, 1995; Terre Blanche et al, 2006). Given the diversity of the workplace (Ng et al, 2005), another limitation could be that the study did not take demographics and ethnicity into account, but rather focussed on the generic tasks within the role of the sample. The researcher has made provision to some degree for the impact that a diverse history could have on banking credit decisions. Then, further to the above, and a substantially greater limitation, was the bank's announcement of a staff restructuring program which affected the selected population directly. All the CST members nationally were to reapply for their jobs. Nedbank Group Ltd. consulted with approximately 1500 staff members nationally about potential job losses across its retail and business-banking divisions to manage its struggle with a failing economy and increased competition. The extent of the losses was predicted to affect around 50 to 100 employees. South African lenders in general are said to be currently struggling with the reason for this being an economy that has been diminishing for three of the past five quarters. Bank clients have been bombarded with challenges such as unemployment, which is currently at 29%, the highest in 11 years, increasing tax rates as well as ever-increasing fuel and utility prices. This has caused clients to start looking for more affordable alternatives. Businesses have all but stopped, and in many instances withdrawn existing investments amid the Eskom debacle, with electricity supply heavily compromised. The bank has thus had no option but to revisit its business operating model. The staff restructuring

program, which commenced in April of 2019 and concluded towards the end of 2019, caused a situation where some respondents found themselves in new roles, with new designations. The researcher decided that for this period, no follow ups on questionnaires would be done, given the trauma and emotional distress the restructuring would create for employees. The researcher waited for the project to conclude before engaging with the sample regarding the responses. Ultimately, the restructuring program negatively affected the data collection process, resulting in only a very limited number of responses.

3.7 Summary

In this chapter, the research design and methodology used for this study were explained. The population targeted was introduced, and the sample chosen explained in some detail. This chapter also dealt with the research philosophy and why it was used, as well as the relevance of the research instrument to this study. The existing email infrastructure was suggested as the most appropriate data collection instrument. To address the research problem as effectively as possible, it was decided to include as respondents, credit, and business managers, who were directly affected by the research questions. A quantitative approach using the Likert-scale questionnaire, distributed, and collected via email, was the most suitable approach given the geographic spread of respondents as well as time constraints. The focus of the next chapter will be on analysing the data.

CHAPTER 4 DATA ANALYSIS

4.1 Introduction

This chapter reflects the data collected during the researcher's data collection process described in Chapter 3. The researcher had been in the employ of Nedbank for 20 years at the time of conducting this study and was inspired to find a means of quantify the varying perceptions that exist within the credit risk environment. Descriptive research and collection of data was the approach taken by the researcher. Descriptive research deals with the survey of information regarding existing conditions or situations, with the aim of describing and interpreting phenomena within the selected population or sample. Descriptive statistical methods are said to be methods of quantitatively describing data. The questionnaire designed by the researcher contained 10 ordinal questions, and 2 nominal questions, which was suited to the descriptive approach in that it answers the questions: who; what; when; where; and how. A further reason for the use of this approach, was its ability to summarize ordinal and nominal data specifically.

With the use of the Likert scale, the questionnaire provided 5 options, ranging from strongly agree to strongly disagree, as well as multiple-choice questions. This allowed the participants to choose an option which they most felt resonated with them. The objective was to understand how the participants experience and extract meaning from their surroundings, how this meaning potentially affected their behaviour, and how this behaviour, by extension, potentially affected the outcome of applications.

The research questions for the study were as follows:

Primary question

What impact does credit risk management have on the sales performance of a bank?

Secondary questions

- When does the bank share credit market insights with the CSTs?
- How does the macro-economic environment affect the bank's risk appetite?
- Which credit assessment skills are required for bank-wide growth?
- What role does credit assessment staff experience play in sales growth?
- What value does credit scoring add to the credit risk management process?
- What impact does credit approval mandates have on the execution of credit assessment?

4.2 Results

The population within the geographical area, also described in Chapter 3, was made up of approximately 100 individuals. Within the population there are three distinct but inextricably linked groups, namely, credit managers, credit assessors, and business relationship managers. Because of the limited size of each group, the entire group was part of the sample. Based on the nature of the population, random sampling was used. Each of the members within each of the groups was governed by the same performance contracts and they were exposed to the same daily business processes. Regardless of which members were chosen to be part of the sample, the data would therefore be reliable.

The following tables reflected the total respondents, as well as the number of responses for each question or statement, as counted by the researcher, using the completed questionnaires. The zeros represented nil responses.

Table 4.1: Likert-scale questions/statements containing the strongly agreed, to strongly disagreed range of responses.

	Q1	Q4	Q5	Q6	Q9	Q10	Q11	Q12	Q13
Strongly Agree	6	3	3	6	10	0	4	18	12
Agree	13	21	25	24	15	22	26	18	23
Neutral	1	9	7	3	6	11	0	0	1
Disagree	14	4	2	0	2	3	5	0	0
Strongly Disagree	4	1	1	2	2	0	0	0	0
Total Respondents	38	38	38	35	35	36	35	36	36

Table 4.2: Likert-scale questions/statements containing the never, to monthly range of responses.

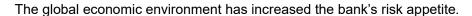
	Q2	Q3
Never	15	13
Annually	6	4
Quarterly	6	6
Monthly	11	15
Total Respondents	38	38

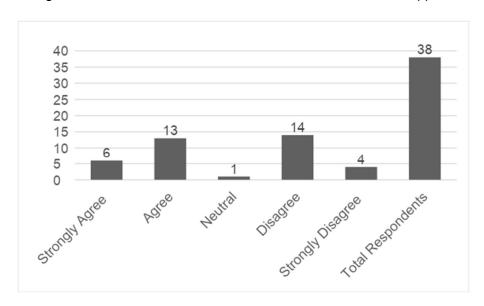
Table 4.3: Likert-scale questions/statements containing the yes/ no responses categories.

Tubic 4.0. Likelt-scale questio				
	Q7	Q8		
Yes	23	33		
No	11	1		
Total Respondents	34	34		

The data in the tables above were converted into graphs consistent with the descriptive analysis approach taken by the researcher. The following graphs represents the total respondents and responses per question, based on the results:

4.2.1 Graphic data presentation of responses to question/statement 1.

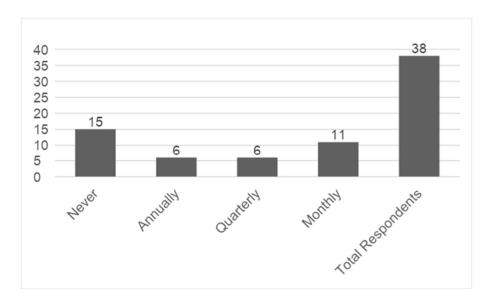




But for one neutral response, the responses were split by 50% agreement with and 50% disagreement with the statement that the global economic environment has increased the bank's risk appetite.

4.2.2 Graphic data presentation of responses to question 2.

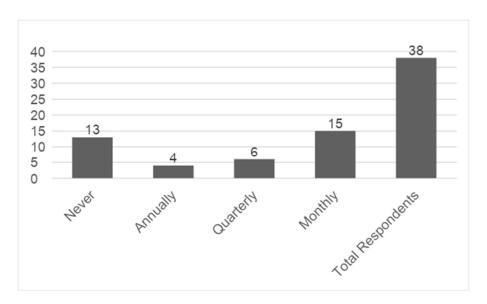
How often are you engaged in information **gathering** activities relating to the macro environment from a credit risk management point of view?



On the question of the respondent's involvement in the gathering of information regarding the banks macro-environment, 39,5% responded that they were never involved, with an equal representation of 15.8% each among respondents indicating annually and quarterly involvement. The respondents who responded for the monthly involvement of gathering information accounted for 28.9%.

4.2.3 Graphic data presentation of responses to question 3.

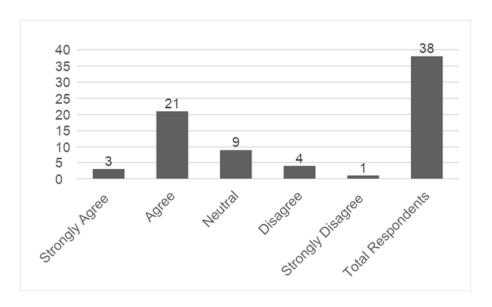
How often are you engaged in information **sharing** activities relating to the macro environment from a credit risk management point of view?



The question relating to the involvement of sharing the information referred to in question three saw the biggest percentage representation by the monthly response, accounting for 39.5% of total responses. Never was the second biggest response accounting for 34.2%, with quarterly and annually representing 10.5% and 15.8%, respectively, of respondents. The most notable aspect of this response was the two bigger percentages representing opposite ends of the response range.

4.2.4 Graphic data presentation of responses to question/statement 4.

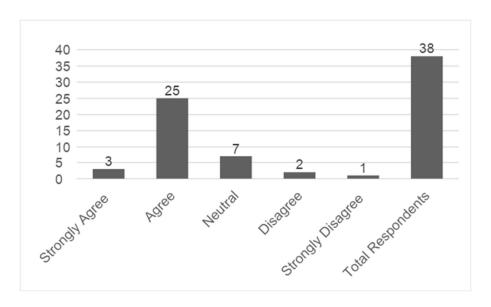
The afore-mentioned activities are initiated by the bank.



The statement that the bank initiates the gathering and sharing information relating to the macro credit risk market environment referred to in questions 3 and 4, yielded 63.2% of respondents who agreed that the bank does initiate these activities. This percentage excludes those who responded never. Only 13.16% of respondents disagreed with this statement, with 23.7% of respondents choosing to remain neutral on this issue.

