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Interest Rate and Loan Portfolio Performance of Commercial Banks in Uganda

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Abstract

The study established the relationship between interest rates and loan performance in commercial banks in Uganda. The specific objectives were to determine the effect of prime lending rate on loan portfolio performance, and to ascertain the contribution loan collateral on loan portfolio performance in Stanbic bank Aponye branch. The study adopted a cross-sectional design that used both the qualitative and quantitative approaches, using both simple random and purposive sampling techniques. The findings indicate significant effects of prime lending on loan portfolio performance. Collateral security have non-significant effects on loan portfolio performance. The study concluded that commercial banks in Uganda that vary their interest rates show superior loan portfolio performance. Commercial banks should ensure that customers to access adequate information regarding loan pricing, systems and controls in loan processes, Customer should always acquire independent advice regarding terms and conditions to loans applied so to gather insights and make appropriate decisions on borrowing, Customers should apply for repayments terms that follow trends of their cash inflow to enable timely repayments.

Key words: *Interest rates, Loan portfolio, commercial Banks*

Introduction

The early Origins interest rates concept dates back to ancient civilizations, where lending and borrowing occurred informally among individuals and merchants (Hudson, M., 2002). However, formal interest rate structures emerged during the Middle Ages in Europe, particularly with the advent of banking institutions. During the 19th century, interest rates began to be influenced by central banks (Goodhart, 1988), and the Bank of England, established in 1694, became a pioneer in setting benchmark interest rates. As industrialization progressed, central banks of various countries assumed greater roles in managing interest rates to stabilize their economies (Friedman, & Kuttner, 2010) and following World War II, many countries experienced rapid economic growth and development. Central banks focused on controlling inflation while encouraging economic expansion, leading to a gradual increase in interest rates.

The period between 1980s-1990s witnessed a significant surge in global interest rates due to soaring inflation and economic uncertainty and the Federal Reserve's aggressive measures in the United States pushed interest rates to record highs (Kose, & Terrones, 2015). However, scholars like Bernanke (2019) assert that by the late 1990s, many countries embarked on a path of easing monetary policy to combat deflationary pressures.

The U.S. Federal Reserve sets the benchmark interest rate, known as the federal funds rate. Today, the federal funds rate is at a historical low, near 0% (Hamilton, Harris, Hatzius, & West, 2016). This accommodative monetary policy was adopted in response to the COVID-19 pandemic to stimulate economic growth and facilitate lending. Relatedly, The European Central Bank (ECB) also maintains historically low interest rates, with its main refinancing rate at 0% (Rostagno, Altavilla, Carboni, Lemke, Motto, Saint Guilhem, & Yiangou, 2021). The ECB implemented unconventional measures, such as negative interest rates on deposits, to boost lending and tackle low inflation (Rostagno et-al 2021), and the Bank of Japan has pursued an ultra-low-interest rate policy for decades, attempting to combat deflation and stimulate economic activity.

Nevertheless, many developing economies especially in Africa which are emerging markets face unique challenges in managing interest rates (Knoop, 2013) and some aim to attract foreign investments by maintaining higher interest rates, while others seek to stimulate domestic consumption and investment by keeping rates low. In principle, as Borio, & Zabai (2018) argues, a rise in interest rates positively affects banks with many non-

remunerated deposits, since their benefit increases the more the rates rise in that item.

In the medium term, it could have delinquency problems with all the loans given at a variable rate, even with those given at a fixed rate; they could be below the current interest rate, producing a mismatch for the bank (Cowan, Drexler, & Yañez (2015). The high level of indebtedness forces governments in the developing world to borrow at higher rates, which increases financial expenses that consequently increases the deficit that could lead to reducing expenses.

The practice of managing loan portfolio performance dates back to the 1920s according to Fabozzi (2008) when lucrative lending opportunities and low capital raising costs encouraged banks to build up capital and increase their asset risk while still maintaining low deposit default risk in America. Banks came under intense pressure to lower deposit risk as a result of loan losses in the early 1930s and the high costs of obtaining fresh capital (Cassis 2011). Banks did this by reducing dividends while avoiding new stock offers, allowing capital to stay low. The reduction in the availability of loans served as the main strategy for lowering depositor risk and preventing withdrawals from accounts (Choudhry 2018). Due to the high adjustment costs of debt liquidation, the procedure took many years. Eminent scholars like Diez, Duval, Fan, Garrido, Kalemli-Ozcan, Maggi, & Pierri, (2021) argue that the capital shortage that compelled banks to reduce their loan portfolio risk led to the depression's contraction in bank lending in substantial part.

