

**DETERMINANTS OF LOAN DEFAULTS IN FINANCIAL INSTITUTIONS IN
ZAMBIA: BANK EMPLOYEES' VIEW**

BY

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DECLARATION

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DEDICATIONS

I dedicate this work to my husband Liswaniso Mulonda, My children (Mubutu and Liswaniso), family and friends for their love, support, time, interest, motivation and patience. Your support and understanding are priceless. Your support has enabled my study to become a reality. Thank you very much for the sacrifice.

ABSTRACT

The current study investigates bank employee's perceptions of the importance of the determinants of non-performing loan (NPL) in Zambia's banking sector. The espoused critical factors in the study were identified based on theories such as the Theory of Asymmetric Information, Deflation Theory and Patronizing and Die another Day Effects Theories. These theories identify various macroeconomic and bank specific factors that may explain and contribute to the problem of loan defaults. The purpose of the study was to explore the perceived importance/ranking of the various factors in each category and between the two categories in explaining the problem of loan default faced by Zambia's banking sector by bank employees.

The study is based on the self-administered questionnaire data collected from bank employees that are involved in loan disbursement and recoveries. Using a multistage cluster sampling strategy, 11 banks were randomly or purposively selected from a population of 19 banks that are registered in the country in the first stage. In addition, two of the MFIs were also surveyed. In the second stage the second an average of seven employees working in the credit department of each bank were selected which yielded 78 respondents.

The study identifies non-supervision of customers on their loan utilization, Poor Loan Appraisal, Lack of training for the clients before/after disbursement, Non-reminders of some customers concerning repayment obligation, weak penalties for defaulters, Late disbursement of loans by the bank, Lack of compliance to bank credit policy by staff, Lack of staff capacity building by banks, Incompetence by bank staff, Amount of repayment in each month too high, Unfavorable payment terms, High bank staff turnover and Inadequate loan sizes in relation to the client needs as key bank level loan default determinants. However, of these, non-supervision of customers on their loan utilization, Non-reminders of some customers concerning repayment obligation and Lack of training for the clients before/after disbursement as the most likely (highest) drivers of bank loan defaults. Of macro level factors, the study respondents viewed High Interest Rates, Unfavorable Exchange Rates and High Unemployment Levels as the most influential macroeconomic level factors of loan defaults in Zambia. Based on the results of the correlation analysis between the loan default factors and respondent perceptions of loan default rates in their banks, it is concluded that macro level factors have greater impact on loan defaults in Zambia's banking sector than bank specific factors. At the bank level, the study recommends improvements in bank credit risk management, credit department staff capacity, flexibility of loan conditions as well as legal measures for loan recovery.

At the macro level, the study recommends that banks strengthen their capacities to evaluate the vulnerabilities of different classes of borrower to different macroeconomic factors. This should inform loan portfolio diversification strategies.

Key words: Non-performing Loans; Banking Industry; Non-Banking Financial Institution; Employees Perspective

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LIST OF ACRONYMS

AfDB	African Development Bank
BAZ	Bankers Association of Zambia
BoZ	Bank of Zambia
BIS	Bank of International Settlements
CEEC	Citizens Economic Empowerment Commission
CSR	Corporate Social Responsibility
CSO	Central Statistical Office
EAZ	Economics Association of Zambia
GDP	Gross Domestic Product
GRZ	Government of The Republic of Zambia
LUSE	Lusaka Stock Exchange
MOF	Ministry of Finance
MOFNP	Ministry of Finance and National Planning
MPC	Monetary Policy Committee
NPLs	Non-Performing Loans
SEC	Securities and Exchange Commission
SME	Small and Medium Enterprises
ZACCI	Zambia Chamber of Commerce and Industry
ZAM	Zambia Association of Manufacturers
ZNFU	Zambia National Farmers Union

CHAPTER 1-INTRODUCTION

1.1 Introduction

The recent global financial crisis of 2008/2009 has increased scholarly and policymakers' interest in credit risk and bank stability in general, and the problem of non-performing loans as an indicator of loan defaults in particular. This study focuses on the causes of loan defaults and Non-Performing Loans (NPLs) within commercial banks in Zambia from the perspective of bank employees. The introductory chapter is broken down into the background of the study, statement of the problem, research objectives and research questions, significance of the study and the scope of the study.

1.2 Background to the Study

1.2.1 Global Loan Defaults/NPLS Trends and Drivers

The Zambian economy and financial sector, like many other developing countries has undergone significant reforms since the IMF and World Bank recommended economic liberalization of the early 1990s (World Bank, 2015). The liberalization of the sector in most developing countries resulted into the influx of new banks and other financial institutions, increased competition and technological advances that have changed the structure and performance of the sector. Since the 1990s, the financial sector reforms and changing market structure of the financial sector in most developing countries, the level of NPLs remain high, indicating the failure of the credit policy. The high NPLs have contributed to bank failures by deteriorating the balance sheets and undermined the intermediation role of banks (Angelini, 2018). Figure 1 below shows the trend in NPLs across regions over the period from the second quarter of 2012 to the second quarter of 2014. As the diffusion index data show, developing countries and Africa have been the most affected by the NPLs problem.

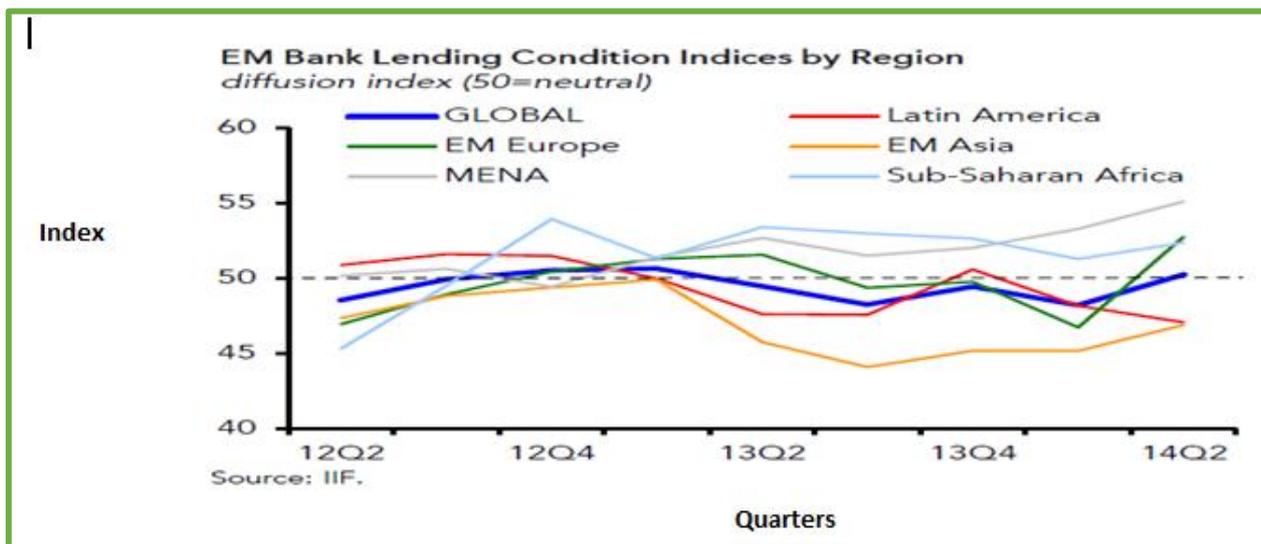


Figure 1-Global Comparison of NPL Trends

However, as the figure above shows, even regions such as the Eurozone have not been spared of the problem of NPLs particularly after the financial crisis with the majority of emerging scholarly work on the problem of NPLs focusing on the region. According to scholars such as Constancio (2017) the problem of NPLs on the books of banks operating in the Eurozone has persisted for reasons including;

- a) **Banks fear to write off NPLs during crises:** Writing off NPLs results in increased reported losses. However, in times of financial uncertainty and bank failures bank management may be averse to taking this step as it has potential to lead to more losses in the market capitalization of the bank. Consequently, banks will prefer to carry the NPLs on their balance sheets rather than take the hit arising from reporting huge losses in the crisis period which may also further lower depositor confidence.
- b) **Slow recovery in the Eurozone:** A reduction in economic activity and consequently measures such as GDP appears to be the most important driver of NPLs according to empirical studies. The slow recovery experienced in the Eurozone may also work with depressed real asset prices to exacerbate the problem of rising NPLs since real assets are the collateral for loans.
- c) **Market Inefficiency in Pricing NPLs due to Asymmetric Information:** The microeconomic theory of transactions characterized by opacity has been used to explain rising NPLs in Europe's banking sector (Constancio, 2017). Banks may be struggling to lower reported NPLs because the quality of such loans is not clear to potential buyers, while based on experience with defaulting borrowers the banks have greater information. It is then possible that problem assets are actively offered to third parties. Therefore, buyers would be unwilling to pay a higher price for higher-quality assets, given lack of information. The bank holding companies are therefore burdened with rising NPLs on their books.

These recent trends in international banking and finance have intensified the focus of both financial sector regulatory bodies and researchers alike on the problem of NPLs and the drivers of NPLs (Angelini, 2018). On the part of the Basel Committee on Banking Supervision (BCBS), recommendations to improve bank capital adequacy and early warning reviews such as stress tests are undergoing scrutiny especially after the bitter lessons of the recent global financial crisis. It is undeniable that the traditional business model of banks relies heavily on deposit backed lending to generate interest income but carries with it the risk that borrowers will not meet their loan contractual obligations at the time they are required to (Rose and Hudgins, 2010). NPLs reduce the banks' ability to advance loans. This affects aggregate demand and investment which contributes to economic stagnation in many developing economies (Ahmad, Guohui, Hasan, Ali, & ur Rehman, 2016). Given the importance of the level of NPLs to the performance and stability of banking sector, many studies have investigated the link between NPL and the survival of banks (Bilgrami-Jaffery (2015)). Other studies have explored the macroeconomic determinants of NPLs (Machacek, Melecky, & Sulganova, 2018)) while others have investigated the bank specific causes of NPLs (Beck, Jakubik, & Piloiu, 2013). Using secondary data sources these studies find mixed results of the key drivers of loan defaults among Bank clients. This study extends the empirical studies to the contexts of Zambia.

1.2.2 Brief History of Loan Defaults in Zambia

According to Mwiya (2006), loan defaults in Zambia have a distinct history that is traced to the emergence of the private sector and the decision by banks to extend credit to the private sector having previously focused on relatively lower risk or risk free lending to the public sector. The incidence of loan default has been a feature of Zambia's financial services sector for a long time with reasons such as weak legal framework and poor economic conditions being advanced for the reluctance of banks to lend especially to small borrowers in the private sector (Financial Services Magazine, 2004). This background led to businesses having difficulties accessing capital while banks lacked the mechanisms to distinguish good from bad borrowers. Poor information flows in the market implied that it was possible for a borrower to default on a loan with one bank and their credit rating with another bank still remained intact. The absence of a credit reference bureau encouraged delinquency on loan repayments. A further factor encouraging loan defaults was the overvaluation of assets pledged by borrowers as collateral for loans. As a result of these negative experiences, bank loans to private sector borrowers were of a typically short term nature as banks believed that this was a way of reducing credit risk exposures. A Credit Reference Bureau was only set up as recently as 2014 (Daily Mail, 2017).

The problem was that by then the belief that Zambian's have a poor credit culture had already become entrenched. An alternative view of why loan default rates became a key feature of Zambia's banking sector was that the gap between lending and deposit rates was too wide as a result of high operating

costs faced by banks (Mwiya, 2006, p. 4). On the other hand, increasing competition and falling yields on treasury bills compelled the banks to increase their presence in the private sector loans segment of the market.