4.2.5 Graphic data presentation of responses to question/statement 5.

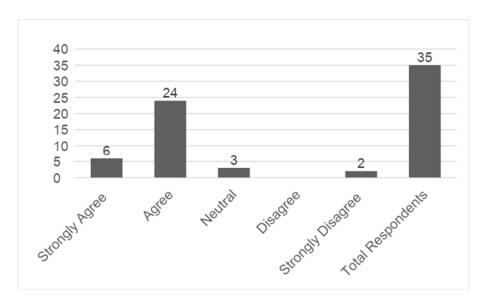
Credit risk management is a growth enabler.



Most respondents, at 73,7% of all responses, agreed with the statement that credit risk management does enable growth for a bank. Only 7.9% of respondents disagree with this statement, with 18.4% of respondents choosing to remain neutral.

4.2.6 Graphic data presentation of responses to question/statement 6.

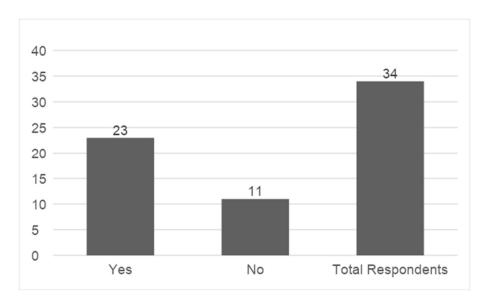
Current bank strategy can be classified as pro-sales.



Most respondents agreed with this statement, at 85.7% of respondents, with 8.6% of respondents choosing to stay neutral, and only 5.7% disagreeing with the statement.

4.2.7 Graphic data presentation of responses to question 7.

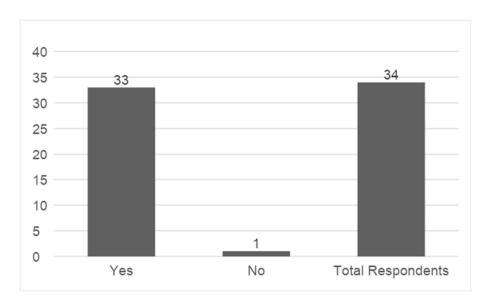
Would you consider the sales and risk management performance measurements to be complementary to each other?



At 67.6%, most respondents said that sales and risk performance measurements are complementary to each other, with 32.4% saying that they were not complementary.

4.2.8 Graphic data presentation of responses to question 8.

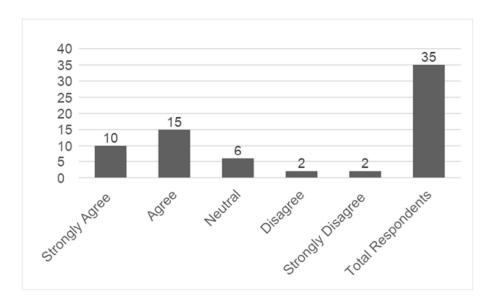
Do you know what a personal risk profile is?



All but one respondent indicated that they knew what a personal risk profile was, dominating this category with 97.1% of responses. Only 2.9% of respondents indicated that they did not know what a personal risk profile was.

4.2.9 Graphic data presentation of responses to question/statement 9.

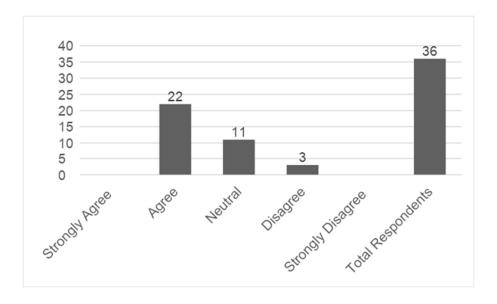
One's personal risk profile affects one's approach when assessing credit risk of client applications.



Most respondents, at 71.5% agreed that one's personal risk profile affects one's approach when assessing client applications. Most notably of these 28.6% strongly agreed with this statement. Only 11.4% disagreed, while 17.1% chose to stay neutral.

4.2.10 Graphic data presentation of responses to question/statement 10.

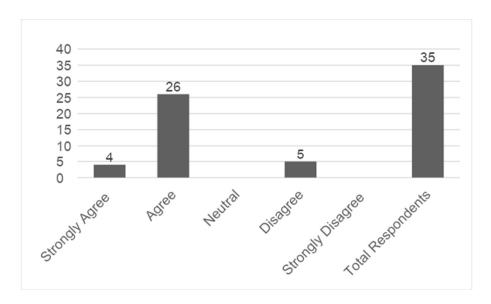
Credit risk scoring is a sound practice to ensure bank-wide growth.



Most responses agreed that credit scoring was a good practice to ensure bank-wide growth at 91.7%, with only 8.3% of respondents in disagreement.

4.2.11 Graphic data presentation of responses to question/statement 11.

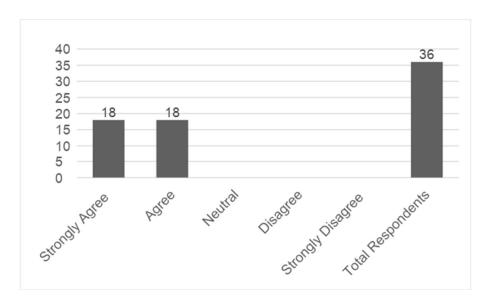
Credit approval mandates contribute to bank-wide growth.



The statement that credit approval mandates contribute to bank-wide growth was agreed with by most respondents at 85.7% of respondents. 14.3% Disagreed.

4.2.12 Graphic data presentation of responses to question/statement 12.

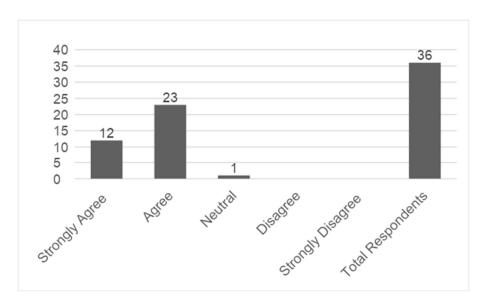
Credit assessment skill is a vital part in the credit assessment process.



100% of respondents agreed that credit risk assessment skill is a vital part of the credit assessment process.

4.2.13 Graphic data presentation of responses to question/statement 13.





97.2% of respondents agreed with the statement that credit risk assessment experience was a vital part of the credit risk assessment process. Only 2.8% respondents disagreed.

4.3 Conclusion

The purpose of this chapter was to establish a set of data that would answer the research questions relating to the impact credit risk management has on a bank's sales performance. It covered three broad areas, firstly, the macro view on the approach to credit risk management, secondly, how this view affected the credit risk management function in general, and thirdly, how this potentially influenced the approach of individuals within the credit risk management function and exploring the individual's view on the role that they fulfil. The following chapter explores the data as it relates to the literature reviewed, as well as the research questions, and then concludes with some discussion and recommendations.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

5.1 Introduction

The primary goal of this study was to explore whether credit risk management has a negative impact on the sales performance of a bank. A further goal of this research was to make possible recommendations to improve the impact of credit risk management on a bank's growth, as well as to identify potential areas for future research. The research questions investigated the impact that credit risk management has on a bank's sales performance. To this end, the researcher developed a primary research question, supported by multiple secondary questions.

Primary research question:

What is the effect of credit risk management on the sales performance of a bank?

Secondary research questions:

- What impact does the macro-economic environment affect the bank's risk appetite?
- When does the bank share credit market insights with the CSTs?
- What impact does personal risk aversion have on credit risk assessment?
- Which credit assessment skills are required for bank-wide growth?
- What role does credit assessment staff experience play in sales growth?
- What value does credit scoring add to the credit risk management process?
- What impact does credit approval mandates have on the execution of credit?

South Africa has a unique and overarching political and economic narrative, which has its origins in a very turbulent and polarising past. A past which has divided the country in many aspects. One aspect that this study focussed on, within existing limitations, was the seemingly unconscious perpetuation of a divided economy through exclusive credit extension. The research was conducted using a funnel approach, which allowed the researcher to start his focus on broader factors which influenced the context within which the credit risk management function operates, and systematically narrowing it down to a more granular level.

This data collection was quantitative, and used a questionnaire as its data collection tool, containing a combination of eleven 5-point Likert-scale questions and statements, and 2 multiple choice 'yes/ no' questions. Ten of these presented the respondent an opportunity to explain his/ her choice, or to provide an opinion relating to the question/ statement. These

opinions assisted greatly in providing context to the data collected. Although the opinions were quite varied, it allowed the researcher to make certain assumptions about the culture within the credit risk environment. The discussions were based on descriptive statistics only, which is acceptable in terms of the Cape Peninsula University of Technology's policy for 50% dissertations.

5.2 Macro view discussion

The broader factors addressed by this study comprised two focus areas, namely, global economic factors in the form of the financial crisis of 2008, which saw many countries plunge into financial distress, as well as socio-economic and political challenges in South Africa, caused by historical, political, and economic systems. Banks have almost been forced to toe the line in the management of liquidity through the Basel Accords, although South Africa has been relatively shielded by its own prudence in employing the National Credit Act some time before the crisis. The literature highlighted the fact that these factors, among other things, worsened the inequality of the South African economy, essentially further entrenching two economies. Consequently, credit was increasingly and more readily available to affluent, white individuals and white owned businesses, because they more easily satisfied the liquidity requirements, and much less so to their non-white counterparts deprived of equal opportunities on several fronts, especially in terms of access to credit for individual and business wealth creation. Credit policy, therefore, continued the trajectory of exclusion, with an inevitable reach into how credit risk is managed within a bank. It became clear that, at the very least, the macro credit risk management system in South Africa has negatively impacted the growth of any bank for that matter, in that it's focus has been historically and, albeit unknowingly, primed to exclude most of its people.