Good loan portfolio managers have focused much of their efforts on cautiously authorizing loans and closely observing loan performance for decades (Yhip & Alagheband 2020). Although this activity remains a staple of loan portfolio management, research of prior credit issues, such as those related to lending for oil and gas, agriculture, and commercial real estate in the 1980s, (Ouma, 2020) has shown that portfolio managers need to take additional steps. In the past, banks prioritized monitoring specific loans while controlling their overall credit risk (Yanenkova, Nehoda Drobyazko, Zavhorodnii, & Berezovska 2021). Banks should consider credit risk management in terms of portfolio segments and the total portfolio, despite the significance of this focus. The total of all loans held by a bank or finance company at any particular time is called its loan portfolio, and as a result, a bank's loan portfolio is made up of individual loans (Drake & Fabozzi 2010). The practice of managing and controlling the risks that are inherent in the credit process is known as loan portfolio management (Allen 2012). Planning for the loan portfolio, customer screening, and credit risk management are all included in loan portfolio management and Customer screening is the process of determining if loan applicants are financially sound and have the ability to benefit from and repay the loan requested (Smithson 2003).

According to Mostaghel & Chirumalla (2021) Banks need to have a competent awareness of the crucial factors that define a customer's ability to pay, such as client financial strength, credit score history, and changing payment patterns, in order to reduce the risk of bad debt and over-holding. Banks are financial institutions created in accordance with the rules and regulations of each country to lend, borrow, issue, exchange, receive deposits, safeguard, or handle money (Szulczyk 2021). According to Choudhry (2022) one of the main sources of income for the banking organization is its loan portfolio and as a result, it poses one of the biggest threats to the stability and safety of the bank. Gurbanzada (2021) argues that loan portfolio issues have historically been the main factor in bank losses and bankruptcies, whether as a result of negligence, lax credit standards, inadequate portfolio risk management, or economic downturn.

Scholars like Hilmi (2024) affirm that one of the most cut throat and fast-paced industries is banking and most commercial banks make the majority of the profits through credit facilities on a global scale. The public's borrowing habits have, nevertheless, been greatly and occasionally badly impacted by the economic climate and the difficulties commercial banks have been having in Africa are not entirely unique, either (Barreyre & Delalande 2020).

According to Gitiri (2022), Kenya's interest rate spread, for instance, has been comparatively greater than the average for Tanzania but lower than that of Uganda in East Africa and this is because Kenyan commercial banks charge riskier borrowers higher interest rates in anticipation of defaults, and as a result, interest rates take loan loss provisions into account in the decomposition. In addition to accounting for overhead expenses, taxes, and required reserves, interest rates also take all of the aforementioned elements into consideration (Amonovich, Alijonovich, Abdullaevich, & Solijanovna 2022). As a result, a large difference between the interest rates on deposits and loans may be a sign of banking sector inefficiency or a measure of the amount of financial development.

Scholars like Abor, Mensah, Kusi, & Mathuva (2022) argue that large bank failures following the crises of 1986 to 1989, 1993/1994, and 1998 in Uganda originated from non-performing assets, which are caused by the interest rate spread, they claimed that these difficulties with banking started as early as 1986.

According to Alani (2021) Uganda's lending interest rates have averaged 21% since the early 1990s, given that one goal of financial sector liberalization was to increase bank competition and drive down lending interest rates that has been a major problem. The bulk of lenders are small businesses and people, which have high operational costs and rely heavily on interest revenue from loans, hence the lending interest rates are high as a result and because small and medium-sized businesses lack reliable credit histories, banks must rely on alternative methods to manage credit risk and ensure repayment (Tumwine Akisimire, Kamukama, & Mutaremwa, 2015). The alternative methods always involve ongoing monitoring, and the cost of this monitoring is reflected in the high interest rates charged on loans, hence the interest rate charged by the lenders often depends on the risk involved in the loan as well as the goal of the loan.

Problem statement

Interest rates have a positive impact loan portfolio performance (Bacon 2023). The management of the loan portfolio's performance also has a direct impact on the bank's performance and this is so because interest income is the primary source of income for banks (Juliet 2021).
Stanbic bank is struggling with non-performing loans despite a decrease in interest rates and expansion of loan portfolio. The total amount of client loans was 2.2 trillion in 2020, 2.6 trillion in 2021, 2.9 trillion in 2022, and 3.5 trillion in 2023. Despite increase in portfolio value, non-performing loans continued to over the years, reaching 122 billion in 2022 and 130 billion in 2023 (Stanbic Bank Annual Report, 2023). This seems to indicate that the bank is not generating loan portfolio as was expected. The unmet levels of loan portfolio performance left a performance gap whose cause is not clear. Considering the unmet loan portfolio performance levels made by the banks. The study sought to establish how much interest rates contributes to loan portfolio performance management at Stanbic Bank Aponye Branch.