1.3 Statement of the Problem

There has been a sharp Increase in percentage of NPLs in the banking sector by 103% between 2014 to 2017. The 14.8% in 2014 to 12.4% in 2017 is above the recommended Bank of Zambia threshold of 10.0% as depicted in Figure 2 below

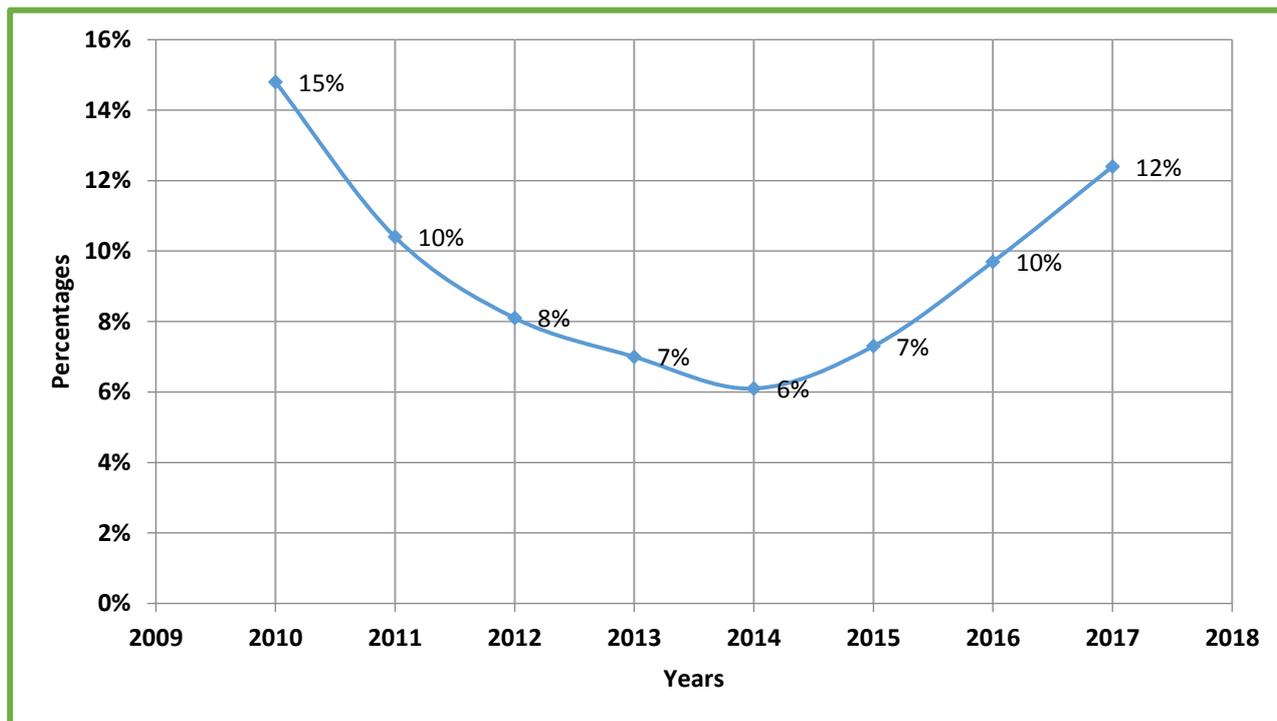


Figure 2-Analysis of the non-performing loans: 2010-2017

Source: Annual Economic Reports (GRZ, 2010-2017)

NPLs research has intensified over the recent past because regulatory authorities and banks are realizing the importance of vigilant management of credit risk in the modern globalized financial system (Sorge, 2004; Khemraj and Pasha, 2009; Nkusu, 2011; Herrerias and Moreno, 2015; Allen et al, 2016). The deterioration in the quality of the loan portfolio of banks was the main cause of problems in the banking system and in financial crises in developed economies. Indeed, the increase in loan defaults, banking mortgage in the United States, underlines the links between macroeconomic and financial shocks and the relationship between the friction in the credit market and the risk of systemic financial instability (Kapinos et al, 2015). The past studies and the events that have motivated them as well as the responses of regulatory bodies such as the ECB, BoZ and the BCBS in relation to both capital adequacies for banks and stronger credit risk management requirements,

suggest that the problem of NPLs should be less of an issue for banks globally and locally particularly in light of the recent global financial crisis (Constancio, 2017).

However, evidence suggests that NPLs will continue to plague banks worldwide with researchers now suggesting that focus should be on both local/domestic and, in the modern era, global factors that drive the NPLs problem to inform better credit risk management strategies as well as regulatory interventions (Beck et al, 2013; Bilgrami-Jaffery, 2015; Zikovic et al, 2015). Statistics as documented by the African Development Bank (2013,6) indicate that in the recent years post the financial crisis, the performance of banks in Zambia as measured by the return on assets (ROA) fell sharply to half a percent from as high as 6% in 2009 to as low 0.1% from 2011 onwards. This is largely attributed to a high proportion of non-performing loans and general extravagance associated with state owned institutions (African Development Bank,2013, 6). The assertions by the African Development bank on non-performing loans has continued to be a topical issue even among media houses a situation that evidently needs to be empirically investigated in the Zambian context.

For example, in more recent media reports citing the Bankers Association of Zambia and the BoZ, it was revealed that some commercial banks in Zambia have halted the issuance of loans in response to high loan defaults while the banking sector regulator also warned the banks operating in the country to be cautious of the problem of NPLs (Daily Mail, 2017). According to the IMF's Financial System Stability Assessment report for 2017, NPLs in Zambia have risen and private sector credit growth has turned negative, due to the severe pressures of 2015–16. The pressures included slower economic growth, sharply lower copper prices, electricity shortages, very tight monetary policy, and mounting fiscal arrears and severe fiscal funding pressures. Due to this, many of the would-be borrowers have been denied financing because they cannot meet the lending criteria. According to the report access to finance has particularly worsened for small- and medium-sized enterprises (SMEs) in Zambia in recent years. The limited provision of SME finance, including state-owned nonbank financial institutions (NBFIs) and capital markets, have left SMEs significantly underserved. Challenges include high levels of informality and collateral requirements, and poor bank lending tools. This has been exacerbated by recently very high real interest rates and crowding out of private credit markets by government debt. Thus, a lot of possible investments activities have ended up on the drawing board due to non-servicing of loans which reduces the net worth of a country and in turn negatively affects the economy (IMF, 2017). The rise in NPLs on the books of Zambian banks is observed with the background of the establishment of a Credit Reference Bureau and Credit Risk Scoring system in 2014 to enhance the credit risk management of banks in Zambia (BoZ, 2014). As observed earlier past studies into loan defaults and the NPLs problem conducted in other countries have stressed the importance of investigating the unique local factors that help explain the problem prior to the design of appropriate strategies for credit risk management (Zikovic et al, 2015).

From the analysis as outlined above therefore, it is evident that lending is not only a critical aspect of a bank's capital structure and profitability but is also critical for overall financial intermediation and stability in an economy such as Zambia. In view of the above as well, it is evident that the situation of NPLs as outlined above justifies empirical research into this subject particularly as there is a paucity of studies that have recently looked into this emerging issue within the Zambian context. This research project addressed the problem by comprehensively investigating the factors that drive loan defaults and the NPLs problem faced by banks operating in Zambia; both from an economic subsector perspective and a macroeconomic factors perspective. Several shocks to the financial system that arise from factors specific to the banks or FIs and macroeconomic imbalances affect the profitability of firms and the level of NPL. However, it is not clear as to which of the factors- macro or bank specific are most significant in driving the NPLs in Zambia. Thus, the questions that arise are: do bank specific factors rank higher than macroeconomic specific factors in driving NPLs in Zambia? The study was conducted using a mixed methods research approach in order to extensively explore the relevant quantitative and qualitative factors that drive loan default and the NPLs in the context of Zambia's banking sector.

1.4 Research Objectives

1.4.1 General Objective

The objective of this research study was to explore and evaluate the determinants of NPLs in the Zambian financial sector at large.

1.4.2 Specific Research Objectives

Towards the attainment of the research aim as outlined above, the study used the following specific objectives;

- To identify the bank level factors (credit policy management related failures) most likely to cause bank customers to default on their loan payment from the bank employee perspective.
- To identify the macroeconomic factors most likely to cause bank customers to default on their loan payment from the bank employee perspective.
- To propose potential solutions to NPL problem in Zambia

1.5 Research Questions

Towards the attainment of the research objectives as outlined above, below are the proposed research questions, which resonate with the research objectives as follows;

Research Question 1: What are the bank level factors most likely to cause bank customers to default on their loan payment from the bank employee perspective?

Research Question 2: What are the macro level factors most likely to cause bank customers to default on their loan payment from the bank employee perspective?

Research Question 3: What solutions can be used or employed by banks operating in Zambia to reduce on loan default on loans?

The study tested the hypothesis stated as follows:

Null Hypothesis: Macro and bank specific factors play an equal role as major causes of NPLs in Zambia's banking sector.

Alternative Hypothesis: Macro factors (uncontrollable factors) are more likely to be the major causes of NPLs in Zambia's banking sector compared to bank specific factors.

1.6 Scope of the Study

The study focused on Zambia's financial services sector and all bank and non-bank lending institution currently operating in the sector. Specifically, the study focused on the lending operations of all deposit taking banks operating in the country under the regulation of the Bank of Zambia (BoZ). Further the study focused on loans provided by the lending institutions to both corporate and personal account holders and borrowers. Geographically, the study was conducted in Lusaka city where all banks as well as the majority of MFIs operating in Zambia have their headquarters.

1.7 Significance of the Study

The case for loans in the capital structure and profitability of a bank cannot be overemphasised. In view of the critical role that lending has in banking operations, this study sought to provide further insights towards the efficacy of the banking industry by empirically highlighting the reasons for the increase in loan defaults and NPLs. The study therefore helps in evaluating the views of important bank credit department employees as key stakeholders on the causes of loan defaults and how best to make amends to this worrying trend in the Zambia banking industry. The study provides information that is useful for policymakers in charge of risk management compliance within the banks themselves and the Bank of Zambia as the regulatory authorities in Zambia's banking sector. The findings from this study are also useful in addressing knowledge gaps vis-à-vis existing lending policies and informing new lending policy options based on the findings of the study. The findings of this research could also serve as a good reference point for further research and a guide to potential investors in the Zambian banking industry.

1.8 Organisation of the dissertation

The rest of the paper is organized as follows; Chapter 2 provides the literature review, placing the problem of loan defaults and NPLs within the context of theory and existing empirical research on why the problems exists and consequently what can be done to address them. Chapter 3 provides the empirical research framework that was applied by the researcher to explore the problem within the context of Zambia's banking sector while chapter 4 presents and discusses the results. The conclusions and policy implications of the study are presented in chapter 5.

CHAPTER 2- LITERATURE REVIEW

2.1 Introduction

The subject of loan default, loan delinquency or from a measurement perspective non-performing loans arising from credit risk exposures is of interest to the banking sector and financial services sector. Various sources of empirical literature identify a number of reasons why loan delinquency has been on the increase among commercial banks in different and across different time periods. The identified factors among others include inflation, interest rates, and poor credit appraisal practices amongst other factors. The sections below provide some brief details on these factors as informed by literature and review past works done by other authors. The literature review begins with a historical account of Zambia's financial services sector before looking at the theoretical and empirical perspectives on loan default.

2.2 NPLs in the Zambian Banking Historical Context

Despite the importance of NPLs to the performance and stability of the banking and financial services sector in a country and globally, few or no empirical studies have attempted to explore the determinants of NPLs in Zambia. This is more so given the changes that have occurred in the sector that have intensified competitive pressures, contributed to a few bank failures and brought the problem of NPLs to the fore (Bank of Zambia, 2017).

Upon attaining Independence on 24th, October 1964, there were a few banks operating in Zambia. In the subsequent decades, the Zambian economy was subject to extensive government intervention during the 1970s and 1980s which made a major contribution to the long-term decline of the economy (Sardanis, 2014). However, since the 1990s economic and banking sector reforms, the Zambian economy and the financial sector has undergone substantial reconfiguration of the Zambian banking system (Mwenda, 2002). Before liberalization, the banking system was composed of a group of public and privately-owned domestic banks holding approximately 60% of the assets of the banking system. A group of foreign banks held the remaining 40% of the assets. Between 1992 and 1994, ten new banks were established by domestic private investors. However, these new banks, along with other domestic banks, failed in the subsequent years. As a result, existing foreign banks progressively increased their market share in Zambia. While in the early 1990s the combined assets of foreign-owned banks did not represent more than 40% of the banking system assets, at the end of 2005 seven foreign banks among them international brands such as Barclays, Standard Chartered, Stanbic and Citibank - held 73% of total assets. Moreover, in 2005 foreign banks had 79% of the total lending portfolio, 69% of the deposits in the banking system and they operated 91 of the existing 156 bank branches in Zambia. (Martins, 2006).

The history of Zambia's banking sector, similar to the Zambian economy overall, can thus be divided into two major eras as follows;

- 1) **1964-1990:** This was a period of heavy regulation of the economy by the Zambian government. Consequently, there were a few banks operating in the sector that were either state owned or foreign-owned (Sardanis, 2014)
- 2) **1991- Present:** In the early years after the liberalization of the Zambian economy in 1990s, more banking institutions begun to emerge in Zambia's banking sector with both local and foreign ownership. However, despite the entry of these private sector banks in the 1990s, a number of them were liquidated in the same period leaving the banking industry still relatively uncompetitive. The foreign banks continue to dominate in terms of market share. For instance, foreign banks in Zambia account for approximately 73% in terms of market share of depositors while the local banks which are in majority but thinly spread across the country only account for 27%, (Lune, 2006). Nevertheless, the sector has experienced an increase in the number of banks in the sector, from less than 10 in the mid-1990s to 18 as at 2017 while the rise of non-bank lending institutions such as those engaged in microfinance has increased pressure on traditional banks to generate revenues.

According to Bridge (1996), the Zambian private sector first entered the banking industry in 1984 when Meridian Bank, was founded. By mid-1995 there were around 13 banks owned by local private sector investors (henceforth local banks) in operation in Zambia. Most of these banks began operating during the first half of the 1990s. At a time when most sectors of the economy were suffering from recession, the banking sector experienced remarkable growth.