On the question of the impact of global economic factors on a bank's risk appetite, the data collected suggests a divided view between those who agreed and those who disagreed on the impact it has had. This was interpreted as uncertainty regarding the bank's position within the global economic risk environment, and possibly how growth potential was translated into bank strategy. More importantly it was possibly an indication of how this strategy was communicated to the credit risk environment. Some respondents indicated that the risk appetite increased through easing of risk policies, making it easier for credit applications to be approved. This was attributed to, among other things, the lessons learnt from the mistakes of other emerging economies, including Greece, a country greatly and negatively affected by the 2008 crisis. Other respondents experienced the credit risk management approach to be extremely restricting, citing a general recessionary climate,

with decreasing opportunities for growth. The general sentiment among the naysayers was the fact that the South African economy is dependent on what happens in the trade relations of economic powerhouses such as the USA and China, and other uncontrollable economic variables. This has caused the global economy to slow down, and this has had a negative impact on South African business from a risk point of view. It stands to reason that the negative sentiment among respondents translated into a negative approach to credit extension with a subsequent negative impact on bank growth.

What was particularly noticeable was that both negative and positive responses lacked any view on the split economy. This possibly suggests that on the bank's part there was no focus on the economy in its entirety, but that it continued to perpetuate the two economies discussed in Chapter two, by only focussing on segments of the economy that automatically fell within this seemingly 'exclusive' policy. What this also potentially highlighted was that credit risk management teams had no input into how to strategically include the currently excluded economy, if such a strategy has even been developed. The researcher included sub questions that tsought substantiate this. The questions related to whether these realities within the macro environment were effectively integrated into the credit risk environment through the gathering and sharing of credit market insights.

On the question about the gathering of information relating to the credit risk macro environment, 39.5% of respondents indicated that they were never involved in the gathering of such information. On the question of sharing the gathered information, 34.2% of respondents said that they were never involved in the sharing of the gathered information. It must be highlighted that 29% and 39.5% of respondents answered that they were involved monthly in the gathering and sharing of this information, respectively. Other response categories included quarterly and annual involvement of information gathering involvement which translated into 15.8% of respondents for each of these categories. The annual information sharing category was made up of 10.5% of respondents, with the quarterly sharing of information category making up 15.8% of the respondents.

When considering the important role banks plays in the socio-economic position of a country, namely funding the livelihoods and financing the growth and development of all its citizens and industries, it may be assumed that an effective strategy would be based on an acute awareness of the environment within which a bank operates. The data created a sense that too little is being done to plug the bank into the needs of the entire economic market, translating into an inability to exploit all growth opportunities.

5.3 Micro view discussion

The macro view, previously discussed, highlighted the environment and context within which the bank operates. This discussion located the credit risk management function at the centre of this context, with a focus on the respondent's views on credit risk management in general, as well as views on internal structures that may influence the credit risk management function. It finally discussed some individual attributes operating within these structures.

In dealing with whether CSTs supported the credit risk management role in general, the question of whether credit risk management was a growth enabler was posed to the respondents. As expected, an overwhelming 85.7% of respondents represented the two categories "strongly agree" and "agree" with the statement. Some of the sentiments among respondents collected through the questionnaires which were of interest to the researcher was that it depended on the experience of the credit assessor, or which assessor was assigned to review the client application for credit. It also included the point of view of willingness to take the risk, as well as confidence in the credit risk function. As much as the expected outcome of this question was realised, the sentiments are still aspirational. It could be a significant growth enabler if certain things were done, or adhered to, or given certain conditions. From this set of data, it became clear that there was a pivotal role for credit risk management, but that it had, however, still not evolved into a role which transcended a set of rules or policies, and that it has yet to become a more strategic, proactive role which could unlock exponential growth.

One of the other broader aspects within the credit risk environment identified in this study was the effectiveness of credit scoring. In chapter 2 the researcher highlighted the role of traditional credit scoring, as part of managing the credit sale (Gavlakova, Kliestik, 2014). Its role is to determine the creditworthiness of homogenous groups of people, as an example, to calculate the potential for credit default. The data collected showed very strong support of this strategy by respondents. In response to the question relating to the effectiveness of credit scoring, 57.9% of respondents agreed with its effectiveness and usefulness, with 28.9% neutral responses, and 7.9% disagreeing that it was effective at all. What the researcher found interesting in this data was that the sentiments were shared by the respondents within the neutral and disagree categories. The view shared by those who disagreed with the credit scoring, the minority of responses, was consistent with the lack of importance that the relationship banking model literature expressed in chapter two. This

sentiment suggests that the credit scoring model is too punitive, in that it does not take important circumstantial detail into account when assessing a client. The relationship banking model is one which the bank actively engaged in and includes in its value proposition to clients. This data suggests that that the well supported credit scoring model stands in contrast to the relationship banking approach which places no real value on credit scoring and, thus, despite being a well-supported strategy, negatively impacts the growth of a bank.

The last question that addressed the broad structure of the credit risk management environment involved the contribution of credit mandates on bank growth. The data suggests very strong support for this structure. A resounding 85.7% of respondents agreed with the value that credit mandates hold on the credit management process, citing its ability to considerably reduce the time that it takes to decide on credit applications. What this practically means is that certain applications may be managed within the mandate of the CST without any time-consuming referrals and escalations. The data generally shows that this is an important aspect of being able to effectively deliver credit decisions within the relationship banking model.

Finally, the researcher turned his attention to the role that individual skill and experience played in credit risk management on the growth of a bank. To both questions all respondents agreed that it does play a vital role, but for one neutral respondent on the question regarding experience. Most respondents agreed that the two go hand in hand. In chapter two the researcher discussed some other personal attributes that may impact an individual's approach to risk, and how this approach might translate into the underlying sentiment when assessing credit applications. Research has been conducted into the influence of, among other things, gender, remuneration, career stability, level of education, emotional state, and even physical traits on the level of personal risk aversion and the predictability of financial decision-making (Ball, Eckel, and Heracleous, 2010; Ho, S., Li A., Kinsun T., Zhang, F. 2015; Nguyen and Noussair, 2014; Nieboer, 2015; Wang, Zhou, and Chang, 2013). There is an argument that understanding individual risk attitudes will provide developments in predicting broader economic behaviour (Sebai, 2014). Understanding individual risk aversion could thus cast a clear and critical light on its possible implications for the bank and, more specifically, on its financial and corporate management. This was identified as an avenue for future research.

5.4 Limitations

As stated in chapter three, the first limitation to this study was that the sample for this study was restricted to only one bank within the financial services industry. The data collected would thus only be applicable to this bank's culture within its credit risk management environment. The responses, however, could be representative of what is experienced within the broader industry, thus creating the opportunity for broader applicability of the findings. Given the diversity of the workplace, another limitation could be that the study did not take demographics and ethnicity into account, but rather focussed on the generic tasks within the function of respondents in the sample. The researcher made provision, to some degree, for the impact that a diverse history could have on banking credit decisions. Then, further to the above, a substantially greater limitation was the bank's announcement of a staff restructuring programme which affected the selected population directly. All the CST members nationally were to reapply for their jobs. Nedbank Group Ltd. consulted with approximately 1500 staff members nationally about potential job losses across its retail and business-banking divisions to manage its struggle with a failing economy and increased competition. The extent of the losses was predicted to affect around 50 to 100 employees. South African borrowers were said to be struggling at a rate where revenues exceed expenses. The reason for this being an economy that has been diminishing for three of the past five quarters.

Bank clients have been bombarded with challenges such as unemployment, which is currently at 29%, the highest in 11 years, increasing tax rates, ever-increasing fuel, and utility prices. This has caused clients to start looking for more affordable alternatives. Businesses have all but stopped, and, in many instances, have withdrawn existing investments amid the Eskom debacle, with electricity supply heavily compromised. The bank has thus had no option but to revisit its business operating model. The staff restructuring program, which commenced in April of 2019 and concluded towards the end of 2019, caused some respondents to find themselves in new roles, with new designations. The researcher decided that for this period, no follow ups on questionnaires would be done, given the trauma and emotional distress that the restructuring would create. The researcher waited for the project to conclude before engaging with the sample regarding the responses. Ultimately, the restructuring program affected the data collection process, resulting in only a very limited number of responses.

5.5 Recommendations

The three broad areas identified for further research, or at least for the development of programs for change are:

- 1. Bias recognition and elimination.
- 2. Developing an inclusive approach to the South African credit market; and
- 3. Matching the approach through human resource management.

5.5.1 Bias recognition and elimination

One vital step for banks is to acknowledge that the credit risk management function has systematically been based on bias and subsequent exclusion. Whilst the negative impact of credit risk management on a bank is often measured financially, it should also be measured in its ability to be inclusive. One recommendation in this regard is for banks to identify the risks that were subjected to bias, and once understood, to proactively develop methods to either mitigate them, or to appropriately manage them. It could include research of specialised credit risk management methods, which accommodate bank clients excluded by the traditional models which are typical second economy clients. In isolation, this recommendation may sound more unimportant than it is, but in the context of equitable and inclusive growth and development for all South Africans, it is of vital importance. It can be accepted as a fact that when people make risk decisions, there will be biases. Even traditional models such as credit scoring models are designed by biased human modelers who decide which factors can successfully project the client's future financial behaviour, and whether these factors should be included or not.