Objectives of the Study

General Objective

The purpose of this study was to establish the relationship between interest rates and loan portfolio performance in commercial banks in Uganda

Specific Objectives

i. To determine the effect of prime lending rate on loan portfolio performance of Stanbic bank Aponye branch.
ii. To assess the effect ofloan collateral on loan portfolio performance in Stanbic bank Aponye branch.

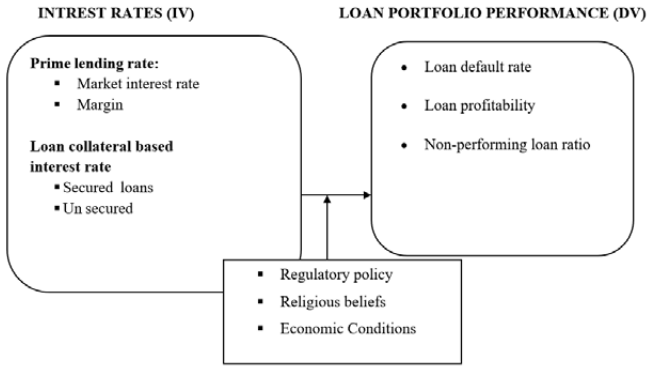
Research Questions

i. What is the effect of prime lending rate on loan portfolio performance of Stanbic bank Aponye branch?
ii. What is the contribution loan collateral on portfolio performance in Stanbic bank Aponye branch?

Conceptual framework

The diagram below is a conceptual relationship between interest rates and loan portfolio performance.

Figure 1.1: **Conceptual framework**



Source: **adapted from *Golin & Delhaise (2013); Huynh & Dang (2021)***

The conceptual framework in Figure 1.1 shows that Credit rate is the independent variable and was conceptualized as Central bank rate (regulatory environment, Credit reference bureau), Prime lending Rate (Market interest rate and margin) and Loan collateral-based interest rate (unsecured and secured loans). Loan portfolio management is the dependent variable measured by loan default rate, loan profitability and non-performing loan ratio. However, the framework also acknowledges that there are intervening variables which may have an effect on the dependent variable. Despite the expected relationship between the independent variables (Interest rate) and the dependent variable (Loan Portfolio performance), there is also an expected relationship of regulatory policy, economic situation and religious beliefs which in turn affects the relationship between interest rates and Loan Portfolio management.

The performance of the loan portfolio is shown as the dependent variable and interest rates are shown as the independent variable in the diagram. The central bank rate, prime lending rates, and collateral security are used in the study to measure interest rates. The study evaluates the efficiency of the loan portfolio in terms of loan default rate, loan profitability and non-performing loan ratio. The paper makes the case that changes in lending rates have a significant impact on the performance of loan portfolios. For instance, when a central bank raises its lending rate, the bank also increases its prime lending rate that consequently affects portfolio performance. Credit may not be repaid by borrowers. Similarly, borrowers may become cut off and are less likely to seek credit when commercial banks raise their prime lending rates; this has an impact on the performance of the lenders' portfolio.

Literature Review

Conard (2023), defines interest as the amount a borrower pays in addition to the principal of loan to compensate the lender for the use of the money while Interest rates are the expressions of interest as a percentage of the principal. On the other hand, Lubinska (2021 interest rate is a rate which is charged or paid for the use of money, an interest rate is often expressed as an annual percentage of the principal and is calculated by dividing the amount of interest by the amount of principal. In general, interest rates rise in times of inflation, greater demand for credit, tight money supply, or due to higher reserve requirements for banks. Hahn, & Hagemann (2015), affirm that a rise in interest rates for any reason tends to dampen business activity (because credit becomes more expensive) and the stock market (because investors can get better returns from bank deposits or newly issued bonds than from buying shares).

Zolea (2022) confirms that the interest rate is the profit over time due to financial instruments and in a loan structure whatsoever, the interest rate is the difference between money paid back and money got earlier, keeping into account the amount of time that elapsed. When establishing the interest rate to the public, banks all over the world make reference to these rates for example 1.5% more than Central Bank Base Lending Rate- BLR - the famous interbank interest rate for loans in Shillings (Wansleben 2023). If the firm is a sound primary firm with excellent trustworthiness, the bank would agree an interest rate only slightly higher than the rate the same bank would be requested to pay in the inter banking market from other lending institutions. By contrast (Wansleben 2023), for smaller industrial firms, the rate usually would be significantly higher because of the worsened credit risk.