However, bank failures afflicted so far four of the local banks in Zambia which is a significant number given the small number of banks that have operated in the country. An extreme example of bank failure for a bank operating in Zambia that may be used to demonstrate poor lending practices is that of Capital Bank. Capital Bank was closed for reasons which remain contentious largely because of the political controversy surrounding this episode. It began suffering from liquidity shortfalls in 1990 after a rapid expansion of its loan portfolio and was forced to seek liquidity from the BOZ. The BOZ accommodated its liquidity needs for several months, but in early 1991 Capital Bank suffered another liquidity crisis when some of its parastatal deposits were withdrawn and government allegations that it had lent money to its own directors, who were leading opposition politicians, contributed to a run on the bank. It received further liquidity support from the BOZ but was closed down before being recapitalized in 1991 and reopened in 1992 as New Capital Bank.

Meridian BIAO Zambia (MBZ) - the Zambian subsidiary of Meridian BIAO - was closed in April 1995 following the closure of Meridian subsidiaries in Swaziland and Kenya. Meridian BIAO, which was clearly undercapitalized, faced an acute liquidity shortage and had probably expanded far too rapidly. It was reported that funds had been transferred from the subsidiaries in Africa to Meridian BIAO's own parent company (Meridian International Bank Ltd.) in the Bahamas. Other financial irregularities, including insider lending and doctoring of financial data, were discovered by a BOZ inspection of MBZ in February 1995. Two more local banks, African Commercial Bank (ACB) and Commerce Bank were closed in late 1995. The former was reported to be suffering from acute liquidity problems (Brown bridge, 1996).

In the last few years there has been increased competition from new entrants into the banking industry, forcing banks to cut costs and improve efficiency through automation and price rationalization. The banks have been forced to cut costs and improve efficiency, there is increasing internal and political pressure on banks to expand their products and services to the un-banked and under-banked. Although new entrants have been a few, Some of the new entrants introduced longer openings hours, cut queues in banking halls and provided more personalized services. A number of innovations occurred and new products were made available. These included credit and debit cards, automated teller machines (ATMs), interest bearing current accounts, and savings accounts with cheque books. Competition for deposits has increased in the urban areas, with both price and non-price competition. There is more competition for corporate clients, especially from the entry of foreign banks, which focus on this sector

Currently, according to the central Bank of Zambia, there are over 19 banks that are operating in Zambia today, comprising of both local banks and international banks that have branches in other countries as well. These banks include; AB bank, Access bank Zambia limited, African Banking Corporation Zambia limited (Banc ABC), Bank of China, Barclays bank Zambia plc, Cavmont capital bank limited, Citibank Zambia limited, Ecobank Zambia limited, Finance bank Zambia limited now renamed Atlas Mara, First alliance bank Zambia limited, First national bank Zambia limited, INDO Zambian bank limited, Intermarket banking corporation bank, International commercial bank Zambia limited, Investrust bank Plc, Stanbic bank Zambia Limited, Standard Chartered Plc, United Bank for Africa Zambia Limited, Zambian National Commercial Bank Plc.

2.3 Capital Adequacy and the NPLs Problem

The recent background in Zambia's banking sector provided above specifically raises questions about the problem of non-performing loans faced by banks, operating not only in Zambia but globally as well, that lead to losses that have to be written off against shareholders' funds. According to Bilgrami-Jaffery (2015) non-Performing Loans (NPLs) have gained the attention of economists and researchers over the last three to four decades; the period when the banking sector has experienced the increasing trend in the NPL's and also started facing major crises in different countries as well as the international financial system (Angelini, 2018). The importance of the financial sector cannot be ignored or argued as economic growth in any country cannot take place without a sound financial sector. Factors of ex-post credit risk are a matter of considerable magnitude for supervisory establishments related to management of banks and financial permanence. Non-Performing Loans (NPLs) are the result of occurrence of ex-post credit risk. Credit risk is measured in empirical research using the NPLs ratio which is a key indicator of bank asset quality, riskiness and solvency (Angelini, 2018). In the literature NPLs are termed as major cause of bank failures which may eventually result in hurting the economy. Reinhart and Rogoff (2010) stated that increasing NPLs can be marked as beginning of the banking crisis. A loan will be classified as non-performing if the borrower has ceased to pay the principal and interest, as stated in the loan repayment contract (Rose and Hudgins, 2010). Non-performing loans (NPLs) are such loans and advances on which markup or principal is overdue by 90 days or more from the due date. In banking industry, the issue of NPLs is quite significant, minimization of NPLs is indispensable for development of the banking industry and subsequently also for the economic development of the country (Rose and Hudgins, 2010).

The piling up of NPLs deteriorates the quality of banking sector assets which leads to considerable losses and significant contraction in capital buffers required by regulatory bodies (Allen et al, 2016). The rapid escalation in NPLs also limits the lending operation of banks which ultimately has repercussions on economic activity, besides increasing vulnerability of banks from internal and external shocks. The banking sector of in many developing and developed economies faces many problems due to NPL's. The rising magnitude of NPL's does not only hurt the banking sector but also hampers the economic growth of the country (Rose and Hudgins, 2010). Kaminsky and Reinhart (1999) suggest that the rising trend of non-performing loans in any economy indicates financial crises.

It is for the forgoing reasons that macro-prudential regulation of the banking sector based on the recommendations of the Basel Committee for Banking Supervision (BCBS), to illustrate the international character of the problem, strongly focuses on the capital adequacy of banks and whether they have sufficient capital to absorb losses arising from bad loans and ensure stability of the financial system against shocks that have potential to escalate the problem of bad loans through diffusion and

spillover effects (Herrerias and Moreno, 2015). On a global scale, the bitter lessons of the recent global financial crisis of 2008/09, as well as other crises before, and the expensive taxpayer funded bailouts of some of the world's largest banks that followed have reemphasized the need for vigilance in the management of risks arising from the core lending activity of banking (Hou, 2007).

In other words, loan defaults and non-performing loans are a reality that has to be managed by banks. However more crucially for individual banks there is need for greater understanding of the factors that drive loan default and non-performing loans. There appears to be greater urgency to understand what factors influence the level of non-performing loans particularly when they become seemingly uncontrollable in bad economic times; a fact incorporated in bank stress testing to assess capital adequacy and therefore stability of the banks. According to one estimate, the rate of NPLs in Europe had been increasing at an average rate of 50 billion euros per annum from the recent global financial crisis. Balgova and Plekhanov (2016) report that the volume of NPLs in the region relative to GDP more than doubled between 2009 and 2014. Figure 1 below shows recent trends in NPLs globally as reported by the Institute of International finance (IIF, 2016). In Zambia's case, the BOZ has responded to the problem by adopting measures such as upward revisions to minimum capital requirement ensure capital adequacy amongst banks operating in Zambia as well as measures intended to ensure that banks have robust risk management systems including those related to the management of credit risk exposures (Bank of Zambia, 2017). The setting up of a Credit Reference Bureau in the country in 2014 is an intervention intended to improve information flows in the loan market and help financial institutions minimise credit risk exposures and the incidence of NPLs (Shishia, Sang, Mutun'gu, & Okibo, 2014).

2.4 Role of Banking Sector in the Zambian Economy

Worldwide, the financial sector is recognised as a facilitator of economic growth and development. A deep and inclusive financial sector is generally associated with financial sector efficiencies that affect all other sectors of the economy positively (Ministry of Finance, 2017). Economic growth is a critical objective particularly for those countries that are classified as developing countries such as Zambia (Todaro & Smith, 2012). To this effect, a number of academic writings seek to establish the causal link between the contributions of various sectors towards economic growth, which is commonly measured by changes in the country's Gross Domestic Product. In the case of the relationship between the banking sector and economic growth, empirical research yields mixed results as demonstrated below. Petkovski & Kjosevski (2014) did a study aimed at establishing whether the banking sector promotes economic growth for 16 transition economies from Central and South Eastern Europe. Their findings indicate that the banking sector was lacking in analysed samples, and therefore the contribution of the relatively underdeveloped credit markets to growth was rather

limited, with only a minor positive effect to economic growth. A related study by Goaid & Sassi (2011) also showed an insignificant relationship between banking and growth which perhaps reinforces the idea that banks don't spur economic growth. Contrary to the findings as outlined above, Pradhan et al. (2014) did a study that was meant to establish the causal link between economic growth, banking sector development, stock market development, and other macroeconomic variables with the ASEAN countries. The study found that banking sector development and stock market development, as well as other macroeconomic variables, matter in the determination of long-run economic growth although the set of statistically significant independent variables varies by sample due to heterogeneity of the countries within each panel. As noted earlier however, NPLs represent a risk factor that may inhibit the banking sector from actualizing its potential in as far as contributions to the economy are concerned. This is one of the major factors that motivated the present study.

The Zambian economy is best described as a copper export commodity dependent economy that has an underdeveloped manufacturing sector, a small formal economy and a relatively large informal sector (Bank of Zambia, 2017). In the case of Zambia, one of the widely recognised principal obstacles to economic growth has been the state of the financial sector. The sector has been identified as currently playing a limited role in the Zambian economy given the relatively large informal sector and proportion of the unbanked with estimates suggesting proportions as high as 90% of adults being in informal employment (World Bank, 2015). Based on the year 2017 GDP data for example, the banking and financial services sector is reported to have held assets that were a mere 3.28% of GDP (Ministry of Finance, 2017). Given this observation, the problem of NPLs assumes greater significance.

2.5 Theoretical Views on Loan Default

2.5.1 Theoretical Views on Loan Default

There are various theories of the underlying issues explaining loan default or non-performing loans from different perspectives. These are described and discussed in the ensuing subsections.

2.5.2 Theory of Asymmetric Information

The theory of asymmetric information tells us that it may be difficult to distinguish very well between bad and good borrowers due to information challenges in financial markets may result into adverse selection and moral hazards problems (Auronen, 2004). The theory explains that in the market, the party that possesses more information on a specific item to be transacted (in this case the borrower) is in a position to negotiate optimal terms for the transaction than the other party (in this case, the lender). The idea underlying this model is that borrowers do not always provide all the information required. Even if they do, not all information will be correct (Nyoni, 2018).

The party that knows less about the same specific item to be transacted is therefore in a position of making either right or wrong decision concerning the transaction. The theory also elaborates that adverse selection and moral hazards have led to significant accumulation of non-performing loans in financial institutions (Angelini, 2018).

Borrowers generally have private (internal) information about their projects that is more accurate than the information possessed by lenders. As a consequence, a lender could still be uncertain about the default risk of a loan contract and have difficulties in assessing and controlling the nature and behavior of the borrower. The adverse selection problem occurs if lenders try to protect themselves against default risk by setting their contractual terms in a manner appropriate for the expected average quality of their loan applicants (Auronen, 2004).

On the other hand, the concept of moral hazard proposes that borrowers who have internal information take hidden actions that increase their default probability. Therefore, moral hazard arises as a result of changes in the two party's incentives after entering into a contract such that the riskiness of the contract is altered (Beck, Jakubik, & Piloiu, 2013).

2.5.3 Deflation Theory

The deflation theory (Fisher, 1933), suggests that when the debt bubble bursts the following sequence of events occurs; debt liquidation leading to distress selling and contraction of deposit currency, as financial institution loans are paid off. This contraction of deposits causes a fall in the level of prices, which leads to greater fall in the net worth of business, hence precipitating bankruptcies which leads the concerns running at a loss to make a reduction in output, in trade and in employment of labour. These cycles cause complicated disturbances in the rates of interest and a fall in the money value. The complicated disturbances described above can be summed as both external and internal forces (macro and micro factors) influencing state of over-indebtedness existing between, debtors or creditors or both which can compound loan defaults.

2.5.4 Financial Theory

Financial theory pioneered by Minsky (1974), also known as financial instability hypothesis, attempted to provide an understanding and explanation of the characteristics of financial crisis. The theory suggests that, in prosperous times, when corporate cash flow rises beyond what is needed to pay off debt, a speculative euphoria develops, and soon thereafter debts exceed what borrowers can pay off from their incoming revenues, which in turn produces a financial crisis. As a result of such speculative borrowing bubbles, banks and lenders tighten credit availability, even to companies that can afford loans and the economy subsequently contracts. The theory identifies three types of borrowers that contribute to the accumulation of insolvent debt: The "hedge borrower" can make debt

payments (covering interest and principal) from current cash flows from investments. For the "speculative borrower", the cash flow from investments can service the debt, i.e., cover the interest due, but the borrower must regularly roll over, or re-borrow, the principal. The "borrower" borrows based on the belief that the appreciation of the value of the asset will be sufficient to refinance the debt but cannot make sufficient payments on interest or principal with the cash flow from investments; only the appreciating asset value can keep the borrower afloat. Financial theory underpins this study in that, a hedge borrower would have a normal loan and is paying back both the principal and interest. This theory encapsulates the macroeconomic aspects of nonperforming loans.