5.5.2 Developing an inclusive approach to the South African credit market.

Today, any client-centric business has market insights available at the press of a button. This enables banks, especially, to develop strategies and products at a much faster rate. As an example, the data is no longer chunk-sized market segmentation, but rather an insight into individual behaviour. Examples of this behaviour includes that which affects method of payment, spending trends, activity on social media, etc. As discussed in Chapter 2, being tuned into the macro environment is vital to bank strategy. Whilst this is key from a business point of view, the researcher has also argued the importance of banks in the context of the South African economy, with more specific attention drawn to its socio-economic role. The segmented economy could be addressed by not ignoring the second economy, but by developing business management skills within its ranks. Yes, there are governmental and other skills development organs available such as Khula, and national skills development

structures to remedy the skewed credit granting practices, but the researcher felt that being at the frontline of the countries credit market, banks could take a more active role by formalizing its role in the development of new business owners in the form of coaching. Part of its budget could be set aside to run business planning workshops, as well as business management programs. This would be making a meaningful change. Credit risk management would then be viewed less punitively and create more opportunities for business success rather than leaving failed applicants to look elsewhere for answers, once rejected.

5.5.3 Contributing to the transformational human resource management approach.

The afore-mentioned recommendations speak to culture. The researcher has purposefully highlighted the fact that there are human beings behind every decision, action, and one being affected by such decisions and actions. This needs to be considered even when assessing aspects at an organisational level so that, when scrutinising the impact of credit risk management, one can assume that even organisational strategy and action, is developed by human beings, and then, at the micro level, in turn, enacted by human beings. While these actions are almost always justified, it is nonetheless flawed by human involvement. The researcher recommends that the credit risk management function within the bank take on the role more actively in the recommendation outlined in 5.5.2. Firstly, having insights into why business fail, they could develop a strategy to avoid this perpetual failure. Then, when considering the second market of South Africa, especially, education concerning this economy seems to be necessary. Existing staff should be formally exposed to the realities of the history of our country, especially the socio-economic component, and the role that they play individually in addressing them. New staff should be tested on such knowledge, as well as their sentiments proved regarding this.

It is the researcher's firm conviction that these 3 recommendations will, in some way, redress the very distorted economy of South Africa and address the negative impact of credit risk management on sales by developing future business through its own socio-economic development strategy. This is to be done by knowing and having a deep and sincere understanding of the detail of our deeply rooted issues as a country, and to develop strategies to address them, especially through transformational human resources. The consequence of such an approach could be one of causing tangible positive change in the country's economy, thereby transforming the negative impact of credit risk management on sales performance into purposeful and targeted growth.

CHAPTER 6 CONCLUSION

This dissertation set out to explore the impact that the concept credit risk management had on the sales performance of a bank. The credit risk management function has very clear guidelines and policies that help it to accurately predict outcomes, which ultimately has an impact on sales growth. It is, however, mostly defined from an organisational point of view, scientific in nature, and is, subsequently, prescriptive. This, however, reflects one approach to credit risk management. An alternative approach, chosen for the purposes of this study, was rather to contextualise credit risk management by considering micro and macro, as well as past, present, and future factors within which it exists, as well as to consider what impact this context may have on individuals within the credit risk management teams.

To this end, the researcher addressed the macro environment, but more pertinently, how banks might exist within this environment. As stated before, South African citizens have a unique composition, representing different beliefs, cultures, traditions, and, certainly, very differing views on life in general. There are differing views on what wealth is, and how it is created. What was of interest to the researcher was how these differences, forged by previous regimes' ideologies, business processes, etc., potentially shaped the approach of individuals within the credit risk management function.

The motivation was to highlight the fact that credit risk management would need to get off the beaten track and take on a different form. It would need to be one with a deep understanding of, and empathy with, the effects of the country's past. It would need to be one of genuine solidarity with all South Africans. It would require banks, and individuals to have a very different approach to risk, and how they define it. This definition would need to evolve into a philosophy which seeks to assist all South Africans in living a life of opportunity, unequivocal dignity, and well-being.

South African businesses, including banks; in fact, businesses in general, are least successful and even falter when they cannot, or refuse to respond to the ever-changing environment in which they exist, referred to earlier as contextualising its approach (Sheth, 2007). As is the case with many companies, ideals are the pulse that drives strategy and decision-making. Some businesses might even argue that its strategies are built on the values of change and transformation. What is often lacking though, is the ability to convert these ideals into meaningful action. It is not, then, just fulfilling a function, but rather contributing to living the ideals. That speaks to culture. In Chapter two the researcher

alluded to the role that a bank plays in any economy, and how this role could be enacted, especially in a bank that calls itself a relationship bank, and how this affects the approach to doing business. It is the point of view that business is not just business; that satisfying stakeholder expectations is just one goal among many very important goals. One such goal for a business that holds such a pivotal role in an economy, is the goal of having a purpose greater than generating profits.

In relationship banking, also described in the literature review, banks need to go beyond just selling products and services. Relationship managers are meant to be trusted advisors to existing clients as well as prospective clients. Unfortunately, this is not the case. Many business managers are trained to sell products and services, and to increase the bank's product cross selling and upselling ratios. Of course, this comes with a certain level of business management knowledge and skill, but real client focus demands that business managers become trusted advisors (Sheth and Sobel, 2000). Trusted advisors in general are good listeners. As mentioned, before they have a great understanding of the functions of business, and the challenges that such business owners face every day. In the throes of a catastrophic event such as Covid-19, for example, their advice and helpfulness define them, and sets them apart from their competitors. Such a situation requires emotional support and a show of empathy and solidarity, with the aim of achieving Social Justice. Research questions two and three investigated the extent to which the organisation and its employees engage, whether pro-actively or not, in trying to understand the environment within which it operates. Unfortunately, this kind of engagement seemed to be lacking. This is not to say that a platform for such engagement does not exist, but rather that the engagement is not what it could be. When reflecting on research questions two and three again, which related to the involvement of gathering and sharing of market insights, the indication was that 39.5% of the respondents were never involved in gathering such information. Added to this, 34.2% of the respondents indicated that they were never involved in sharing insights about the environment in which the bank operates. Referring to the scorecards, only a 5% weighting was allocated to employee development and training. How do you become a trusted advisor if you know very little about your environment, and when there seems to be a very limited appetite for learning? This could represent a culture where each function follows its own mandates, rules, policies, and ultimately scorecards, rather than entrenching a culture that has its fingers on the pulse of what South Africa needs. The researcher has attempted to draw attention to this by posing a question regarding whether the scorecards of business and credit risk managers were complementary. As much as around 65% of the sample agreed that they were complementary. The researcher concluded that the other 35% that disagreed may have been more accurate. When comparing the business and credit

manager scorecards it was clear that the focus on client growth and financial growth was substantially different, with each being 14% and 12%, respectively; higher in the case of business managers. Selling products and services and gaining new clients was clearly more heavily weighted towards the business managers. What could possibly confirm the approach is the fact that there was a 26% greater credit risk weighting on the credit manager than there was on the business manager. From these weightings it does not appear that the two roles were complementary at all, yet 65% of the sample were satisfied that they were. In the context of building wealth and bridging the gap between the two economies in South Africa, the researcher concluded that the credit manager would, often, avoid the riskier business to avoid bad debt, and the business manager will be less inclined to push the boundaries for potential clients, especially the ones meeting less of the criteria set out in traditional credit policies. This is a clear indication of the traditional risk management approach which the researcher referred to in Chapter two.

In Chapter two the researcher also described the South African economy as one that is split: an economy for the wealthy, and one for the poor, each with its own rules and criteria, with a stark and widening gap between those who have and those who do not. It has therefore become vital to have an approach of purpose. Of course, all businesses operate to make a profit, and credit risk management is designed to protect that profit. But what if the approach is to do good, and to uplift and to find a way to join the two economies? Would that not unlock more value? Would that not, consequently increase sales? What better purpose in the South African context than to go beyond the goal of generating profits, to equalizing wealth and prosperity? Sheth (2000) describes this as a win-win-win approach. It is inclusive of the business, the country or citizens and community, and the environment.

A few of the research questions and part of the literature review dealt with the aspect of individual beliefs, attitude and behaviours of individuals, and its potential impact on how risk management is approached. The data gathered for the purposes of this Thesis seems to indicate that an overwhelming number of respondents believe that it does have an impact. Yet, nothing in the scorecards, or even in the approach to the market, points to that importance. Individual development and perhaps even re-orientation of every individual to the realities of South Africa' past present and future, is non-existent. There has been a big drive in the recent past to address the inequalities of the distant past, speaking to concepts such as privilege, dispossession, and inequality. An acknowledgment of inequality and all that goes with it is required.

The impact of Covid-19 on the economy of South Africa has also been undeniable. It has the potential to send strong companies into a deep, dark holes. An already skewed distribution of resources in favour of wealthier citizens and businesses has become very apparent. The protection that wealth and access to finance brings has set in motion a massive exposure to the economic effects of the pandemic. It is this exposure which has forced the opening of the economy, and, with it, the increased exposure to this very devastating disease. Whilst the Black Lives Matter movement challenges the depths of how divided South Africa really is, and promises to address the human, civil, and economic inequalities in our country once and for all, the truth which Covid-19 brings to light about this division could be a major setback.

The researcher has always believed that making money, or building profits, or being a successful sales force was more than just the Rands and Cents. It is more than just bottom line, and organisational power and standing. It is more about people. It is more about beautiful communities, about building equal wealth, and creating an undeniable well-being for everyone. Does credit risk management contribute to this? It does not. The potential for growth is restricted by the exclusivity of its approach, through its disconnection from the sales goals, by its lack of proactive involvement in the real composition of the South African economy, by the fact the individuals involved in credit decisions may not be aware of, or be sensitive to, the broader economic needs of the South African people.

The world has now changed, and so have risks. Banks, and by extension, credit risk functions, will also have to change the way that they approach these risks as the entire globe explores a route to recovery from the pandemic. During history, our world has been required to make phenomenal adjustments, but none as enormous and impactful as was brought about by Covid-19, and certainly nothing that credit risk management teams would be used to. These teams will need to have the ability to respond to these changes and apply an equally adjusted approach to the needs of individuals and businesses (Wright 2020:18).