Lending is the principal business activity for most commercial banks and loan portfolio is typically the largest asset and the predominate source of revenue (Jones, Cowe, & Trevillion, 2018). Per se, it is one of the greatest sources of risk to a bank's safety and soundness. Due to slack credit standards, poor portfolio risk management, or weakness in the economy, loan portfolio problems have historically been the major cause of bank losses and failures (Allen 2012). In essence therefore, effectual management of the loan portfolio and the credit function is fundamental to a bank's safety and soundness. The impact of real interest rates on loan portfolio is extensively documented in the literature and in fact, several studies report that high real interest rate is positively related to this variable (Schulmerich 2010).

This variable is constructed by subtracting the annual inflation rate from the weighted average lending rate of each bank and using a pseudo panel-based model for several Sub-Saharan African countries, find evidence that economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans are significant determinants of loan portfolio in these countries. The author attributes the strong association between the macroeconomic factors and non-performing loans to the undiversified nature of some African economies (Lubinska 2021).
Maimbo, Faye, & Triki (2011) confirm that the commercial banking sector in Uganda is saddled with poor loan portfolios, estimated at 36 percent of their total loan portfolios. Commercial banks have got higher percentages of insider lending and concentration of credit compared to their total credit portfolios (Golin & Delhaise 2013). This has resulted in a large share of non-performing advances and subsequent failures. Yhip & Alagheband (2020) argues that on every occasion, a borrower commits breach of agreement in respect of repayment of schedule of the amount of loans with interest the scapegoat is that there are 'Overdues' in the Loan Account.

Banks accept deposits for the purpose of lending and the most important functions of the banks is to create credit (Choudhry 2022). Nevertheless Johri, Khan & Sosa-Padilla (2022 affirms that higher

interest rates raise default risk which in turn leads to lending losses and hence to avoid this, unrestricted and rational lenders prefer to set loan interest rates below market clearing levels and then ration credit. Credit rationing is generally defined as a situation where the demand for loans exceeds the supply of loans at the loan interest rate determined by banks (Beyhaghi, Firoozi, Jalilvand & Samarbakhsh 2020). Henceforth, even though there is excess demand for credit at a given interest rate, banks do not respond to it by increasing loan interest rates to the market clearing level Where demand becomes equal to supply. Most banks will not make a fixed rate long term loan in portfolio due to the interest rate risk, and those loans may be fixed for periods from one to seven years and then they will become an adjustable-rate loan (Choudhry 2022).

The Loan Portfolio Performance

Eminent scholars like Bouteille & Coogan-Pushner (2021) define loan portfolio management as the process by which risks that are inherent in the credit process are managed and controlled. Loan portfolio performance comprises of loan portfolio planning, customer screening and credit risk control (Wamalwa & Jagongo 2017). Effective loan portfolio performance function is vital for maintaining the bank safety and profitability (Barine & Minja 2023). Hence the portfolio management staff should possess the fundamental credit handling experience, quantitative analytics skills and marketing skills and experiences in order to perform their tasks well.

Effective portfolio management also might foster the performance and profitability of banks (Afroz, 2013). Loan portfolio risk depends on the degree of exposure the individual loans have to covariant risks as per Kerbl & Sigmund (2017) for instance, in a mainly coffee-exporting region of a given country, a drop in world coffee prices can have serious repercussions on the loan portfolio of a financial institution involved in agricultural lending for the reason that Coffee producers, processors and traders are all likely to be hit by such a price change. Besides, if a large proportion of people's income in the region is dependent on coffee production, retailers and manufacturers of household goods and other consumer items are likely to be hit as well.

Yokoi-Arai (2002) therefore asserts that a prudent financial institution needs to take into account these inter-dependent relationships and manage its exposure to loan portfolio risk in an active manner. The risk profile of each borrower needs to be assessed in detail in order to determine whether he/she is eligible for a loan or not or even the lending institution is willing to take on the (limited) risk of default (Aven, 2015). As a result, individual loan appraisal is a must but not enough for it must be complemented by risk evaluation and mitigation techniques conducted by the financial institution at the loan portfolio level (Bouteille & Coogan-Pushner 2021). Loan portfolio performance management is the practice by which risks that are innate in the credit process are managed and controlled and excellent loan portfolio managers have focused on carefully approving loans and monitoring their performance (Barine & Minja 2023).