2.5.5 Ownership Structure Theory

Ownership structure theory pioneered by Jensen (1976) integrated the elements of theory of property rights (Ronald, 1937), the theory of agency (Ross, 1973) and Mitnick (1974) and the theory of finance (Minsky, 1974). The theory explains why highly regulated industries such as public utilities or banks have higher debt-equity ratios for equivalent levels of risk than the average non-regulated firm. Jensen (1976) argues that, "ownership structure" rather than "capital structure" is the crucial variable to be determined, not just the relative amounts of debt and equity but also the fraction of the equity held by the manager. Ownership structure theory is appropriate for this study in that NPLs levels are investigated on basis of financial institution ownership structure dependence.

2.5.6 Patronizing and Die Another Day Effects Theories

The patronizing effects model of loan defaults proposes that there is a possibility lender are unwilling to collect. Unwillingness may arise from several factors such as poor policies, procedures, structure, rewards, physical setting, etc. Such internal problems weaken management and motivate borrowers not to repay the loan, because they are confident that no serious action will be taken against them (Islam et al, 2005).

On the other hand, the Die Another Day Effects model of loan delinquency is based on the idea that in our society gives more importance to current consumption; such that people do not mind spending the borrowed fund for consumption, if they are not strictly followed up. People hold a very short vision of thinking for today leading to sufferings tomorrow. Therefore, a significant portion of capital goes to unproductive sector that may be termed as die another day effect. In turn if borrowers are not followed up, they get wrong perception about the management, that is, it is weak, so borrowers will squander the loan money unwisely. In brief, weak follow up weakens the system leading to loan defaults and rising non-performing loans in the loan books of commercial banks (Islam et al, 2005).

2.6 Review of Empirical Studies

There are several country or bank specific studies that have investigated various aspects and implications of loan defaults in Africa and other regions of the World. These include Adeola & Ikpesu (2017) undertook a study aimed at investigating the macroeconomic determinants of non-performing loans in Nigeria, using time series data for the period 2005 to 2014. Their findings showed that inflation and the exchange rate have a positive relationship with NPL while lending rate, money supply to gross domestic product (M2GDP), and unemployment rate have a positive and significant relationship with NPL. In the case of Ghana, Addae-korankye (2014) undertook a study to ascertain the causes of loan defaults in the financial sector of Ghana. His findings indicate that the causes of loan default include; high interest rate (similar to findings by Adeola & Ikpesu above), inadequate loan sizes, poor appraisal, lack of monitoring, and improper client selection. In a similar study in Kenya, findings by Walter Okibo Bichanga (2013) found that loan repayment default was as result of non-supervision of borrowers by the banks, inadequate training of borrowers on utilization of loan funds before they received loans as well as borrowers not spending the loan amount on intended and agreed projects.

Keeton and Morris (1987) presented one of the earliest studies to examine causes of loan losses in commercial banks in USA. This study investigated the causes of loan loss diversity for a systematic sample of 2500 banks in the USA operating in Federal Reserve District states. The study used correlation analysis based on data on variables of interest for the period 1970 to 1985. The studies found evidence that economic condition, and poor performance of certain sectors were significant determinants of loan losses amongst banks in the different areas and sectors targeted for lending. This study highlights the importance of diversification of the loan book of banks as a strategy for limiting loan losses. However, this study did not consider all the relevant factors that may affect loan losses, particularly factors such as the exchange rate that have become more prominent for especially for small economies and foreign currency loans (Vogiazas and Nikolaidou, 2011). Subsequent studies such as Makri et al (2014) also find that the stability of any country's economy could largely affect business in the country and therefore the loan losses suffered by the financial system of the economy.

Sinkev and GreenWalt (1991), whose study examined the loan loss- experience of large commercial banks in USA, provided evidence that both internal and external factors explain the loan-loss rate (defined as net loan charge of plus NPLs divided by total loans plus net charge offs) of these banks. These authors found a significant positive relationship between the loan – loss rate and internal factors such as high interest rate, excessive lending, and volatile funds. This study in particular highlighted the role of credit policy of lending institutions in influencing the levels of nonperforming loans experienced.

According to Zablon et al (2015) lending policies should be reviewed to match the highly volatile economy trends within the financial markets with strong emphasis on institutional appraisals on credit worthiness. Credit policy guide is developed by very experienced team of individuals, who have theoretical and practical understanding of the bank (Birgham et al, 1996). It is the responsibility of the Head of credit and Director of risk for content of the document and to review it regularly. This document normally assists the banks in realizing its long term objectives as it is the backbone with regard to credit offering and credit risk management. (Kalui and Maina,2014) in their findings indicates that credit policy as one of the factors which affecting the loan default. Credit policies have to be adhered to in order to help in reduction of further increase in loan default. The credit policy in a financial institution will be help in inspiring confidence to the credit staff that are involved in credit evaluation. The policy will be helpful in resolving grey areas when issuing the loans and in good decision making in lending which will also be used as a monitoring tool to ensure that they are performing according to its covenants of the facility. These studies show the importance of considering the possible impact of interactions between the variables identified as explaining levels of nonperforming loans of banks.

Also, in another related study Sinkey and Greenawalt (1991) argued that depressed regional economic conditions explained the loss- rate in commercial banks. (Ewert, Schenk, & Szczesny, 2000)studied banks' lending performance in Germany. Their study found evidence that high interest rate, and inadequate collateral had significant positive relationship on the banks poor lending performance.

Bercoff et al (2002) studied the fragility of the Argentinean banking system over the 1993-1996 period. They strongly suggested that non- performing loans are affected by both bank specific factors and macroeconomic factors.

From 1985 to 1997, Salas and Saurina (2002) studied determinants of problem loans of Spanish commercial and saving banks. Their study found that real growth in GDP, rapid credit expansion, bank size, capital ratio and market power explained variations in non- performing loans.

In relation to bank size, Khandker (1998) also claims that loan recovery rate for larger loans may be lower than small loans. One of the reasons for the possible relationship between high repayment rate and small loans could be higher risk distribution. The small size of loans reduces credit risk for new borrowers (Holt and Ribe, 1991). A sound credit record should be built before bigger loans are granted to customers. It may be an important incentive for the customers to receive more loans in the future if they have good payment records and lender tend to award higher loans to those with good credit history. Abafita (2003) studied problem loans at Oromai Credit and Savings SHARE company in

Kuyu. The author argued that education, loan size, loan diversion, availability of other credit sources, loan supervision, and suitability of loan were positively related to poor loan repayment performance.

Rajan and Dhal (2003) examined non-performing loans of public sector banks in India. They found evidence that favourable macro-economic conditions, and financial factors such as maturity cost and terms of credit, bank size and credit orientation are significant determinants of non-performing loans.

Fofack (2005) conducted a study on non-performing loans in sub-Saharan Africa after which he concluded that economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans are significant determinants of non-performing loans in these countries. The author attributed strong association between the macroeconomic factors and non-performing loans to the undiversified nature of some African economies. Further, Jimenez and Saurina (2005) studied the Spanish banking sector from 1984 to 2003. They provided evidence that non-performing loans are determined by GDP growth, high interest rate and lenient credit terms. Oladebo and Oladebo (2008) conducted research on factors affecting loan repayment among small holder farmers in Ogbomoso agricultural zone of Oyo state in Nigeria. They found evidence that amount of loan collected, age experience with credit usage, and level of education were major significant socio-economic factors determining loan repayment.

Aballey (2009) studied the causes of bad loans portfolio at African Development Bank. He found evidence that non-performing loans are positively correlated to ineffective monitoring of loans and poor credit appraisal. Further, Kangimba (2010) studied determinants of non-performing loans in Standard Chartered Bank. He argued that long duration granted for repayment of loans, unwillingness of borrowers to pay back the loan, cheating in declaration of collateral, poor management, lack of business skills, and high competition are the reasons for non-performing loans.

Din'ohi (2011) who conducted research on factors that increased the level of non-performing loans at AKIBA commercial bank found out that poor practicing of credit policies, and procedure, unavailability of accurate information was positively related to non-performing loans. The creation of a credit reference bureau could therefore be expected to help address some of the information challenges in the system and improve the asset qualities of banks (Aballey, 2009).

Several studies which followed the publication of Din'ohi have proposed similar explanations for problematic loans in Tanzania. For instance, Mwakoba (2011) studied determinants of non-performing loans at SACCOS, and found strong association between non-performing loans and high interest rate, insufficient collateral and business problems. More recently Kwayu (2011) analyzed factors for non-repayment of bank loans at NBC Dodoma region. They argued that interest rate does not affect repayment of loans, but costs incurred during loans application are high. The attitudes of

borrowers contributed to non-repayment of loans. Other reasons for poor repayment of loans were bad economic condition and high competition.

The rate of inflation is another factor that has been investigated by some studies of causes of loan defaults. When general prices levels increase across the board, the ability of borrowers to pay back loans would decrease (Rizwi and Khan,2015). In the context of Pakistan, Rizwi and Khan (2015), noted that the country that has suffered from both high inflation rate and high default rates. Nkhusu (2011) however notes that the relationship between inflation and loan default can be positive or negative. Higher inflation rates can enhance the loan payment capacity of a borrower by reducing the real value of outstanding debt and weakens the loan repayment of the borrower by reducing the real income when salaries/wages are sticky. The instability of inflation rate makes banks and other lenders apprehensive about their future values of the loans when they mature. Therefore, most of the lending institutions and banks tend to increase their rates to maintain the loan value.

2.7 Critique of the Literature

Despite the policy importance of understanding the causes of loan defaults, very little empirical work has been undertaken in the context of Zambia. The only available literature in the Zambia context on the subject matter is the Annual Economic reports by Ministry of Finance which indicated that the increase in NPLs in Zambia can be attributed to the tight liquidity conditions in the market which has led to an increase in lending rates (Republic of Zambia, 2016:36). This in turn negatively affected the borrowers' capacity to meet the loan repayment obligations, and hence the gradual increase in defaults. In the broader African context, there are a number of country or bank specific studies that have been conducted. Based on the snap shot of literature reviewed as outlined above, it is evident that whilst there are some common findings across different countries, there is no homogeneity in the results across countries and banks. Further the literature reviewed indicates that given the country specific nature of the different macro and bank level drivers of NPLs, few studies have attempted to compare the impact of factors in the two categories on the problem. However, based on the reviewed literature, the table below shows the factors identified as drivers of loan defaults and the problem of NPLs.

Table 1-Summary Drivers of Loan Defaults according to Empirical Literature

Source	Factors Identified
Adeola & Ikpesu (2017)	Inflation, exchange rate, lending rate, money supply to gross domestic product, unemployment rate
Addae-Korankye (2014)	High interest rate, inadequate loan sizes, poor appraisal, lack of monitoring, improper client selection

Bichanga (2013)	Non-supervision of borrowers by the banks, inadequate training of borrowers on utilization of loan funds before they received loans as well as borrowers not spending the loan amount on intended and agreed projects.
Keeton and Morris (1987)	Economic condition, poor performance of certain sectors
Sinkey and GreenWalt (1991)	High interest rate, excessive lending, and volatile funds
Bercoff et al (2002)	Bank specific factors and macroeconomic factors
Abafita (2003)	Loan size, loan diversion, availability of other credit sources, loan supervision, Suitability of loan.
Fofack (2005)	Economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans
Jimenez and Saurina (2005)	GDP growth, high interest rate and lenient credit terms
Kwayu (2011)	High costs incurred during loan application, attitudes of borrowers, bad economic conditions, high competition

CHAPTER 3- RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The objective of the study was to explore and rank the determinants of NPLs in the Zambian financial services sector at large from the perspective of employees of the lending institutions. The study intended to explore the subject matter of loan defaults in a natural and uncontrolled setting represented by Zambia's banking sector. "Descriptive research involves collecting data in order to answer questions concerning the current status of the study" (Gay,1992, p.217). This method involves a process to determine and report things the way they are (p.13). Using a survey, primary data was collected from 78 employees of 11 banks and 2 microfinance institutions with branches in Lusaka city.

The sample selection was made using a two-stage sampling system. In the first stage, the banks, microfinance institutions and their participating branches in the survey were purposively selected based on their levels of NPLs and the default rate being high. The sampling procedure ensured representativeness of the financial sector in Zambia. The second stage involved the selection of individual respondents from the participating bank and MFI branches.

3.2 Data Collection

Data for the study was collected by self-administered questionnaire. The questionnaire (attached in the appendix to this report) that comprised both open and closed ended questions was distributed to the employees of the selected financial institutions based within Lusaka. The closed ended questions asked respondents to rank potential factors that influence the loan default. The bank specific and macroeconomic factors were based on the findings of the literature reviewed in the previous chapter. The questionnaire also provided for open ended questions that accorded respondents an opportunity to qualitatively indicate their opinions on a variety of issues relevant to the problem of loan defaults in Zambia's financial services sector.

3.3 Data Analysis

The data collected were analyzed using Statistical Package for Social Sciences (SPSS) version 16.0. The SPSS was used to generate tables and charts that are the main form of presentation of data in this research project report. Data on the frequencies of the loan default drivers in the two main categories of bank-specific and macro variables were used to provide a rudimentary ranking of the factors that respondents considered as most prevalent in explaining the problem. The software was used to compute correlations between drivers of loan defaults adopted for the study and respondent

perceptions of the default rates in their respective financial institutions. The key messages from open ended questions were used to elaborate some of the observed rankings as perceived by employees.