According to Wright there will be a need to be responsive from a human resource point of view to match the change in the risk environment. He suggests that answering the following questions will help facilitate the response. How has the credit risk team complement changed? Has there been change in staffing criteria such as experience, knowledge, or skill? Would the new risks require a change in the level of experience, knowledge, or skill, and how will this staffing requirement be approached?

To assist with this, South African banks should evaluate the effects of COVID-19, and respond bravely and compassionately to its economic impact, as this virus would undoubtedly have entrenched the already deep disparities in the life of so many of its citizens. Again, only time will tell if extenders of credit in South Africa will be willing to be brave and compassionate. While an increase in credit risks due to Covid-19 seems to have the inevitable outcome of pushing the qualifying criteria further from the reach of South Africa's second economy, it also provides banks a unique opportunity to wipe the slate clean and to develop policies that address the ills of the past.

BIBLIOGRAPHY

Accardi, J. (2018). 'Relationship Management Average Vs. Extraordinary', Secured Lender, 74(2), pp. 40–42.

Adesina, K. S. and Mwamba, J. M. (2016). 'Do Basel III Higher Common Equity Capital Requirements Matter for Bank Risk-taking Behaviour? Lessons from South Africa', *African Development Review*, 28(3), pp. 319–331.

Alexiou, C., & Sofoklis, V. (2009). Determinants of bank profitability: Evidence from the Greek banking sector. *Economic annals*, 54(182), 93-118.

Appleton, J.V. (1995). Analysing qualitative interview data: Addressing issues of validity and reliability. *Journal of Advanced Nursing*, 22(1), 278-308.

Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V. (2008) 'How Important Are Financing Constraints? The Role of Finance in the Business Environment', *World Bank Economic Review*, 22(3), pp. 483–516.

Bagozzi, R. P., Rosa, J. A., Celly, K. S., & Coronel, F. (2018). Marketing-Management. Walter de Gruyter GmbH & Co KG.

Ball, S., Eckel C. C., Heracleous, M. (2010). "Risk Aversion and Physical Prowess: Prediction, Choice and Bias." *Journal of Risk & Uncertainty* 41 (3): 167–193.

Baud, C., Chiapello, E. (2017). 'Understanding the disciplinary aspects of neoliberal regulations: The case of credit-risk regulation under the Basel Accords', *Critical Perspectives on Accounting*, 46, pp. 3–23.

Beck, T., Degryse, H., De Haas, R., & Van Horen, N. (2015). When arm's length is too far: Relationship banking over the credit cycle. *Systematic Risk Centre*. Discussion Paper No 33

Belas, J., Smrcka, L., Gavurova, B., & Dvorsky, J. (2018). The impact of social and economic factors in the credit risk management of SME. *Technological and Economic Development of Economy*, 24(3), 1215-1230

Berrada, T., Detemple, J., Rindisbacher, M. (2018). 'Asset pricing with beliefs-dependent risk aversion and learning', *Journal of Financial Economics*, 128(3), pp. 504–534.

Bertelsmann Stiftung, BTI, 2016, South Africa Country Report 2016, Bertelsmann Stiftung, Gütersloh.

Beresford, M. (2020). 'Entrepreneurship as legacy building: 'Reimagining the economy in post-apartheid South Africa', *Economic Anthropology*, 7(1), pp. 65–79.

Blakeley, S. (2020). 'COVID, Chapter 11, Critical Vendor and Suspension Orders: The New World of Credit Risk with the Insolvent Customer', *Credit & Financial Management Review*, 26(2), pp. 26–31.

Bloom, David E., Cadarette, D., Sevilla, J. P. (2018). Epidemics and economics: New and resurgent infectious diseases can have far-reaching economic repercussions. *Finance and Development* 55(2), 46–49.

Bockman, J. (2019). 'Democratic Socialism in Chile and Peru: Revisiting the "Chicago Boys" as the Origin of Neoliberalism', *Comparative Studies in Society & History*, 61(3), pp. 654–679.

Boermans, M. A., Willebrands, D. (2018). 'Financial Constraints Matter: Empirical Evidence on Borrowing Behavior, Microfinance and Firm Productivity', *Journal of Developmental Entrepreneurship*, 23(2).

Boyd, J. H. and De Nicolo, G. (2005). 'The Theory of Bank Risk Taking and Competition Revisited', *Journal of Finance (Wiley-Blackwell)*, 60(3), pp. 1329–1343.

Brownbridge, M. (2015). 'How relevant are the Basel capital reforms for sub-Saharan Africa?', *Journal of Risk Management in Financial Institutions*, 8(2), pp. 153–162.

Browne, M., Jaeger, V., Steinorth, P. (2019). 'The impact of economic conditions on individual and managerial risk taking', *Geneva Risk & Insurance Review*, 44(1), pp. 27–53.

Bruni, M.E., Beraldi, P., & lazzolino, G. (2014). Lending decisions under uncertainty: A DEA approach. *International Journal of Production Research*, 52(3), 766–775.

Buera, F. J., Fattal Jaef, R. N. and Shin, Y. (2015). 'Anatomy of a credit crunch: From capital to labor markets', *Review of Economic Dynamics*, 18(1), pp. 101–117.

Burger, P., Fourie, F. (2019). 'The unemployed and the formal and informal sectors in South Africa: A macroeconomic analysis', *South African Journal of Economic & Management Sciences*, 22(1), pp. 1–12.

Burkhardt, P. (2019). 'Eskom Power Cuts Revive Threat to South African Businesses', *Bloomberg.com*, p. N.PAG.

Burra, P. *et al.* (2015). 'Implementing the Countercyclical Capital Buffer in South Africa: Practical Considerations', *South African Journal of Economic & Management Sciences*, 18(1), pp. 105–127.

Campbell-Verduyn, M., Goguen, M., Porter, T. (2017). "Big data and algorithmic governance: the case of financial practices", *New Political Economy*, Vol. 22 No.2, pp. 219-236.

Cherney, A. (2018). Strategic marketing management. Cerebellum Press.

Chiou, J.-S., Shen, C. C. (2012). 'The antecedents of online financial service adoption: the impact of physical banking services on Internet banking acceptance', *Behaviour & Information Technology*, 31(9), pp. 859–871.

Cialdini, R. B, Trost, M.R. (1998). "Social Influence: Social Norms, Conformity, and Compliance." *The Handbook of Social Psychology*, edited by Daniel T Gilbert Susan T Fiske and Lindzey Gardner, 4th ed., 151-192. Boston, MA: McGraw-Hill

Claessens, L. Laeven, S. (2004). "What drives bank competition? Some international evidence", *Journal of Money, Credit and Banking*, vol 36, 3, 563-583.

Cohn, A., Fehr, E., Maréchal, M. A. (2017). "Do professional norms in the banking industry favour risk-taking?", *Review of Financial Studies*, Vol. 30 No. 11, pp. 3801-3823.

Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing*, 54(3), 68–81.

Cullen, K L, Jinyan F, Cong L. (2014). "Employee Popularity Mediates the Relationship Between Political Skill and Workplace Interpersonal Mistreatment." *Journal of Management* 40 (6):1760–78

Dam, K., Escrihuela-Villar, M., Sánchez-Pagés, S. (2015). 'On the relationship between market power and bank risk taking', *Journal of Economics*, 114(2), pp. 177–204.

Davies, G. B., Brooks, P. (2014). 'Risk tolerance: Essential, behavioural and misunderstood', *Journal of Risk Management in Financial Institutions*, 7(2), pp. 110–113.

Dierkes, M., Erner, C., Langer, T., & Norden, L. (2013). Business credit information sharing and default risk of private firms. *Journal of Banking & Finance*, 37(8), 2867-2878

Dinh, T. H. T., Kleimeier, S. (2007). 'A credit scoring model for Vietnam's retail banking market', *International Review of Financial Analysis*, 16(5), pp. 471–495.

Disatnik, D., Steinhart, Y. (2015). "Need for Cognitive Closure, Risk Aversion, Uncertainty Changes, and Their Effects on Investment Decisions." *Journal of Marketing Research* 52 (3): 349–359.

Eeckhoudt, L., Liu, L., Meyer, J. (2017). 'Restricted increases in risk aversion and their application', *Economic Theory*, 64(1), pp. 161–181.

Elhusadi, I. (2019). 'The Role of Human Resources Empowerment in Credit Risk Management Efficiently', *REMAH Journal*, (38), pp. 299–326.

Faff, R., Hallahan, T., & McKenzie, M. (2009). Nonlinear linkages between financial risk tolerance and demographic characteristics. *Applied Economics Letters*, 16, 1329–1332.

Fan, V. Y., Jamison, D. T., Summers, L.H. (2018). Pandemic risk: How large are the expected losses? *Bulletin of the World Health Organization* 96(2), 129–134.

Fan, J. X., Xiao, J. J. (2006). Cross-cultural differences in risk tolerance. A comparison between Chinese and Americans. *Journal of Personal Finance*, 5, 54–75.

Flick, U. (2014) 5th Ed. An introduction to qualitative research. SAGE Publications: London.

Forgas, J. P., Williams, K.D. (2001). "Social Influence: Introduction and Overview." In Social Influence: Direct and Indirect Processes, edited by Joseph P. Forgas and Kipling D. Williams, 3-24. New York, NY: Psychology Press

Forgas, J. P., Williams, K.D. (2003). "Social Judgments: Implicit and Explicit Processes." Cambridge, UK: Cambridge University Press.