Increased Non-Performing loans and unstable and rising interest rates stunt private sector expansion and raise losses, which cause banks' equity to erode creating an environment akin to self- cannibalism (Le, Šević, Tzeremes, & Ngo (2022). According to Asari et al. (2011), a significant source of economic stagnation and distortion is the rise in loan defaults, which needs to be monitored, and controlled (Manasseh, Abada, Okiche, Okanya, Nwakoby, Offu, & Nwonye, 2022). Policymakers in emerging nations need to address high default rates, which is a big concern but Lending is the principal business activity for most commercial banks in Uganda (Rogoff 2022). The loan portfolio is main source of revenue and comes along with the biggest risk to a bank's wellbeing and reliability. Golin, & Delhaise, (2013) and the level of interest risk for the individual bank's lending behavior depends on the composition of its loan portfolio and the degree to which the conditions of its loans depict the bank's revenue stream to deviations in rates. In this study the dimensions of loan portfolio that was studied were loan default rate, loan profitability and non-performing loan ratio.

Theoretical review

Different theories have been developed over the years to understand the relationship between interest rates and Loan portfolio performance. The current study however adopted the Loanable funds theory of Interest. According to this theory, rate of interest is determined by the demand for and supply of loanable funds. Interest rate is a result of the supply and demands of funds in loan market. The theory, applies not only to loans but to other forms of credit. The theory assumes that interest rate is the price that equilibrates the supply of and demand for loanable funds. The supply of loanable funds comes from savers such as households who are willing to lend their money at a certain interest rate. Demand for loanable funds also come from borrowers such as businesses and governments who are willing to borrow money at a certain interest rate.

The theory predicts that an increase in supply of loanable funds will lower the rate of market interest, while a decrease in the supply will raise the market interest rate. The theory explains how the interest rate is determined by the interaction of savers and borrowers in the credit market. According to the theory, savers are willing to lend their money to borrowers because they receive interest as compensation for postponing their consumption. Borrowers however, demand loans because they want to invest in productive projects that will yield a return higher that the interest rate. The interest rate is the cost that borrowers pay for using someone else's money .

The theory postulates that interest rates are explained by the role of money (demand- supply) (Belke, 2009). The central bank rate is normally hiked to reduce liquidity in the public and to strengthen the currency value. However, the more liquidity is reduced, the price for the loans hikes, which affects the performance of commercial banks. Central bank has to set a minimum interest rate (Central Bank Rate) at which commercial banks borrow not to suffocate their ability to create credit through deposit mobilization and credit services (prime lending and collateral security). Therefore, the bank interest rate will influence rate at which borrower's access and repay their loans hence affecting the loan portfolio performance. This theory is very pertinent for the current study.

Prime lending Rates and Loan Portfolio Performance

The prime lending rate is the current interest rates financial institutions charge their best customers (Kidwell, Blackwell, & Whidbee 2016). A prime rate or prime lending rate is an interest rate used by banks, usually the interest rate at which banks lend to customers with good credit (Golin, & Delhaise, 2013). These customers have excellent credit, and are eligible for this optimal rate because their loans carry the lowest risk for their financial institutions (Gitman, Juchau, & Flanagan 2015).

Some variable interest rates may be expressed as a percentage above or below prime rate. The prime rate is used often as an index in calculating rate changes to adjustable rate mortgages (ARM) and other variable rate short term loans (Chandy, & Ding 2021). Many credit cards and home equity lines of credit with variable interest rates have their rate specified as the prime rate (index) plus a fixed value commonly called the spread or margin (Tuckman & Serrat 2022). An interest rate is the percentage of a loan amount that a lender charges and it is the lender's compensation, and the percentage varies with each type of loan (Deventer Imai & Mesler 2013). By and large, any unsecured loan such as a credit card balance is charged interest at a

higher rate than a secured loan such as an auto loan or a mortgage (Adams 2018).

In essence the rate that an individual or business receives will vary depending on the borrower's credit history and other financial details. The prime rate began to rise significantly in the 1970s as the United States experienced an economic recession and high inflation (Rogoff 2022). The prime rate reached its all-time high of 21.5% in Dec. 1980, as the Federal Reserve sought to curb inflation by raising interest rates (Gessaroli 2022). Over the next few decades, the prime rate fluctuated widely, reflecting the ups and downs of the economy and largely mirroring other benchmark interest rates (Bhansali 2021). During times of economic growth, the prime rate tends to be higher, while it tends to be lower during times of recession or financial turmoil.

Prime rates fluctuate over time depending on the movement of the federal or central bank funds rate, which, in turn, reflects the state of the economy (Bernanke 2020). Historically, in North American banking, the prime rate was the actual interest rate, although this is no longer the case (Basten & Mariathasan 2023). The prime rate varies little among banks and adjustments are generally made by banks at the same time, although this does not happen frequently and as of 26 December 2023 the prime rate was 8.50% in the United States and 7.20% in Canada (De Zoysa, Dunphy & Schwartz 2024).