3.4 Ethical Issues

In the conduct of this study, all ethical research standards were adhered to. Informed consent was sought and obtained from all respondents prior to participation in the study. Permission to conduct the study was sought from the University of Zambia GSB as well as the commercial banks themselves. Anonymity of study respondents was assured by the fact that no respondent was required to include details of their identities on the data collection instrument. No study respondents were physically or psychologically harmed in the conduct of the study and confidentiality was assured by the fact that data were collected and used solely for the academic research purposes intended.

3.5 Data Collection Methods

The study used a combination of interviews and a questionnaire for data collection. The factors that contribute to NPLs to be derived from the content analysis of literature will be used as input in the design of the questionnaire. Interviews will be used to augment the data to be derived from the questionnaire.

3.6 Limitations of the Study

Finally, the study was conducted with several methodological limitations. Firstly, the size of sample was small relative to the size of Zambia's banking and financial services sector. This raises questions about the validity and generalizability of study findings to the country's entire banking and financial services sector. Secondly the assumption of objective measurement of respondent perceptions of drivers of loan default may be argued to suffer weaknesses that reduce the scientific rigor of the present study (Ang, 2014). Further, validity concerns also arise from the fact elements of the population were not given an equal chance of being included in the sample. Nevertheless, the fact that the study was conducted essentially based on the views of employees of lending institutions as experts in the field entails that the study provides a useful contribution to the existing knowledge on the drivers of loan default and the problem of NPLs

CHAPTER 4-PRESENTATION OF RESULTS

4.1 Introduction

The objective of the study this study was to explore and rank the determinants of NPL in the Zambian financial sector at large. Data were collected by self-administered questionnaires from 78 employees of 11 Banks from credit Department and whose default rate is above the threshold of 10% . All respondents were based in Lusaka city as discussed in the previous chapter. In this chapter the results that were obtained are discussed. The results obtained were put through statistical analysis and are presented in this present chapter. The results and discussion are arranged in the following order; results on the profiles of respondents are presented and discussed first followed by results from the analysis of bank level factors that are most likely to cause bank customers to default on their loan payment from the bank employee perspective. The results from the analysis of analysis of macro level factors most likely to cause bank customers to default on their loan payment from the bank employee perspective are then presented and discussed. The results of hypothesis tests comparing the two groups of factors are also presented.

4.2 Respondent Characteristics

4.2.1 Role/Designation in Bank

The sample for the study was divided into 7 categories according to respondent designations or roles within the bank's credit departments. Table 2 below shows the percentage distribution for respondents by designation or role in their bank's credit departments. The largest proportion of respondents (25.6%) was loan officers in their banks' respective credit departments. On the other hand, the lowest proportion of respondents was represented by supervisors.

Table 2-Respondent Role/Designation

	Frequency	Valid Percent	Cumulative Percent
Valid Head of Department	7	9.0	9.0
Senior Manager	8	10.3	19.2
Manager	19	24.4	43.6
Senior Officer	15	19.2	62.8
Officer	20	25.6	88.5
Supervisor	4	5.1	93.6
Clerk	5	6.4	100.0
Total	78	100.0	

Source: Researcher 2018

4.2.2 Years in Current Role

Table 3 below shows respondents classified according to the years they had been engaged in their current roles in their respective banks' credit departments at the time of the study. The largest proportion of respondents (26.6%) had been in their current role in their banks' credit departments while the lowest proportion were those who had been in their current roles for 10 or more years.

Table 3-Respondents Analysed by Years in Credit Department Role

		Frequency	Valid Percent	Cumulative Percent
Valid	Less than 2 years	21	26.6	26.6
	2 to less than 4 years	20	25.3	51.9
	4 to less than 6 years	20	25.3	77.2
	6 to less than 10 years	11	13.9	91.1
	10 and Above	7	8.9	100.0
	Total	79	100.0	

Source: Researcher 2018

4.2.3 Perceptions of Loan Default Levels

To measure the levels of NPLs for each of the banks in the study, respondents were asked to provide their perceptions as to whether NPLs were too high or at reasonable levels (acceptable limits) as shown by Table 4. Table 4 below shows the findings in this regard. For respondents who rated their banks' NPL levels as very high, the proportion was 24.4% compared with 62.8% (the majority) who rated their banks' NPL levels as high. In contrast, only 12.8% of respondents rated their banks' NPL levels as being within acceptable limits. Cumulatively therefore, 87.2% of respondents perceived their banks' NPLs as being either very high or high; an indication that they considered NPLs to be a major problem in Zambia's banking sector.

Table 4-Ratings of NPLs Levels

		Frequency	Valid Percent	Cumulative Percent
Valid	Very High	19	24.4	24.4
	High	49	62.8	87.2
	Within acceptable limits	10	12.8	100.0
	Total	78	100.0	

Source: Researcher 2018

Table 5 below provides the findings from the analysis of perceptions of loan default rates/ NPLs levels when cross tabulated against respondent roles within their banks' credit departments. The highest proportion of heads of departments rated their banks' current customer loan default rates as Very high or high. For senior managers on the other hand, the highest proportion in this category of respondents perceived their current customer loan default rates as being high. A similar pattern was found among 'managers' and 'loan officers'.

Table 5-Respondent Roles in Bank Credit Department and Loan Default Rate Perception

		What is your perception of the current loan default rates in the Bank?			Total
		1 Very High	2 High	3 Within acceptable limit	
1 Head of Department	Count	4	2	1	7
	% of Total	5.2%	2.6%	1.3%	9.1%
2 Senior Manager	Count	2	6	0	8
	% of Total	2.6%	7.8%	0.0%	10.4%
3 Manager	Count	3	12	3	18
	% of Total	3.9%	15.6%	3.9%	23.4%
4 Senior Officer	Count	5	9	1	15
	% of Total	6.5%	11.7%	1.3%	19.5%
5 Officer	Count	2	16	2	20
	% of Total	2.6%	20.8%	2.6%	26.0%
6 Supervisor	Count	3	1	0	4
	% of Total	3.9%	1.3%	0.0%	5.2%
7 Clerk	Count	0	2	3	5
	% of Total	0.0%	2.6%	3.9%	6.5%
Total	Count	19	48	10	77

% of Total	24.7%	62.3%	13.0%	100.0%
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Source: Researcher 2018

On the hand, the highest proportion of supervisors considered their banks' current default rates as being very high. For respondents in the category of clerks, the highest percentage considered their banks' default rates as being within acceptable limits. Table 6 below provides a similar analysis in relation to years respondents had been in their current roles at the time of the study and their perceptions of their banks' loan default rates.

Table 5 below shows that respondent's perceptions of bank customer default rates may be affected by the length of their service in current roles in their organizations.

Table 6-Respondent Years in Current Role and Loan Default Perceptions

		What is your perception of the current loan default rates in the Bank?			Total
		Very High	High	Within acceptable limit	
Less than 2 years	Count	5	12	3	20
	% within How long have you been in this role?	25.0%	60.0%	15.0%	100.0%
	% within What is your perception of the current loan default rates in the Bank?	26.3%	24.5%	30.0%	25.6%
	% of Total	6.4%	15.4%	3.8%	25.6%
2 to less than 4 years	Count	6	12	2	20
	% within How long have you been in this role?	30.0%	60.0%	10.0%	100.0%
	% within What is your perception of the current loan default rates in the Bank?	31.6%	24.5%	20.0%	25.6%
	% of Total	7.7%	15.4%	2.6%	25.6%
4 to less than 6 years	Count	7	8	5	20
	% within How long have you been in this role?	35.0%	40.0%	25.0%	100.0%
	% within What is your perception of the current loan default rates in the Bank?	36.8%	16.3%	50.0%	25.6%
	% of Total	9.0%	10.3%	6.4%	25.6%
6 to less than 10 years	Count	1	10	0	11
	% within How long have you been in this role?	9.1%	90.9%	.0%	100.0%
	% within What is your perception of the current loan default rates in the Bank?	5.3%	20.4%	.0%	14.1%
	% of Total	1.3%	12.8%	.0%	14.1%
10 and Above	Count	0	7	0	7
	% within How long have you been in this role?	.0%	100.0%	.0%	100.0%
	% within What is your perception of the current loan default rates in the Bank?	.0%	14.3%	.0%	9.0%
	% of Total	.0%	9.0%	.0%	9.0%
Total	Count	19	49	10	78
	% within How long have you been in this role?	24.4%	62.8%	12.8%	100.0%
	% within What is your perception of the current loan default rates in the Bank?	100.0%	100.0%	100.0%	100.0%
	% of Total				

	24.4%	62.8%	12.8%	100.0%
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Source: Researcher 2018

4.3 Bank level Loan Default Factors

As noted in the relevant literature on determinants of loan defaults and the NPLs problem, a key group of factors that explain the problem may be classified as bank level or bank specific loan default factors including variables as such as non-supervision of customers on their loan utilisation, late disbursements of loans by the bank, no penalties for defaulters, non-reminders of some customers concerning their repayment obligation, unfavourable payment terms etc. Respondents were asked to provide ratings for factors in this category according to whether they are highest drivers of loan defaults (Table 7), high drivers of loan defaults (Table 8), average drivers of loan default (Table 9), lower drivers of loan defaults (Table 10) or least likely drivers of loan defaults (Table 11).

Table 7 summarizes the scores attached to 13 bank specific loan default drivers or factors by study respondents when considered from the perspective of highest (or most likely) bank specific loan default factors. As the results in the table show, respondents rated non-supervision of customers on their loan utilisation as being the most prominent of the highest bank specific drivers of loan defaults. This was followed by non-reminders of some customers concerning repayment obligation. The lowest ranked bank specific factors in this regard were high bank staff turnover and inadequate loan sizes in relation to the client needs.

Table 7-Highest Bank Specific Loan Default Drivers

Factor	Frequency (%)	Score
Non-supervision of customers on their loan utilisation	20	
Poor Loan Appraisal	15	
Lack of training for the clients before/after disbursement	17	
Non-reminders of some customers concerning repayment obligation	18	
No penalties for defaulters	16	
Late disbursement of loans by the bank	7	
Lack of compliance to bank credit policy by staff	5	
Lack of staff capacity building by banks	3	
Incompetence by bank staff	5	

Amount of repayment in each month too high	5
Unfavourable payment terms i.e. tenure.	4
High bank staff turnover	2
Inadequate loan sizes in relation to the client needs	2

Source: Researcher 2018

Table 8 summarizes the scores attached to the 13-bank specific loan default drivers or factors by study respondents when considered from the perspective of high (or likely) bank specific loan default factors. As the results in the table show, respondents rated Lack of training for the clients before/after disbursement as being the most prominent of the high bank specific drivers of loan defaults. This was followed by there being no penalties for defaulters. The lowest ranked bank specific factors in this regard were lack of compliance to bank credit policy by staff and incompetence by bank staff.

Table 8-High Bank Specific Loan Default Drivers

Factor	Frequency Score
Non-supervision of customers on their loan utilisation	19
Poor Loan Appraisal	14
Lack of training for the clients before/after disbursement	24
Non-reminders of some customers concerning repayment obligation	21
No penalties for defaulters	23
Late disbursement of loans by the bank	14
Lack of compliance to bank credit policy by staff	7
Lack of staff capacity building by banks	12
Incompetence by bank staff	3
Amount of repayment in each month too high	9
Unfavourable payment terms i.e. tenure.	18
High bank staff turnover	14
Inadequate loan sizes in relation to the client needs	17

Source: Researcher 2018

Table 9 summarizes the scores attached to the 13-bank specific loan default drivers or factors by study respondents when considered from the perspective of average (or reasonably likely) bank specific loan default factors. As the results in the table show, respondents rated Lack of training for the clients before/after disbursement as being the most prominent of the high bank specific drivers of loan defaults. This was followed by poor loan appraisal. The lowest ranked bank specific factors in this regard were incompetence by bank staff and incompetence by bank staff and late disbursement of loans by the bank.

Table 9-Average Bank Specific Loan Default Drivers

Factor	Frequency Score
Non-supervision of customers on their loan utilisation	17
Poor Loan Appraisal	23
Lack of training for the clients before/after disbursement	24
Non-reminders of some customers concerning repayment obligation	20
No penalties for defaulters	13
Late disbursement of loans by the bank	7
Lack of compliance to bank credit policy by staff	18
Lack of staff capacity building by banks	12
Incompetence by bank staff	10
Amount of repayment in each month too high	19
Unfavourable payment terms i.e. tenure.	17
High bank staff turnover	16
Inadequate loan sizes in relation to the client needs	17

Source: Researcher 2018

Table 10 summarizes the scores attached to the 13-bank specific loan default drivers or factors by study respondents when considered from the perspective of lower (or unlikely) bank specific loan default factors. As the results in the table show, respondents rated Incompetence by bank staff incompetence by bank staff as being the most prominent of the lower bank specific drivers of loan defaults. This was followed by lack of staff capacity building by banks. The lowest ranked bank

specific factors in this regard were lack of training for the clients before/after disbursement and non-reminders of some customers concerning repayment obligation.