Fourie, J. (2020). 'One thing corona won't kill: inequality: Historically, wars, revolutions and pandemics have reduced inequality, but new research suggests that Covid-19 is unlikely to be a leveller for South Africa's deeply unequal society', *Finweek*, p. 4.

Frizzo-Barker, J., Chow-White, P.A., Mozafari, M., Ha, D. (2016). "An empirical study of the rise of big data in business scholarship", International Journal of Information Management, Vol. 36 No.3, pp.403-413.

García, F., Giménez, V., Guijarro, F. (2013). 'Credit risk management: A multicriteria approach to assess creditworthiness', *Mathematical & Computer Modelling*, 57(7/8), pp. 2009–2015.

Gavlakova P., Kliestik T., (2014). Credit Risk Models and Valuation. 4th International Conference on Applied Social Science, *Information Engineering Research Institute*, *Singapore*, pp. 139-143.

Ge, R., Feng, J., Gu, B., Zhang, P. (2017)'. "Predicting and deterring default with social media information peer-to-peer lending", *Journal of Management Information Systems*, Vol.34 No.2, pp.401-424.

Gerrans, P. *et al.* (2015). 'Individual financial risk tolerance and the global financial crisis', *Accounting & Finance*, 55(1), pp. 165–185.

Goodman, P. S. (2017). "An Economic Apartheid Bedevils South Africa." *New York Times*, p. A1(L).

Gopalan, S., Sasidharan, S. (2020). 'Financial liberalization and access to credit in emerging and developing economies: A firm-level empirical investigation', *Journal of Economics & Business*, 107, p. N.PAG.

Gridley, K. (2017). 'The Benefits of Relationship Banking', *Business Journal (Central New York*), 31(30), p. 4B.

Guiso, L. (2012). 'Trust and Risk Aversion in the Aftermath of the Great Recession', *European Business Organization Law Review*, 13(2), pp. 195–209.

Haacker, M., (2004). The Impact of HIV/AIDS on Government Finance and Public Services. *International Monetary Fund, Washington.*

Haneef, S., Riaz, T., Ramzan, M., Rana, M. A., Hafiz, M. I., & Karim, Y. (2012). Impact of risk management on non-performing loans and profitability of banking sector of Pakistan. *International Journal of Business and Social Science*, 3(7).

Hallahan, T. A., Faff, R. W., & McKenzie, M. D. (2004). An Empirical investigation of personal financial risk tolerance. *Financial Services Review*, 13, 57–78.

Harlow, W. V., Brown, K. C. (1990). 'Understanding and Assessing Financial Risk Tolerance: A Biological Perspective', *Financial Analysts Journal*, 46(6), pp. 50–62.

Hatting, J. H. (2017). Implications of the global financial crisis for financial regulation in South Africa, *Magister Legum (LLM) in the Faculty of Law*, University of Pretoria.

Hellmann, T. F., Murdock, K. C., Stiglitz, J. E. (2000). 'Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?', *American Economic Review*, 90(1), pp. 147–165.

Hooman, A. et al. (2016). 'Statistical and Data Mining Methods in Credit Scoring', *Journal of Developing Areas*, 50(5), pp. 371–381.

Ho, S., Li A., Kinsun T., Zhang, F. (2015). "CEO Gender, Ethical Leadership and

Accounting Conservatism." Journal of Business Ethics 127 (2): 351-370.

Hsieh, W. C. (2003). The study of multiple criteria evaluation model on business loan process by the bank. *Master's thesis, Chaoyang University of Technology, Taichung, Taiwan*.

Huang, B., Thomas, L. C. (2015). 'The impact of Basel Accords on the lender's profitability under different pricing decisions', *Journal of the Operational Research Society*, 66(11), pp. 1826–1839.

Jiménez, G. Lopez, J. A., Saurina, J. (2013). "How Does Competition Affect Bank Risk-Taking?" *Journal of Financial Stability* 9.2 : 185–19.

Jones, E. E. (1990). Interpersonal Perception. New York, NY: Macmillan

Kalra, A. et al. (2017) 'Connect within to connect outside: effect of salespeople's political skill on relationship performance', *Journal of Personal Selling & Sales Management*, 37(4), pp. 332–348.

Kapoor, S., Kaur, M. (2017). 'Basel III Norms: A SWOT and TOWS Approach', *Vision* (09722629), 21(3), pp. 250–258.

Katsikeas, C. S., Morgan, N. A., Leonidou, L. C., & Hult, G. T. M. (2016). Assessing performance outcomes in marketing. *Journal of Marketing*, 80(2), 1–20.

Kaupelytė, D., Kairytė, D. (2016). 'Intellectual Capital Efficiency Impact on European Small and Large Listed Banks Financial Performance', *International Journal of Management, Accounting & Economics*, 3(6), pp. 367–377.

Keeley, M. (1990). Deposit insurance: Risk, and market power in banking, *American Economic Review*, 80, pp. 1183–1200.

Keiningham, T. L., Cooil, B., Andreasson, T. W., & Aksoy, L. (2007). A longitudinal examination of 'net promoter' and firm revenue growth. *Journal of Marketing*, 71(3), 39–51

Kganyago, L., Thomas, D. (2019). "South Africa's growth problem is structural, not cyclical", *African Business*, (467), pp. 14–15.

Klement, J., Miranda, R. E. (2012). 'Kicking the Habit: How Experience Determines Financial Risk Preferences', *Journal of Wealth Management*, 15(2), pp. 10–25.

Kotler, P., Keller, K. L., Brady, M., Goodman, M., & Hansen, T. (2016). Marketing management. Pearson Education Ltd

Koudijs, P., Voth, H. J. (2016). 'Leverage and Beliefs: Personal Experience and Risk-Taking in Margin Lending†', *American Economic Review*, 106(11), pp. 3367–3400.

Kremp, E., & Sevestre, P. (2013). Did the crisis induce credit rationing for French SMEs.? *Journal of Banking & Finance*, 37(10), 3757-3772.

Kuvalekar, S. V., (2016). 'Basel Accords and their implications on banking business, *Vinimaya*, Vol. 37, No. 3

Laeven, L., Levine, R. (2009). "Bank governance, regulation and risk taking", Journal of Financial Economics, Vol. 93 No. 2, pp. 259-275.

Lagoarde-Segot, T., Leoni, P. L., (2013). Pandemics of the poor and banking stability, Journal of Banking and Finance 37(11), 4574–4583.

Lee, E. (2014). "Basel III and its new capital requirements, as distinguished from Basel II" *The Banking Law Journal*, 131, pp 27-69.

Leoni, P L., (2013). HIV/AIDS and banking stability in developing countries. *Bulletin of Economic Research* 65(3), pp. 225–237.

Lefifi, T.A., 'Nedbank is not scared of Capitec, and here is why', https://www.pressreader.com/south-africa/sunday-times-1107/20130616/282419871814723, (16 June 2013).

Lenzen, M. et al. (2020). 'Global socio-economic losses and environmental gains from the Coronavirus pandemic', PLoS ONE, 15(7), pp. 1–13.

Leonida, L., Muzzupappa, E. (2018). 'Do Basel Accords influence competition in the banking industry? A comparative analysis of Germany and the UK', *Journal of Banking Regulation*, 19(1), pp. 64–72.

Levy, D. A., Collins B.E, Nail P. R. (1998). "A New Model of Interpersonal Influence Characteristics." *Journal of Social Behavior and Personality* 13 (4):715–33

Levy, M. (2015). 'An evolutionary explanation for risk aversion', *Journal of Economic Psychology*, 46, pp. 51–61.

López-Espinosa, G., Mayordomo, S., Moreno, A. (2017). 'When does relationship-lending start to pay?', *Journal of Financial Intermediation*, 31, pp. 16–29.

Lounsbury, J., Basel III to tighten capital requirements. https://creditwritedowns.com/2010/09/basel-iii-tightens-capital-requirements.html, (12 September 2010).

Lovelock, C., & Patterson, P. (2015). Services marketing. Pearson Australia.

Makri, V., & Papadatos, K. (2014). How accounting information and macroeconomic environment determine credit risk? Evidence from Greece. *International Journal of Economic Sciences and Applied Research*, 7(1).

Meidell, A., Kaarbøe, K. (2017). 'How the enterprise risk management function influences decision-making in the organization – A field study of a large, global oil and gas company', *British Accounting Review*, 49(1), pp. 39–55.

Mester, L. J. (1997). 'What's the point of credit scoring?', *Business Review (Federal Reserve Bank of Philadelphia*), p. 3.

Meyersfeld, B., Kinley, D. (2015). 'Banks and Human Rights: A South African Experiment', *Sur: Revista Internacional de Direitos Humanos*, 12(22), pp. 189–205.

Mokatsanyane, D., Muzindutsi, P. F., Viljoen, D. (2017). 'Credit Risk and Securitisation in the South African Banking Sector', *Acta Universitatis Danubius: Oeconomica*, vol. 13, no. 2, pp. 102–121.

Mongale, I.P., Mashamaite, T. and Khoza, N. (2018) 'Household savings, financing and economic growth in South Africa', *Business and Economic Horizons*, 14(1), 105.

Moradi, S., Mokhatab, R. F., (2019). A dynamic credit risk assessment model with data mining techniques: evidence from Iranian banks, *Finance Innovation 5*, p. 15.

Moyo, B., (2018). 'An analysis of competition, efficiency and soundness in the South African banking sector', *South African Journal of Economic and Management Sciences* 21(1).

Munangi, E., Sibindi, A. (2020). An empirical analysis of the impact of credit risk on the financial performance of South African Banks. *Academy of Accounting and Financial Studies Journal*. 24. 1-15

Mutandwa, E., Taremwa, N. K., Tubanambazi, T. (2015). 'Determinants of Business Performance of Small and Medium Size Enterprises in Rwanda', *Journal of Developmental Entrepreneurship*, 20(1), p. 1.