In the United States, the prime rate runs approximately 300 basis points (or 3 percentage points) above the federal funds rate, which is the interest rate that banks charge each other for overnight loans made to fulfill reserve funding requirements (Cipriani, & La Spada 2022). The Federal funds rate plus a much smaller increment is frequently used for lending to the most creditworthy borrowers, as is LIBOR, the London Interbank Offered Rate and the Federal Open Market Committee (FOMC) meets eight times per year to set a target for the federal funds rate (Subramani 2021). The prime interest rate is the percentage that U.S. commercial banks charge their most creditworthy customers for loans and like all loan rates, the prime interest rate is derived from the federal funds' overnight rate, set by the Federal Reserve at meetings held eight times a year (Hughes, Jagtiani, & Moon, 2022).

The prime interest rate is the benchmark that banks and other lenders use when setting their interest rates for every category of loan from credit cards to car loans and mortgages (Yun & Cho 2022). Prior to December 17, 2008, the Wall Street Journal followed a policy of changing its published prime rate when 23 out of 30 of the United States' largest banks changed their prime rates and recognizing that fewer, larger banks now control most banking assets (that is, it is more concentrated), the Journal now publishes a rate reflecting the base rate posted by at least 70% of the top ten banks by assets (Baig, & Winters 2022).

Effective January 2, 2015, the Base Lending Rate (BLR) structure was replaced with a new Base Rate (BR) system and Under BR, which will now serve as the main reference rate for new retail floating rate loans, banks in Malaysia can determine their interest rate based on a formula set by Bank Negara, the Malaysian central bank (Agarwal & Wu 2018).

Malayan Banking (Maybank) has set a group-wide base rate at 3.2%, effective Jan 2, 2015 and all new retail loans and financing such as mortgages, unit trust loans, share margin financing, personal financing and overdraft facilities which are applied for by individual customers will be based on the base rate (Leong, & Tan, 2018). Though certain banks may be setting a higher BR compared to others, they can sometimes offer lower ELR to customers in order to remain competitive and loans that are already approved and extended prior to January 2, 2015 will still follow the old BLR until the end of the loan tenure (Stanelytė 2021).

Ugandan commercial banks which majorly rely on deposits for capital/liability employ the deposits, for which they compensate with a mere average interest rate of 2% (apart from fixed deposit accounts and only lucky ones get an average 2% rate on the savings account in Uganda, that sometimes also gets eaten away by monthly account maintenance charges) to issue loans at staggering rates exceeding 20% to the critical sectors and to individuals and this results in a massive margin of over 18% (Mugerwa 2017; Kato 2019).

Naturally one would assume that these banks, benefiting from affordable deposits, would reciprocate by lowering their lending rates or offering higher interest rates on deposits and regrettably, this is not the reality in our country and since January 2023, the average interest rate on loans has persisted at 20%, while the average rate on deposits lingers around 2% (Goddard, & Wilson 2016; Ahiadorme 2023). This discrepancy prompts us to question the wisdom of maintaining substantial deposits in banks if we are not reaping the benefits of favorable lending rates. Comparatively, in Kenya, our neighboring nation, the interest rate margin is averaging 9.3% and the weighted average commercial bank rate fluctuates between 13% and 15% while interest income given on the savings account is around 2.5%, creating a margin of around 9.3% (Wamaitha 2023)

Banks generally use a formula to determine the prime rate it charges its best customers, primarily large corporations that borrow and repay loans on a more or less constant basis and that prime rate is the starting point for all other interest rates, which are set at the prime rate plus an additional percentage. The bank sets a range of interest rates for each loan type and the rates individual borrowers are charged are based on their credit scores, income, and current debts for instance, a person with an outstanding credit score might be charged, say, prime plus 9% for a credit card, while an individual with only a good score might get a rate of prime plus 15% (Mandal, Basu, Choi, & Rath 2024; Kasaian, Murthi, & Steffes 2023).

The prime rate plus a percentage forms the base of almost all consumer and business interest rates and the prime rate is determined by individual banks and used as the base rate for many types of loans, including loans to small businesses and credit cards (McPhail, Schnabl, & Tuckman 2023).

The prime rate is not fixed and can change over time based on changes in the federal funds rate, inflation, the demand for loans, and other economic factors and when the prime rate changes, the interest rates on loans and financial products that are based on the prime rate may also change (Levieuge & Sahuc 2021).