Table 10-Lower Bank Specific Loan Default Drivers

Factor	Frequency Score
Non-supervision of customers on their loan utilisation	12
Poor Loan Appraisal	13
Lack of training for the clients before/after disbursement	9
Non-reminders of some customers concerning repayment obligation	7
No penalties for defaulters	10
Late disbursement of loans by the bank	14
Lack of compliance to bank credit policy by staff	24
Lack of staff capacity building by banks	27
Incompetence by bank staff	28
Amount of repayment in each month too high	20
Unfavourable payment terms i.e. tenure.	17
High bank staff turnover	16
Inadequate loan sizes in relation to the client needs	21

Source: Researcher 2018

Table 11 summarizes the scores attached to the 13-bank specific loan default drivers or factors by study respondents when considered from the perspective of least (or most unlikely) bank specific loan default factors. As the results in the table show, respondents rated late disbursement of loans by the bank as being the most prominent of the lower bank specific drivers of loan defaults. This was followed by high bank staff turnover. The lowest ranked bank specific factors in this regard were non-supervision of customers on their loan utilisation and lack of training for the clients before/after disbursement.

Table 11-Least Bank Specific Loan Default Drivers

Factor	Frequency Score
---------------	------------------------

Non-supervision of customers on their loan utilisation	10
Poor Loan Appraisal	14
Lack of training for the clients before/after disbursement	10
Non-reminders of some customers concerning repayment obligation	11
No penalties for defaulters	16
Late disbursement of loans by the bank	33
Lack of compliance to bank credit policy by staff	24
Lack of staff capacity building by banks	19
Incompetence by bank staff	31
Amount of repayment in each month too high	24
Unfavourable payment terms i.e. tenure.	20
High bank staff turnover	28
Inadequate loan sizes in relation to the client needs	21

Source: Researcher 2018

4.4 Macro level Loan Default Factors

Macro level loan default factors investigated included interest rates, exchange rates, public debt, annual GDP growth rates and high unemployment levels. Table 12 below summarizes the scores attached to the 5-macro level loan default drivers or factors by study respondents when considered from the perspective of highest loan default factors. As the results in the table show, respondents rated High Interest Rates as being the most prominent of the macro level drivers of loan defaults. This was followed by Unfavourable Exchange Rates. The lowest ranked macro level factors in this regard were Annual GDP Growth Rates and Public Debt Levels.

Table 12-Highest Macro Level Loan Default Drivers

Factor	Frequency Score
High Interest Rates	44
Unfavourable Exchange Rates	17

Public Debt Levels	13
Annual GDP Growth Rates	7
High Unemployment Levels	14

Source: Researcher 2018

Table 13 below summarizes the scores attached to the 5-macro level loan default drivers or factors by study respondents when considered from the perspective of high loan default factors. As the results in the table show, respondents rated High Interest Rates as being the most prominent of the macro level drivers of loan defaults. This was followed by Unfavourable Exchange Rates, Public Debt Levels and High Unemployment Levels. The lowest ranked macro level factors in this regard were Annual GDP Growth.

Table 13-High Macro Level Loan Default Drivers

Factor	Frequency Score
High Interest Rates	22
Unfavourable Exchange Rates	20
Public Debt Levels	20
Annual GDP Growth Rates	17
High Unemployment Levels	20

Source: Researcher 2018

Table 14 below summarizes the scores attached to the 5-macro level loan default drivers or factors by study respondents when considered from the perspective of average loan default factors. As the results in the table show, respondents rated Annual GDP Growth Rates as being the most prominent of the macro level drivers of loan defaults. This was followed by Unfavourable Exchange Rates and Public Debt Levels. The lowest ranked macro level factors in this regard were high unemployment and high interest rates.

Table 14-Average Macro Level Loan Default Drivers

Factor	Frequency Score
---------------	------------------------

High Interest Rates	12
Unfavourable Exchange Rates	20
Public Debt Levels	20
Annual GDP Growth Rates	29
High Unemployment Levels	15

Source: Researcher 2018

Table 15 below summarizes the scores attached to the 5-macro level loan default drivers or factors by study respondents when considered from the perspective of lower loan default factors. As the results in the table show, respondents rated High unemployment levels as being the most prominent of the macro level drivers of loan defaults. This was followed by Unfavourable Exchange Rates. The lowest ranked macro level factors in this regard were high interest rates.

Table 15-Lower Macro Level Loan Default Drivers

Factor	Frequency Score
High Interest Rates	12
Unfavourable Exchange Rates	14
Public Debt Levels	13
Annual GDP Growth Rates	13
High Unemployment Levels	15

Source: Researcher 2018

Table 16 below summarizes the scores attached to the 5-macro level loan default drivers or factors by study respondents when considered from the perspective of least loan default factors. As the results in the table show, respondents rated Annual GDP Growth Rates as being the most prominent of the macro level drivers of loan defaults. This was followed by Unfavourable Exchange Rates and Public Debt Levels. The lowest ranked macro level factors in this regard were high interest rates.

Table 16-Least Macro Level Loan Default Driver

Factor	Frequency Score
---------------	------------------------

High Interest Rates	12
Unfavourable Exchange Rates	20
Public Debt Levels	20
Annual GDP Growth Rates	12
High Unemployment Levels	13

Source: Researcher 2018

4.5 Hypothesis Test Results

Table 17 below shows the results of correlational analysis which were used as the basis for testing the research hypothesis of the relative importance of bank specific and macro level drivers of loan default in Zambia's banking sector.

Table 17 shows that of the 13-bank specific drivers of loan defaults in Zambia's banking sector, only 4 had correlation coefficients with the perceived levels of loan defaults that were statistically significant i.e. Poor Loan Appraisal and unfavourable payment terms i.e. tenure at the 1% level of significance. At the 5% level of significance for loan default drivers in this category, no penalties for defaulters and lack of compliance to bank credit policy by staff generated correlation coefficients that were statistically significant at the 5% level.

In contrast, all the macro level variables were found to have statistically significant correlation coefficients with the dependent variable apart from the High Unemployment Levels (See Table 16 below). Specifically, High Interest Rates, Unfavourable Exchange Rates and Annual GDP Growth Rates had statistically significant correlation coefficients with the dependent variable at the 5% level. Of the macro level drivers of loan defaults and NPLs in Zambia's banking sector, only Public Debt Levels had a statistically significant correlation coefficient with the dependent variable at the 1% level of significance.

Table 17-Correlation Matrix-Default factors and Default Rates

BANK SPECIFIC FACTORS	Factor	Pearson's rho	Sig. (Two tailed)
	Non-supervision of customers on their loan utilisation	.087	.306
	Poor Loan Appraisal	0.267	0.001**
	Lack of training for the clients before/after disbursement	-0.321	0.664

	Non-reminders of some customers concerning repayment obligation	0.033	0.411
	No penalties for defaulters	0.145	0.031*
	Late disbursement of loans by the bank	0.201	0.232
	Lack of compliance to bank credit policy by staff	0.345	0.023*
	Lack of staff capacity building by banks	-0.112	0.433
	Incompetence by bank staff	-0.055	0.239
	Amount of repayment in each month too high	0.024	0.771
	Unfavourable payment terms i.e. tenure.	0.118	0.007**
	High bank staff turnover	0.016	0.315
	Inadequate loan sizes in relation to the client needs	0.421	0.891
MACRO DRIVERS	High Interest Rates	0.433	0.024*
	Unfavourable Exchange Rates	0.059	0.036*
	Public Debt Levels	0.514	0.009**
	Annual GDP Growth Rates	0.067	0.041*
	High Unemployment Levels	0.111	0.156
**. Correlation is significant at the 0.01 level (2-tailed).			
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Researcher 2018

CHAPTER 5: DISCUSSION OF RESULTS

5.1 Introduction

The current study investigated bank employee's perceptions of the determinants of the non-performing loan (NPL) in Zambia's banking sector. Past studies have classified the factors as macroeconomic level and bank level drivers of loan defaults (Bilgrami-Jaffery, 2015). The purpose of the study was to explore the strength of the various factors in each category and between the two categories in explaining the problem of loan default faced by Zambia's banking sector from the perspective of bank employees. Data were collected from credit departments of 11 banks operating in Zambia with a sample of 78 credit department employees being obtained from respondent banks. Data were collected using a self-administered questionnaire. The questionnaire featured structured questions based on Likert Scale measures of the level the intensity of respondent agreement as to how likely or unlikely the various factors were to lead to loan defaults based on their experiences/perceptions. The data were then analysed using frequency scores in SPSS version 16 to enable a ranking of the factors in each class of macro and bank level determinants of loan defaults. In this chapter, the results of the study are discussed in relation to the research questions that the study was designed to address in the context of past studies.

5.2 Bank Specific Drivers of Loan Default in Zambia's Banking Sector

The first objective of this study was to identify or explore the bank level factors most likely to cause bank customers to default on their loan payment from the bank employee perspective. In this respect, the study considered bank level drivers of loan defaults as being composed of factors that bank managers have a direct control over which may contribute to loan defaults and high levels of NPLs in Zambia's banking sector i.e. factors relevant at the micro prudential bank regulatory level (Allen, Goldstein, Jagtiani, & Lang, 2016). To this effect, 13-bank specific drivers of loan defaults in the banking sector were drawn from the extant literature in order to evaluate the extent to which they were prevalent according to the views of bank employees that were interviewed (Auronen, 2004; Bester, 1994; Bilgrami-Jaffery, 2015). The factors investigated were; 1) Non-supervision of customers on their loan utilisation; 2) Poor Loan Appraisal; 3) Lack of training for the clients before/after disbursement; 4) Non-reminders of some customers concerning repayment obligation; 5) No penalties for defaulters; 6) Late disbursement of loans by the bank; 7) Lack of compliance to bank credit policy by staff; 8) Lack of staff capacity building by banks; 9) Incompetence by bank staff; 10) Amount of repayment in each month too high; 11) Unfavourable payment terms i.e. tenure; 12) High bank staff turnover and 13) Inadequate loan sizes in relation to the client needs (Bilgrami-Jaffery, 2015; Islam, Shil, & Mannan, 2005; Makri, Tsagkanos, & Bellas, 2014).

The theoretical foundations for the inclusion of these factors in the study were the theory of asymmetric information (Auronen, 2004) as well as the Patronizing and Die Another Day Effects Theories (Islam, Shil, & Mannan, 2005). From the analysis of the data collected from the 78 bank employees in the credit departments of the Zambian banks in the study, it was observed that non-supervision of customers in their loan utilisations was a factor that banks could control which respondents felt could have the highest possibility of leading to loan defaults. In this respect the study concludes that while project viability is an important determinant of bank customer liquidity and therefore ability to meet loan obligations according to agreed schedules, the lack of proper follow-ups by banks to ensure borrowers do not expose themselves to unnecessarily high risks that compromise their ability to repay loans is a loophole in the lending cycle that is highly likely to drive loan defaults in Zambia's banking sector. This combined with what respondents identified as a poor culture of repaying loans in Zambia generally implies that banks are complicit in encouraging or facilitating loan defaults by not having robust post-loan approval policies to lower the chances of loan defaults. Further, respondents suggested that there was a propensity for borrowers to use loans for consumption rather than for investment, unwillingness to repay the loan coupled with prioritising other obligations which amplified the importance of this bank-specific driver of loan defaults.

In respect of the other bank-specific drivers of loan defaults, respondents also identified with poor loan appraisal procedures, lack of training for borrowers before/ after loan disbursements, late disbursements of loans by banks, non-compliance to bank credit policies, lack of penalties for loan defaults etc as important bank-specific drivers of loan defaults in Zambia. This study concludes that the combination of factors in this regard are symptomatic of a deep-rooted problem of weak risk management that bank management and regulatory authorities need to be consistently wary of (Allen, Goldstein, Jagtiani, & Lang, 2016). These findings and conclusions are generally consistent with the findings of a contextually disparate set of empirical studies conducted on the role of bank specific factors in the extant literature explaining loan defaults and the problem of NPLs (Cowan & Cowan, 2004; Bester, 1994; Bofondi & Gobbi, 2003; Keeton & Morris, 1987; Ewert, Schenk, & Szczesny, 2000; Cucinelli, 2015)

In this regard, the findings of the study are also consistent with the adopted theoretical frameworks of asymmetric information well as the Patronizing and Die Another Day Effects Theories (Islam, Shil, & Mannan, 2005; Auronen, 2004). In relation to the challenges posed by asymmetric information in Zambia's banking sector, the setting up of a Credit Reference Bureau (CRB) in 2014 may be helpful but this study concludes that for now banks may not be effectively using CRB reports to ascertain customer's indebtedness and creditworthiness.