Ndiili, N. (2020). 'Unprecedented economic attack on Sub-Sahara African economies: coronavirus: How severe is the perceived slump?', *Environment Systems & Decisions*, 40(2), pp. 244–251.

News Coverage on What the Chinese State Did for the COVID-19 Outbreak in China' (2020). *Modern China Studies*, 27(2), pp. 11–78.

Ng, T.W.H., Eby, L.T., Sorensen, K.L., & Feldman, D.C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58(2), 367-408.

Nguyen, Y., Noussair, C. N. (2014). "Risk Aversion and Emotions." *Economic Review* 19 (3): 296–312.

Nichter, S., Goldmark, L. (2009). 'Small Firm Growth in Developing Countries', *World Development*, 37(9), pp. 1453–1464.

Nieboer, J. (2015). "Group Member Characteristics and Risk Taking by Consensus." Journal of Behavioural and Experimental Economics 57: 81–88.

Nobre, L. H. N., Grable, J. E. (2014). "The Role of Risk Profiles and Risk Tolerance in Shaping Client Investment Decisions." *Journal of Financial Service Professionals* 69 (3): 18–21.

Nyoka, C. (2015). 'The Status of Southern Africa in the Wake of the Global Financial Crisis', *International Journal of Business & Economics Perspectives*, 10(1), pp. 17–30.

Oke. O., Wale-Awe, O. I. (2018). 'Credit Risk Management and Financial Performance among Deposit Money Banks in Nigeria: A Case Study of Zenith Bank Plc', *Forum Scientiae Oeconomia*, 6(4), pp. 23–36.

Orthofer, A. (2016). 'Wealth Inequality in South Africa: Evidence from Survey and Tax Data." *REDI3x3 Working Paper No. 15. Cape Town, South Africa: Research Project on Employment, Income Distribution and Inclusive Growth, SALDRU.*

Palmatier, R. W. et al. (2013) 'Relationship Velocity: Toward A Theory of Relationship Dynamics', *Journal of Marketing*, 77(1), pp. 13–30.

Park, J. E., Kim, J., Dubinsky, A. J., & Lee, H. (2010). How does sales force automation influence relationship quality and performance? The mediating roles of learning and selling behaviors. *Industrial Marketing Management*, 39(7), 1128–1138.

- Perez, S., Basel banking accord: The accord that shaped and will shape banking. http://marketrealist.com/2014/09/basel-iis-pillar-two-incorporated-regulatory-framework. (September 2014)
- Peterson, R. M. et al. (2021) 'Sales enablement: conceptualizing and developing a dynamic capability', *Journal of the Academy of Marketing Science*, 49(3), pp. 542–565.
- Plouffe, C. R. (2018) 'Is it navigation, networking, coordination ... or what? A multidisciplinary review of influences on the intraorganizational dimension of the sales role and performance', *Journal of Personal Selling & Sales Management*, 38(2), pp. 241–264.
- Potgieter, I. L. and Snyman, A. M. (2018) 'Personal factors in talent retention in the South African banking industry', *Journal of Psychology in Africa*, 28(6), pp. 455–461.
- Pratt, J. W. (1964). "Risk Aversion in the Small and in the Large." *Econometrica* 32 (1/2): 122–136.
- Rahman, M., & Hai, H. (2017). Factors affecting non-performing loan (npl) of private commercial banks in Bangladesh. *Amity Global Business Review*, 12(2), 7–14.
- Rashotte, Lisa S. 2009. "Social Influence." The Concise Blackwell Encyclopedia of Sociology, edited by George Ritzer and J. Michael Ryan, 4426–4429. Oxford, UK: Blackwell Publishing.
- Rehman, A. et al. (2015). 'Relationship between Information Sharing and Risk Management Practices with Financial Performance: Evidence from Pakistani Banking Sector', *Journal of Managerial Sciences*, 9(2), pp. 138–146.
- Repullo, R. (2004) 'Capital requirements, market power, and risk-taking in banking', *Journal of Financial Intermediation*, 13(2), p. 156.
- Santaeulalia-Llopis, R. (2008). Aggregate effects of AIDS on development. Washington University in St. Louis Working Paper.
- Schneider, G. E. (2018). 'The Post-Apartheid Development Debacle in South Africa: How Mainstream Economics and the Vested Interests Preserved Apartheid Economic Structures', *Journal of Economic Issues (Taylor & Francis Ltd)*, 52(2), pp. 306–322.
- Sebai, S. (2014). "Further Evidence on Gender Differences and Their Impact on Risk Aversion." *Journal of Business Studies Quarterly* 6 (1): 308–319.
- Sengupta, A. S., Yavas, U. and Babakus, E. (2015). 'Interactive effects of personal and organizational resources on frontline bank employees' job outcomes', *International Journal of Bank Marketing*, 33(7), pp. 884–903.
- Sheth, J. N., Sobel, A. (2000). Clients for life: How great professionals develop breakthrough relationships. New York, NY: Simon & Schuster
- Skoufias, E. (2003). Economic crises and natural disasters: Coping strategies and policy implications. *World Development* 31(7), pp. 1087–1102.
- Smit, P.J, Cronje, G.J.J., Brevis, T. & Vrba, M.J., (2013). Management principles: A contemporary edition, 5th edition., Juta, Cape Town.
- Sukwadi, R., Inderawati, M. W., & Wong, D. (2016). Integrating the Balanced Scorecard into Sales Performance Management of Trading Company. *Teknik Dan Ilmu Komputer*, 5(20).
- Tabak, B. M., Gomes, G. M. R., Jr.da Silva Medeiros, M. (2015). 'The impact of

market power at bank level in risk-taking: The Brazilian case', *International Review of Financial Analysis*, 40, pp. 154–165.

Tarullo, D., "Good compliance, not mere compliance", Speech at the Federal Reserve Bank of New York Conference "Reforming Culture and Behaviour in the Financial Services Industry", New York, NY, (24 October 2014).

Terre Blanche, M., Durrheim, K., Painter, D. (2006). Research in practice: Applied methods for the social sciences. Cape Town, South Africa: University of Cape Town Press.

Thomas, D. (2019). 'South Africans give Ramaphosa solid mandate for change', *African Business*, (464), pp. 42–45.

Thomas, P. J. (2016). 'Measuring risk-aversion: The challenge', *Measurement*. Vol. 79, pp. 285–301.

Tichareva, M. T. (2017). 'Specialised growth: Takeaways from the South African Experience in Banking', *Actuary Magazine*, 14(2), pp. 14–18.

Tivaringe, T. (2019). 'The Social Unemployment Gap in South Africa: Limits of Enabling Socio-Economic Redress through Expanding Access to Higher Education', *Education Policy Analysis Archives*, 27 (155).

Turner, A. (2016). *Between debt and the devil: Money, credit, and fixing global finance.* Princeton, New Jersey, Princeton University Press, pp 302.

Turner, John C. 1991. Social Influence. Belmont: Thomson Brooks/Cole Publishing Co.

Valaskova K., (2014). Quantification of the Company Default by Merton Model. 4th International Conference on Applied Social Science. Singapore. pp. 133-138.

Valebnikova, O. A., Valebnikova, N. V. and Kalinina, O. V. (2019). 'Intellectually-Oriented Consulting for Financial Function in the era of Technology and Digitalization', Proceedings of the European Conference on Knowledge Management, 2(2), pp. 1069–1078.

Van de Venter, G., Michayluk, D., Davey, G. (2012). 'A longitudinal study of financial risk tolerance', *Journal of Economic Psychology*, 33(4), pp. 794–800.

Vieira, V. A. *et al.* (2021) 'The impact of intuition and deliberation on acquisition-retention ambidexterity and sales performance: comparing the Dual-Process and Uni-Process Models', *Journal of Personal Selling & Sales Management*, 41(1), pp. 56–69.

Visser, D., van Vuuren, G. (2016). 'Trading Book Risk Metrics: A South African Perspective', *South African Journal of Economic & Management Sciences*, 19(1), pp. 118–138.

Walters, A. C., Ramiah, V. (2016). 'Is it possible to be too risk averse? Considerations for financial management in the public sector', *Applied Economics Letters*, 23(17), pp. 1210–1214.

Wang, Y., Zhou, W., Chang, K. (2013). "Effect of Decision Makers" Education Levels on Their Corporate Risk Taking." Social Behaviour & Personality: *An International Journal* 41 (7): 1225–1230.

Weber, E. U., Hsee, C. (1998). 'Cross-cultural Differences in Risk Perception, but Cross-cultural Similarities in Attitudes Towards Perceived Risk', Management Science, 44(9), pp. 1205–1217.

Wei, Y., Yildirim, P., Van den Bulte, C., Dellarocas, C. (2016). "Credit scoring with social network data", *Marketing Science*, Vol.35 No.2, pp.234-258.

Wright, R. (2020) 'Assessing Risk in a Post-Pandemic World', Internal Auditor, 77(3), p. 18.

Yach, D., Stuckler, D., Brownell, K. D. (2006). Epidemiologic and economic consequences of the global epidemics of obesity and diabetes, *Nature Medicine* 12 (1),pp. 62–66.

Yao, R., Hanna, S. D., Lindamood, S. (2004). Changes in financial risk tolerance, 1983–2001. *Financial Services Review*, 13, 249–266

Young, K. (2019). 'Personnel Development: How recruitment in credit management has changed and continues to evolve', *Credit Management*, p. 54.

Zondi, W. B. (2017) 'Challenges Facing Small Business Development in South Africa', International Journal of Economic Perspectives, 11(2), pp. 621–628.