Loan Collateral Based Interest Rate and Loan Portfolio Performance

A collateral loan is a form of debt that's secured by a valuable asset, but because the lender takes on less risk with a collateral loan, they often come with lower interest rates than unsecured loans (Rampini & Viswanathan 2020). However, Carney, Kremer, Lin & Rao (2022) asserts that the consequences of not repaying a collateral loan mean you could lose that valuable asset your car or home, in some cases so be sure to weigh your options carefully. Banks and non-banking financial companies (NBFCs) generally disburse two types of loans; secured loans and unsecured loans (Farheen 2020). A collateral loan is a type of secured loan requiring a borrower to pledge an asset to avail of the loan and the asset, called a collateral, is liquidated by the lender in case the borrower defaults hence on the other hand, unsecured loans do not require the borrower to pledge collateral (Nugraheni & Aziza 2020).

Mann (2022) argues that a collateral loan also called a secured loan is backed by something you own with the common types of collateral

loans being auto loans and mortgages, though other forms of collateral that can be used include ; Savings account/certificate of deposit (CD),Car or truck, Boat, Piece of jewelry, Investment portfolio, Home or other types of real estate and Insurance policy. A collateral loan can offer lower interest rates or larger loan amounts but in some cases, it may be the only loan option for a borrower who has a poor credit history or too low of an income to qualify for an unsecured loan (Mésonnier, O'Donnell & Toutain 2022). However, if you can't repay the loan, the lender has the right to seize the collateral and unsecured loans, on the other hand, are backed only by your promise to repay or your eligibility and rates are based on the lender's confidence in your income and credit history (Mann 2022).

With a collateral loan, you may receive more attractive loan terms than with an unsecured loan, including a lower interest rate, larger loan amount or longer loan term (Schwert 2020). Before a lender approves you for a collateral loan, they will need to determine how much your collateral is worth by assessing the fair market value of your asset this is done to ensure you repay your loan and reclaim the asset or collateral. In the case of a mortgage, this includes the appraised value of your home and the size of your loan will be determined as a percentage of your collateral's value (Calem, Kenney, Lambie□Hanson & Nakamura 2021).
With a mortgage, the value of your collateral is directly reflected in the loan to value ratio (LTV) the lender assigns you and in general, the higher your LTV, the more you can expect to pay in interest and closing costs (De Araujo, Barroso & Gonzalez 2020). When comparing secured loans from top lenders, keep in mind that the options depend on the type of collateral one has to offer and some lenders have limits on the types of assets they are willing to accept (Christie-David 2024).

Collier, Ellis & Keys (2021) argues that depending on the lender, if one misses a payment, the collateral loan might be in default after 30 to 90 days, but , most lenders offer a grace period after a missed payment and the loan might be considered delinquent at that time, but one can be able to work with the lender to come up with an acceptable payment plan before your loan actually goes into default. If your account continues to be delinquent, you run the risk of losing your asset, depending on the lender, the type of loan and your state of residence, for instance, car repossession might occur as soon as you default on your loan, and a lender may not necessarily have to notify you (Wadud, Ahmed & Tang 2020).

Heakal (2022) defines interest rate as the cost of borrowing money or, on the other side of the coin, it is the compensation for the service and risk of lending money and in both cases, it keeps the economy moving by encouraging people to borrow, to lend, and to spend. But prevailing interest rates are always changing, and different types of loans offer different interest rates and if a lender, a borrower, or both, it's important that one understands the reasons for these changes and differences because they also have a heavy effect on the rare metals trade, including silver stocks (Eggertsson, Juelsrud, Summers & GetzWold 2023).

Charles & Mori (2016) argue that collateral helps the lender to minimize default risks but also improve loan repayment therefore, lenders associate collateral with extra costs of monitoring and repayment appraisal, which makes the loan expensive. Garvin, Hughes & Peydro (2021) on the other hand, argue that collateral consists of transaction costs, collateral substitute, and the costs of using the collateral during the loan period. Muchere, Mwambia & Muema (2021) related loan portfolio and financial performance of commercial banks in Kenya and results indicated a significant relationship between loan portfolio and financial performance of commercial banks in Kenya where the strength of the relationship is associated to the loan portfolios form the backbone of the assets in lending institutions which include mortgage loans, business loans, and government loans. Relatedly, Block, Jang, Kaplan & Schulze (2024) and Mitchell (2021), asserts that performing banks need to have a portfolio mix that leans more to business and government loans than personal loans and educational loans.

Donaldson, Gromb & Piacentino (2020) opine that the core characteristics of collateral are its liquidation value, pledgeability, and durability and these characteristics are at the heart of the performance of loan portfolio performance.