5.3 Macro Level Drivers of Loan Default in Zambia's Banking Sector

The second objective of this study was to identify or explore the macro level factors most likely to cause bank customers to default on their loan payment from the bank employee perspective. In this respect, the study considered macro level drivers of loan defaults as being composed of factors arising from underlying economic conditions that banks generally do not have control over that affect the ability of their borrowers to meet loan obligations (Beck, Jakubik, & PiloIU, 2013). In other words, the study considered these as largely external factors or shocks that adversely affected the ability of borrowers to achieve their loan repayment obligations. From the extant literature and theoretical perspectives available, the study identified and explored 5 macro level drivers of loan default rates and NPLs for the study of Zambia's banking sector. These were 1) High Interest Rates; 2) Unfavourable Exchange Rates; 3) Public Debt Levels; 4) Annual GDP Growth Rates and 5) High Unemployment Levels (Angelini, 2018; Beck, Jakubik, & PiloIU, 2013; Bercoff, Giovanni, & Grimard, 2002; Bofondi & Gobbi, 2003; Herrerias & Moreno, 2011; Islam, Shil, & Mannan, 2005). Theoretically, the adoption of these factors in the study was supported by deflation theory (Fisher, 1933) and financial theory (Minsky, 1974) focusing on the roles of macroeconomic factors in explaining liquidity challenges and consequently the incidence of loan defaults and NPLs.

From the perspective of study respondents vis-à-vis the 5-macro level loan default drivers or factors, it is concluded that High Interest Rates are the most prominent of the macro level drivers of loan defaults. The recent trends of high inflation rates and consequently high nominal interest rates to guarantee real returns for banks in Zambia has been acknowledged as not only discouraging bank borrowing but also increasing debt distress challenges particularly for SMEs in the country (Daily Mail, 2017). From an empirical literature perspective, the conclusions of this study are consistent with what was observed leading up to the 2008/2009 global financial crisis (Balgova & Plekhanov, 2016). This was followed in the respondent rankings of macro level factors likely to lead to loan defaults in Zambia by Unfavourable Exchange Rates, Public Debt Levels and High Unemployment Levels. The Zambian economy is vulnerable to external shocks that typically manifest in exchange rate fluctuations that have a significant impact on variables such as liquidity, inflation and interest rates (Bank of Zambia, 2017). These shocks affect ability of businesses and individuals to meet their loan obligations. The lowest ranked of the macro level factors identified by study respondents in this regard was the Annual GDP Growth rate.

5.4 Relative Significance: Bank Specific & Macro Drivers of Loan Default in Zambia

Research Objective 3 of this study was to compare the impacts of bank specific and macro level variables on loan default rates in Zambia's banking sector. From an empirical literature perspective, this was one of the gaps identified in the extant literature that motivated this study. To draw inferences

in this area, correlation analysis was conducted for each dimension of the bank specific and macro level drivers of loan default adopted for purposes of the study with respondent perceptions of the loan default rate levels. The hypothesis tests of the significance of correlation coefficients shows that of the 13-bank specific drivers of loan defaults in Zambia's banking sector, only 4 had correlation coefficients with the perceived levels of loan defaults that were statistically significant i.e. Poor Loan Appraisal and unfavourable payment terms i.e. tenure at the 1% level of significance. At the 5% level of significance for loan default drivers in this category, no penalties for defaulters and lack of compliance to bank credit policy by staff generated correlation coefficients that were statistically significant at the 5% level.

In contrast, all the macro level variables were found to have statistically significant correlation coefficients with the dependent variable apart from the High Unemployment Levels. Specifically, High Interest Rates, Unfavourable Exchange Rates and Annual GDP Growth Rates had statistically significant correlation coefficients with the dependent variable at the 5% level. Of the macro level drivers of loan defaults and NPLs in Zambia's banking sector, only Public Debt Levels had a statistically significant correlation coefficient with the dependent variable at the 1% level of significance. Thus, the study concludes that macro variables appear to have a more significant impact on loan default rates in Zambia than bank specific variables. However, in respect of the latter, high failure rates at individual institution level may bear greater responsibility in explaining individual cases of bank challenges vis-à-vis loan default rates and NPLs. The study confirms expectations in the theoretical literature that macroeconomic factors are more likely to drive large scale movements in loan defaults than bank level factors which managers are likely to have greater control over (Beck, Jakubik, & Piloiu, 2013; Bilgrami-Jaffery, 2015; Cucinelli, 2015).

5.5 New Knowledge Contributed by the Study to Extant Literature

The subject of loan default and Non-Performing loans continues to be of theoretical and scholarly interest. Consequently, many scholars have investigated different aspects of the problem in different banking sector contexts. While the current study was not exhaustive in this regard, it dealt with the two major categories of factors most likely to drive loan defaults and NPLs in the context of Zambia's banking sector; a sector that based on the background to the study discussed has a long history of perceptions of a poor loan repayment culture. There has been a broad range of methodologies applied in the extant literature from interviews with bank credit officers to elaborate econometric models. In the former category of studies, the focus has been largely been on bank and borrower specific drivers of loan defaults while the latter category of studies has combined macro/micro level factors in empirical models estimated. Operational definitions of bank level factors such as the strength of

credit management have proved problematic in the construction of such models. This has adversely affected the external validity of such studies.

The present study adds to the literature on drivers of loan defaults and NPLs by conducting what were essentially expert interviews involving bank credit department officers to identify and rank bank level drivers of the problem and likewise macro level drivers of the problem. Further the study compares the significance of the two classes of drivers of loan defaults in the context of Zambia's banking sector. This opens up a new direction for research that past studies have paid little attention to. In this respect the present study is unique.

CHAPTER 6-CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The final chapter of this report draws conclusions on the findings of the research study vis-à-vis the research questions that the study was designed to address. The chapter also places these findings within the context of past research as well as theoretical backgrounds in order to highlight the main contributions of the research study conducted to extant literature on the subject matter. The conclusions of the study are arranged based on the order of the research objectives and presented in Chapter 1. The chapter also provides the recommendations, analysed in terms policy recommendations and recommendations for future research, arising from the conclusions made by the research study.

6.2 Conclusions of the Study

The current study investigated bank employee's perceptions of the determinants of loan defaults and Non-performing loan (NPL) in Zambia's banking sector. The study applied theories such as the Theory of Asymmetric Information, Deflation Theory and Patronizing and Die Another Day Effects Theories to identify various macro and bank specific factors that may explain and contribute to the problem of loan defaults. The purpose of the study was to explore the strength of the various factors in each category and between the two categories in explaining the problem of loan default faced by Zambia's banking sector from the perspective of bank employees.

The study was conducted in the context of Zambia's banking sector in Lusaka City where the head offices of all banks operating in Zambia are based. Data were collected from credit departments of 18 banks operating in Zambia with a sample of 78 credit department employees being obtained from respondent banks. Data were collected using a self-administered questionnaire. The questionnaire featured structured questions based on Likert Scale measures of the level the intensity of respondent agreement as to how likely or unlikely the various factors were to lead to loan defaults based on their experiences/perceptions. The data were then analyzed using frequency scores in SPSS version 16 to enable a ranking of the factors in each class of macro and bank level determinants of loan defaults.

The study identified non-supervision of customers on their loan utilization, Poor Loan Appraisal, Lack of training for the clients before/after disbursement, Non-reminders of some customers concerning repayment obligation, No penalties for defaulters, Late disbursement of loans by the bank, Lack of compliance to bank credit policy by staff, Lack of staff capacity building by banks, Incompetence by bank staff, Amount of repayment in each month too high, Unfavourable payment terms, High bank staff turnover and Inadequate loan sizes in relation to the client needs as key bank level loan default determinants. However, of these, non-supervision of customers on their loan

utilization, Non-reminders of some customers concerning repayment obligation and Lack of training for the clients before/after disbursement as the most likely (highest) drivers of bank loan defaults. Of macro level factors, the study respondents viewed High Interest Rates, Unfavourable Exchange Rates and High Unemployment Levels as the most influential macro level factors of loan defaults in Zambia. Based on the results of the correlation analysis between the loan default factors and respondent perceptions of loan default rates in their banks, it is concluded that macro level factors have greater impact on loan defaults in Zambia's banking sector than bank specific factors.

6.3 Recommendations

6.3.1 Policy Recommendations

This study provides a wide range of policy recommendations that bank managers and banking sector regulators may find useful in dealing with the mitigation of loan defaults that contribute to the problem of NPLs and the possibility of banking sector instabilities. The policy recommendations are mainly intended to address the bank level drivers of loan defaults identified in this study. Nevertheless, some of the recommendations are also relevant in relation

Credit and Credit Risk Management Policies

Credit policies and the credit risk management deficiencies of banks in general may be contributing to the problem of loan defaults in Zambia's banking sector. To address these possible deficiencies, it is recommended that banks update credit policies on a regular basis to reflect changes in the loan market including those arising from macro level drivers of loan defaults and NPLs. The policy updates should include developing closer links with the CRB given that this institution is still in its infancy in terms of operations in the Zambian financial system. From a micro prudential regulation perspective, policymakers should adopt more robust mechanisms for identifying and redressing weaknesses in the overall risk management frameworks of the banks.

Staff Training and Capacity Building

It is evident from this study that bank employees play a critical role in the implementation of policies of the banks vis-à-vis credit risk control and regulation of the probability of loan defaults faced by the banks. Thus, the banks need to review and update processes relating to staff training and capacity building in relation to knowledge on loan default patterns and effective credit administration. The capacity building should be extended towards credit department supervisory mechanisms. These measures will address the problem of loan defaults by minimizing possibilities of staff incompetence and non-adherence to lenders' credit control policies. These measures should extend specifically to critical areas such as the training of loan officers to properly assess loan applicants including processes involving consultations with the CRB.

There should be a robust appraisal system developed, implemented and well-coordinated so as to deter those that have over borrowed from borrowing again. The staff employed should also be sensitized on the consequences of failure to update records and notifying clients of outstanding loans and loan service schedules. The measures should also strengthen monitoring processes and controls in the banks' credit departments. Banks should intensify debt collection to set as an example to stop would be defaulters from doing so as well as intensifying credit checks to ensure adherence to intended loan projects.

Loan Conditions

Banks should exercise flexibility in loan conditions to minimize the likelihood of loan default. Measures recommended for consideration include reviewing interest rates in order to change from floating rates to fixed rates as appropriate considering economic conditions and the circumstances of their borrowers. Restructuring of loans affected by statutory deductions should also be taken into consideration. Restructuring of loan repayments should however only be done in cases where there is genuine need for doing so. Banks should be willing to relax conditions of collateral on public loans i.e. Landed property. They should also consider relaxing collateral requirements to ease the pressure on borrowers. Similarly, adjustments of interest rates to reduce impact on borrowers during difficult economic times as well as lengthening tenure of loans should be strategies evaluated in this respect. They should have a limit or cap for maximum interest rates to prevent loans from growing beyond acceptable tenure.

Legal and Related Measures

A variety of legal and related measures to help banks deal with the high probability of loan defaults in the Zambian loan market are also suggested. There should be more strict laws and legal remedies vis-à-vis loan defaults to protect banks. These should include putting in laws that will restrict clients from borrowing from multiple institutions. Measures intended to tighten underwriting standards should also be part of this legal framework. The work of the CRB should also be legally strengthened and their database updated for defaulters in order to combat the culture of loan defaults.

Customer Centred Measures

Although this area was not directly addressed by the empirical evidence analyzed in this study, the recommendations provided herein will be incomplete without the inclusion of customer centred recommendations. Banks should train the borrowers on importance of using borrowed money for intended purposes. There should be adequate education to borrowers on the effective use of borrowed money so that loans service themselves. They should also ensure that borrowers have stable sources of income e.g. multiple investments. Borrowers should also be educated to ensure they take time to

go through the loan contract so that clients understand what it is that they are getting into. Client education should extend to financial fitness programs to manage how they use the loan and plan for loan servicing. Banks should promote a culture of responsible borrowing by providing clients with all information needed on pros and cons of borrowing. They should also offer incentives to customers who pay back their loans early e.g. discounts

6.3.2 Recommendations for Future Research

The present study was an exploratory study focusing on identification of bank specific and macro level drivers of loan default rates in Zambia's banking sector. For future research, recommendations are as follows;

- a) Greater focus on the econometric relationships between various bank specific loan default drivers and the levels of bank NPLs
- b) Development of an econometric model predicting the levels of NPLs and loan default rates based on bank attributes and levels of key macroeconomic variables such as the copper price.

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APPENDIX A-RESEARCH APPROVAL LETTER



THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

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Approval of Study

26th April, 2019

REF. NO. HSSREC: 2019-APR-024

Charity Mumba
ZANACO - HOPC
P.O. Box 33611
Lusaka

Dear Ms. Mumba,

RE: "DETERMINANT OF LOAN DEFAULTS IN FINANCIAL INSTITUTIONS IN ZAMBIA: BANK EMPLOYEES VIEWS"

The University of Zambia Humanities and Social Sciences Research Ethics Committee IRB has approved the study noting that there are no ethical concerns.

On behalf of The University of Zambia Humanities and Social Sciences Research Ethics Committee IRB, we would like to wish you all the success as you carry out your study.

In future ensure that you submit an application for ethical approval early enough.