APPENDIX A

Questionnaire

- ** Please circle your choice where applicable.
 - 1. The global economic environment has increased the banks risk appetite.

Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |

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	piairi					
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2. How often are you engaged in information <u>gathering</u> activities relating to the macro environment from a credit risk management point of view?

Annually	Bi-annu	ally Quar	terly	Monthly	Never	
						aring activitie oint of view?
Annually	Bi-annu	ally Quar	terly	Monthly	Never	
4. The		entioned a	ctivities			the bank.
Such gry along to a long t						
Г		nanagemen Disagree	_			ronaly Aaree
Strongly disagree Disagree Neutral Agree Strongly Agree						
Explain.						
Explain.						
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	rrent banl	ς strategy ς	can be	classified		
		< strategy of Disagree			d as pro	
6. Cui					d as pro	-sales.
6. Cur					d as pro	-sales.

7. Would you consider the current sales and risk management performance measurements to be complementary of each other? (Please circle your choice)

.....

- Yes
- No

8. Do you know • •	Yes No.			is? (Please circle ou think it might	
		• • • • • • • • • • • • • • • • • • • •			
applications	?				sessing credit risk of clie
applications		file affects	one's a		sessing credit risk of clie
applications Strongly disagree	?				sessing credit risk of clie
applications Strongly disagree Explain.	? Disagree	Neutral	Agree	Strongly Agree	sessing credit risk of clie
applications Strongly disagree Explain.	? Disagree	Neutral	Agree	Strongly Agree	
applications Strongly disagree Explain.	? Disagree	Neutral	Agree	Strongly Agree	
applications Strongly disagree Explain.	? Disagree	Neutral	Agree	Strongly Agree	
applications Strongly disagree Explain.	? Disagree	Neutral	Agree	Strongly Agree	
applications Strongly disagree Explain.	? Disagree	Neutral	Agree	Strongly Agree	
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applications Strongly disagree Explain.	? Disagree	Neutral es positiv	Agree	Strongly Agree	

44.0						
11. Credit a	ppro	val mandat	es contrib	ute posi	tively to bank-wid	
Strongly disagr	ee	Disagree	Neutral	Agree	Strongly Agree	
Explain.						
12. Credit a	sses	sment skill	is a vital ¡	oart in th	e credit assessm	
Strongly disagr	99	Disagree	Neutral	Δατρρ	Strongly Agree	
		Disagree	Noutiai	Agree	Ottorigiy Agree	
Explain.						
12 Crodit o		emont ovn	orionoo io	a vital p	art in the gradit a	
		-			art in the credit a	
Strongly disagr	ee	Disagree	Neutral	Agree	Strongly Agree	
Explain.						



APPENDIX B

Company letter of approval

3 April 2019

Attention: The Ethics Committee (CPUT)

Re: Masters Thesis - Darren Jacobs

Topic: 'The impact of credit risk management on the sales performance of a selected bank'

Darren Jacobs approached Nedbank his current employer to conduct a quantitative study on the above topic.

Permission has been granted for Darren to conduct the study with relevant departments and staff within the Cape Region of Nedbank.

The following conditions are to be adhered to:

- 1. Clients are prohibited from being contacted or included in any way in this study.
- 2. Given the nature of the research, the study would be restricted from the public domain for 5 years.

Yours faithfully

Fayzel Omar

Provincial General Manager

Western Cape Retail and Business Banking

Client Network: RBB | Southern Division | Western Cape Province South Wing 1" Floor Nedbank Clocktower Clocktower Precinct V&A Waterfront 5002 T 021 416 6000 F 021 416 8071

Directors V Nadoo (Chairman) MWT Brown (Chief Executive) HR Brody BA Dames NP Dongwana EM Kruger RAG Leith PM Makwana L Makalima Dr MA Matocane RK Morathi (Chief Financial Officer) MP Moyo JK Netshijenzhe MC Nikuhlu (Chief Operating Officer) S Subramoney Mt Wyman" (* British) Company Secretary: J Katzin 01.01 2019

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APPENDIX C

Consent for participation in questionnaire survey.

Dear Participant

The main objective of this study is to explore the impact of credit risk management on the sales performance of a commercial bank.

The questionnaire will be presented to both sales and credit staff and has been designed to establish the approach to credit risk management within the organisation. Please note that the questionnaire is anonymous, and therefore you do not have to disclose your name. All answers will be treated with confidentiality and your participation voluntary. The purpose of the study is to gain a greater insight into the dynamic between sales and credit, and how it affects sales outcomes. The study will depend greatly on your invaluable experience and insight, and your input will be greatly appreciated. Further to this it may create an opportunity for the researcher to make recommendations based on these outcomes.

Should you wish to withdraw for any reason, you will be free to do so at any time, without any consequence. The information provided by you in this questionnaire is confidential and will be treated as such.

Signature of Participant: Date:

Thank you very much for your participation. For more information, feel free to contact the researcher on the below detail:

Darren Jacobs

Cell: 0828902468



APPENDIX D

Extract of credit manager performance scorecard.

Credit Manager	Measure		Threshold Target	Target	Stretch Target
30%	FINAN	ICIAL AND IESS			
10%	1,1	GOI - Actual Rand Growth vs. Target Rand Growth (Portfolio)	50,0%	100%	140,0%
6%	1,2	Total NIR - Actual Rand Growth vs. Target Rand Growth	50,0%	100%	140,0%
6%	1,6	Asset Volume Growth - Actual Pay-outs vs. Target Pay-outs (Contribution Statement)	40,0%	100,0%	130,0%
8%	1,7	Targeted Specific Impairments as % of advances	(+25bps)	Trgt	(-25bps)
25%		T AND FIONSHIP			
5%	2,1	New Group Acquisition (Volume Count)	2.0" rating	3.5" rating	5.0" rating
5%	2,2	New Group Acquisition (Product Penetration)	2.0" rating	3.5" rating	5.0" rating

5%	2,3	New Group Acquisition (new group GOI uplift)	2.0" rating	3.5" rating	5.0" rating
5%	2,4	Existing client Cross-Sell (Positive Product count)	2.0" rating	3.5" rating	5.0" rating
5%	2,7	Net Promoter Score (NPS) - drive referrals and mitigate client attrition. (60% Portfolio/40% NB)	2.0" rating	3.5" rating	5.0" rating
40%	I	GEMENT AND NAL PROCESSES			
20%	5,1	Risk Management Measure	2.0" rating	3.5" rating	5.0" rating
5%	5,2	Risk Management - quality of NCA	2.0" rating	3.5" rating	5.0" rating
15%	5,4	Client Onboarding Turn-Around-Time - National Benchmark (ETDC report - "submitted to credit to credit decision made")	2.0" rating	3.5" rating	5.0" rating
0%	5,9	BPQA - For measurement in H2(weightings will be added in H2)	2.0" rating	3.5" rating	5.0" rating
5%	LEARI	INISATIONAL NING, LEADERSHIP RANSFORMATION			
5%	6,4	Personal effectiveness (Role-relevant training, and Compliance)	2.0" rating	3.5" rating	5.0" rating
100%					



APPENDIX E

Extract of business manager performance scorecard.

ВМ	Measu	ıre	Threshold Target	Target	Stretch Target
44%	FINAM	NCIAL AND NESS			
12%	1,1	GOI - Actual Rand Growth vs. Target Rand Growth (Portfolio)	50,0%	100%	140,0%
11%	1,2	Total NIR - Actual Rand Growth vs. Target Rand Growth	50,0%	100%	140,0%
10%	1,3	Liabilities (Incl CAC) - Actual Rand Growth vs. Target Rand Growth	40,0%	100,0%	130,0%
6%	1,6	Asset Volume Growth - Actual Pay-outs vs. Target Pay-outs (Contribution Statement)	40,0%	100,0%	130,0%
5%	1,7	Targeted Specific Impairments as % of advances	(+25bps)	Trgt	(-25bps)
37%		IT AND TIONSHIP			
6%	2,1	New Group Acquisition (Volume Count)	2.0" rating	3.5" rating	5.0" rating
6%	2,2	New Group Acquisition (Product Penetration)	2.0" rating	3.5" rating	5.0" rating
8%	2,3	New Group Acquisition (new group GOI uplift)	2.0" rating	3.5" rating	5.0" rating

6%	2,4	Existing client Cross-Sell (Positive Product count)	2.0" rating	3.5" rating	5.0" rating
6%	2,5	Existing client Cross-Sell (Net GOI uplift from Positive Product count)	2.0" rating	3.5" rating	5.0" rating
5%	2,7	Net Promoter Score (NPS) - drive referrals and mitigate client attrition. (60% Portfolio/40% NB)	2.0" rating	3.5" rating	5.0" rating
14%		AGEMENT AND RNAL PROCESS			
3%	5,1	Risk Management Measure	2.0" rating	3.5" rating	5.0" rating
7%	5,3	Operational Excellence - a) Outstanding docs incl. securities, EDD etc. based on BB benchmark - BM (100%) and SM (50%) b) Diligent process execution to prevent losses. (50%) - SM ONLY	2.0" rating	3.5" rating	5.0" rating
4%	5,6	Client Onboarding Turn-Around- Time - National Benchmark (ETDC Report - Lead identified to submitted to credit")	2.0" rating	3.5" rating	5.0" rating
0%	5,9	BPQA - For measurement in H2(weightings will be added in H2)	2.0" rating	3.5" rating	5.0" rating

5%	LEAR LEAD	ANISATIONAL NING, ERSHIP AND ISFORMATION			
5%	6,4	Personal effectiveness (Role-relevant training, and Compliance)	2.0" rating	3.5" rating	5.0" rating
100%					