Yours faithfully,

Dr. J. Mwanza

BA, MSoc, Sc., PhD

CHAIRPERSON

**THE UNIVERSITY OF ZAMBIA HUMANITIES AND SOCIAL SCIENCES
RESEARCH ETHICS COMMITTEE IRB**

CC: Director Directorate of Research and Graduate Studies
Assistant Director (Research), Directorate of Research and Graduate Studies
Assistant Registrar (Research), Directorate of Research and Graduate Studies
Senior Administrative Officer (Research), Directorate of Research and Graduate Studies

Excellence in Teaching, Research and Community Service

QUESTIONNAIRE

FACTORS CONTRIBUTING TO LOAN DEFAULTS IN ZAMBIA

Dear Respondent,

My name is Charity Mumba, I am an MBA student with the University of Zambia Graduate Business School (GSB). I am currently conducting a research that seeks to obtain information on the lenders' perceptions of the bank specific and external conditions or factors that explain the default rates. As a key stakeholder in the lending process within the banking sector, you have been selected to be among the respondents to this questionnaire. Kindly endeavor to answer the questions with utmost sincerity because the quality of your responses will determine the quality of this research.

It is my desire that all information you give to be kept confidential. Therefore, I request that you do not write your name on this survey form. Your open and sincere answers are needed to make this study successful, so I request that you to answer all questions as completely and honestly as you can.

Kindly note that all information you provide will be treated with maximum confidentiality. I shall therefore not write your name on this survey form. I wish to further indicate that this research is being conducted purely for academic purposes.

INSTRUCTIONS

- 1. Please, answer each question by ticking () at the side or filling in the spaces provided.**
- 2. Do not indicate anything that will identify you, (e.g. name, signature).**

Question 1: What is your role/designation in your current organization?

- Head of Department
- Senior manager
- Manager
- Senior officer
- Officer
- Supervisor
- Clerk

Question 2: How long have you been in this role?

- Less than 2 years
- 2 to less than 4 years
- 4 to less than 6 years
- 6 to less than 10 years
- 10 and above

Question 3: Which among the following sub sections of the financial sector do you belong?

- Banking Sector
- Leasing
- Microfinance

Based on the literature I have reviewed, and interviews conducted from different banks, below are factors that drive loan default rates higher. In your professional opinion, kindly rate the factors in terms of how they have contributed in driving the loan defaults higher in Zambia.

1. What is your perception of the current loan default rates in the Bank?

Very High

High

Within acceptable

Low

For the next questions, please use this key

Key:

5 = Highest driver of loan

4 = high driver of loan defaults

3 = Average driver of loan defaults

2 = Lower drivers of loan defaults

1 = least driver of loan defaults

Kindly rate the factors () in the boxes provided

A	BANK RELATED FACTORS	5	4	3	2
A1.	Poor Loan appraisal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2.	Inadequate loan sizes in relation to the client needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A3.	Lack of compliance to the bank credit policy by staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A4.	Non-supervision of customers on their loan utilization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A5.	Late disbursement of loans by the bank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A6.	No penalties for defaulters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A	BANK RELATED FACTORS <i>(continued)</i>	5	4	3		
A7.	Non-reminders of some customers concerning their repayment Obligations	<input type="checkbox"/>				
A8.	Unfavourable payment terms i.e. tenure.	<input type="checkbox"/>				
A9.	Lack of training for the clients before and after disbursement	<input type="checkbox"/>				
A10.	Incompetence by bank staff	<input type="checkbox"/>				

A11. Lack of capacity building by bank staff

A12. High staff turnover

A13. Starting time to repay is too early

A14. Loan repayment period is short

A15. Amount of repayment in each month is too high

<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

B ECONOMIC FACTORS

5 4 3 2

B1. High Interest Rates

B2. Client Business Failures

B3. Misuse of loan proceeds to unintended use by clients

B4. High exchange rate

B5. Public Debt

B6. Annual percentage growth of gross domestic product (GDP)

<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

C OTHERS

5 4 3 2

C1. Ineffectiveness of the credit reference Bureau (CRB)

C2. Dismissal and insurance do not cover those dismissed

C3. Unforeseen contingencies. Death or illness of family member

C4. Unemployment levels are high

C5. Most borrowers did not spend the loan on intended projects

<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

The list of factors that contribute to loan defaults provided above may not be exhaustive. Kindly write any factors that you think drive loan defaults higher in Zambia which may not have been covered above (kindly use bullet points).

SECTION C: SOLUTIONS TO THE HIGH DEFAULT

What do you think should be done by banks to improve the loan repayment process? (Kindly use bullet points)

THANK YOU SO MUCH FOR YOUR TIME

	22 Ineffectiveness of the credit reference bureau (CRB)	12	.6	3.2	87.8
	5 Late disbursement of loans by the bank	7	.3	1.9	89.7
	21 Annual percentage growth of gross domestic product(GDP)	7	.3	1.9	91.6
	3 Lack of complaine to bank credit policy by staff	5	.2	1.4	93.0
	10 Incompetence by bank staff	5	.2	1.4	94.3
	15 Amount of repayment in each month too high	5	.2	1.4	95.7
	8 Unfavourable payment terms i.e. tenure.	4	.2	1.1	96.8
	13 Starting time to repay is too early	4	.2	1.1	97.8
	11 Lack of capacity building by banks to staff	3	.1	.8	98.6
	2 Inadequate loan sizes in relation to the client needs	2	.1	.5	99.2
	12 High staff turnover	2	.1	.5	99.7
	14 Loan repayment period is short	1	.0	.3	100.0
	Total	370	18.0	100.0	
Missing	System	1684	82.0		
Total		2054	100.0		

The table above shows that 370 factors were entered and classified as **highest drivers of loan defaults**. Of this number, 44 entries representing 11.9% ranked **Interest Rates** as the **highest driver of loan defaults**. In second place it is a tie between **most borrowers did not spend the loan on intended projects** and **misuse of loan proceeds to unintended use by clients** with both factors getting 37 entries representing 10%. **Client Business failure** got 32 entries representing 8.6% with **Non-supervision of customers on their loan utilisation** getting 20 entries representing 5.4%.

High driver of loan defaults

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	17 Client Business failure	27	1.3	6.5	6.5
	9 Lack of training for the clients before and after disbursement	24	1.2	5.8	12.3
	6 No penalties for defaulters	23	1.1	5.5	17.8
	18 Misuse of loan proceeds to unintended use by clients	23	1.1	5.5	23.4
	16 High Interest Rates	22	1.1	5.3	28.7
	7 Non-reminders of some customers concerning their repayment obligation	21	1.0	5.1	33.7
	19 High Exchange rate	20	1.0	4.8	38.6
	20 Public Debt	20	1.0	4.8	43.4
	25 Unemployment levels are high	20	1.0	4.8	48.2
	4 Non-supervision of customers on their loan utilisation	19	.9	4.6	52.8
	26 Most borrowers did not spend the loan on intended projects	19	.9	4.6	57.3
	8 Unfavourable payment terms i.e. tenure.	18	.9	4.3	61.7
	2 Inadequate loan sizes in relation to the client needs	17	.8	4.1	65.8
	21 Annual percentage growth of gross domestic product(GDP)	17	.8	4.1	69.9
	23 Dismissal and insurance do not cover those dismissed	15	.7	3.6	73.5
	1 Poor Loan Appraisal	14	.7	3.4	76.9
	12 High staff turnover	14	.7	3.4	80.2
	11 Lack of capacity building by banks to staff	12	.6	2.9	83.1
	14 Loan repayment period is short	12	.6	2.9	86.0
	22 Ineffectiveness of the credit reference bureau (CRB)	12	.6	2.9	88.9

	24 Unforeseen contingencies. death or illness of family member	11	.5	2.7	91.6
	15 Amount of repayment in each month too high	9	.4	2.2	93.7
	5 Late disbursement of loans by the bank	8	.4	1.9	95.7
	13 Starting time to repay is too early	8	.4	1.9	97.6
	3 Lack of compliance to bank credit policy by staff	7	.3	1.7	99.3
	10 Incompetence by bank staff	3	.1	.7	100.0
	Total	415	20.2	100.0	
Missing	System	1639	79.8		
Total		2054	100.0		

In the above table, **Client business failure** was ranked the highest on factors contributing to **High drivers of loan defaults** with 27 entries representing 6.5%. This was followed by **Lack of training for the clients before and after disbursement** which got 24 entries representing 5.8%. **Misuse of loan proceeds to unintended use by clients** and **no penalties for defaulters** came in third with 23 entries each representing 5.5%. **Interest rates** came in fifth with 22 entries representing 5.3%

Average driver of loan defaults

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21 Annual percentage growth of gross domestic product(GDP)	29	1.4	6.3	6.3
	22 Ineffectiveness of the credit reference bureau (CRB)	29	1.4	6.3	12.6
	1 Poor Loan Appraisal	23	1.1	5.0	17.6
	13 Starting time to repay is too early	21	1.0	4.6	22.2
	7 Non-reminders of some customers concerning their repayment obligation	20	1.0	4.3	26.5
	19 High Exchange rate	20	1.0	4.3	30.9
	20 Public Debt	20	1.0	4.3	35.2
	23 Dismissal and insurance do not cover those dismissed	20	1.0	4.3	39.6

15	Amount of repayment in each month too high	19	.9	4.1	43.7
3	Lack of compliance to bank credit policy by staff	18	.9	3.9	47.6
9	Lack of training for the clients before and after disbursement	18	.9	3.9	51.5
24	Unforeseen contingencies. death or illness of family member	18	.9	3.9	55.4
2	Inadequate loan sizes in relation to the client needs	17	.8	3.7	59.1
4	Non-supervision of customers on their loan utilisation	17	.8	3.7	62.8
8	Unfavourable payment terms i.e. tenure.	17	.8	3.7	66.5
5	Late disbursement of loans by the bank	16	.8	3.5	70.0
11	Lack of capacity building by banks to staff	16	.8	3.5	73.5
12	High staff turnover	16	.8	3.5	77.0
17	Client Business failure	16	.8	3.5	80.4
26	Most borrowers did not spend the loan on intended projects	16	.8	3.5	83.9
25	Unemployment levels are high	15	.7	3.3	87.2
18	Misuse of loan proceeds to unintended use by clients	14	.7	3.0	90.2
6	No penalties for defaulters	13	.6	2.8	93.0
16	High Interest Rates	12	.6	2.6	95.7
10	Incompetence by bank staff	10	.5	2.2	97.8
14	Loan repayment period is short	10	.5	2.2	100.0
	Total	460	22.4	100.0	
Missing	System	1594	77.6		
Total		2054	100.0		

Annual percentage growth of gross domestic product (GDP) and Ineffectiveness of the credit reference bureau (CRB) were ranked joint highest on factors contributing to **average driver loan defaults** with 29 entries representing 6.3%. **Poor Loan Appraisal** was third with 23 entries representing 5%. **Starting time to repay is too early** was fourth with 21 entries representing 4.6%. There was a joint fifth consisting of **Non-reminders of some customers concerning their repayment obligation, High Exchange rate, Public Debt, Dismissal and insurance do not cover those dismissed** with all these factors getting 20 entries representing 4.3%.

Lower driver of loan defaults

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10 Incompetence by bank staff	28	1.4	7.6	7.6
	11 Lack of capacity building by banks to staff	27	1.3	7.3	14.9
	3 Lack of compliance to bank credit policy by staff	24	1.2	6.5	21.5
	14 Loan repayment period is short	22	1.1	6.0	27.4
	2 Inadequate loan sizes in relation to the client needs	21	1.0	5.7	33.2
	15 Amount of repayment in each month too high	20	1.0	5.4	38.6
	24 Unforeseen contingencies. death or illness of family member	20	1.0	5.4	44.0
	8 Unfavourable payment terms i.e. tenure.	17	.8	4.6	48.6
	23 Dismissal and insurance do not cover those dismissed	17	.8	4.6	53.3
	12 High staff turnover	16	.8	4.3	57.6
	25 Unemployment levels are high	15	.7	4.1	61.7
	5 Late disbursement of loans by the bank	14	.7	3.8	65.5
	19 High Exchange rate	14	.7	3.8	69.3
	22 Ineffectiveness of the credit reference bureau (CRB)	14	.7	3.8	73.1
	1 Poor Loan Appraisal	13	.6	3.5	76.6
	20 Public Debt	13	.6	3.5	80.2

	21 Annual percentage growth of gross domestic product(GDP)	13	.6	3.5	83.7
	4 Non-supervision of customers on their loan utilisation	12	.6	3.3	87.0
	13 Starting time to repay is too early	12	.6	3.3	90.2
	6 No penalties for defaulters	10	.5	2.7	92.9
	9 Lack of training for the clients before and after disbursement	9	.4	2.4	95.4
	7 Non-reminders of some customers concerning their repayment obligation	7	.3	1.9	97.3
	26 Most borrowers did not spend the loan on intended projects	5	.2	1.4	98.6
	18 Misuse of loan proceeds to unintended use by clients	3	.1	.8	99.5
	17 Client Business failure	2	.1	.5	100.0
	Total	368	17.9	100.0	
Missing	System	1686	82.1		
Total		2054	100.0		