The difference between asset-based loans and cash flow loans can again be understood from the perspective of the collateral used to secure the credit and in the case of asset-based loans; the borrower pledges specific physical assets to secure the loan (Garmaise, Jansen & Winegar 2022).

Bhat, Tariq & Ahmed (2020) argues that for several years, good loan portfolio managers have concentrated most of their efforts on carefully approving loans and monitoring loan performance, even though these activities continue to be mainstays of Loan Portfolio Management, analysis of past credit problems has made it clear that portfolio managers should do more. Budianto & Dewi, (2023) affirms that there are factors which influence effective Loan Portfolio performance such as management strategies, financial institutions staff competencies, choice of lending methodology and Management Information System.

METHODOLOGY

Research design

This study adopted a cross-sectional design that used both the qualitative and quantitative approaches (Maier, Thatcher, Grover, & Dwivedi, 2023). A cross-sectional design is a research design that studies a phenomenon in snapshot to portray its prevalence (Voleti 2024) and the current study used the cross-sectional design to portray the state of loan portfolio performance. The advantage and relevance of the design is that it allows quick collection of raw data in addition to enabling the researcher to interact with people that have practical experience with the subject of study and assesses their perceptions, opinions and feelings at a particular time (Carcary2020). The current study also adopted correlation design which helped in establishing the relationship between the variables (Schwab 2013).

Study population

The study population included 30 Credit Officers, 6 Client Relationship officers, 2 Credit Evaluation officers, 2 Branch managers, 10 tellers and 100 clients which made a total of 150 as the target population. In general, the unit of analysis of the current study was the employees of Stanbic bank. The choice of these people is premised on the fact that they have been working with the bank and specifically on loans for more than one year, therefore they have the knowledge and experience of how interest rates affect loan portfolio performance in commercial banks. However, individual employees constitute the unit of observation.

Sampling Design

In this study both probability and non-probability sampling techniques were used in selecting the respondents. The goal is to obtain a sample that is representative of the larger population.

Sampling Procedure

A mixture of purposive, census and simple random sampling were used. The respondents were first grouped according to departments. A list of names of credit officers were obtained, individual names were written on pieces of paper, put in a box and then drawn randomly until the desired number is attained for each category. Simple random sampling was used because it helps in avoiding bias in selection of respondents

and gives equal chance to all respondents to be selected (Denscombe 2017). Census was taken for branch managers, credit evaluation officers, and customer relationship officers because they are very few. Purposive sampling was used for tellers and clients because of their experiences, knowledge on issues related to interest rates and loan portfolio performance. Purposive sampling is a form of non-probability sampling that is used to select respondents that are specific and known (Brooke, 2023). The rationale for using purposive was to identify and get best responses from respondents with adequate knowledge on the issue.

Sample Size

Kothari, (2004) defines sample as small group of respondents drawn from a population about which a researcher is interested in getting the information so as to arrive at a conclusion. This study selected respondents from the employees and clients of Stanbic bank, Aponye branch. In this study, the target sample was 108 but actual sample of 97 respondents was drawn from a study population of 150 employees and clients basing on Krejice & Morgan (1970) sample determination technique because it is considered to give representative sample for any study population. A breakdown of the proposed sample size is presented in Table 3.1.

Table 3.1: Number of participants per category

Category	Population	Sample size	Sampling Strategy
Branch managers	2	2	Census
Credit Evaluation officers	2	2	Census
Branch Credit Officers	30	28	Simple random sampling
Client relationship Officers	6	6	Census
Tellers	10	8	Purposive
Customers	100	62	Purposive
Total respondents	**150**	**108**	

***Source**: Stanbic Bank, Human Resource Records (2020);*

Data collection

Data collection instruments included questionnaires. A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents (Singh, 2017). Data can be collected relatively quickly because the researcher would not need to be present when the questionnaires are being completed a research assistant can assist in administering them (Bell, & Waters 2018). This is useful for large populations when interviews would be impractical.

Questionnaire

The study used one set of questionnaires that was constructed to capture all the necessary information from all categories of respondents in respect to the objectives of the study. The study used a Five-point Likert scale questionnaire which was administered to all respondents of the study.

Data Quality Control

The study followed the required procedures to ensure that data is collected, managed, and utilized with accuracy and precision. To ascertain the reliability and validity of instruments, the following was done;

Validity

Validity is the extent to which the instrument truly measures what it is intended to measure (Amin, 2005). Validity of instruments was ascertained by first of all discussing the questionnaire and interview guide with the supervisor. This was done before collection of data from the field. After constructing the questionnaire, the researcher analyzed the results of the content validity of the scale. According to Amin (2005) construct validity of an instrument is refined basing on expert advice.

Reliability

Kothari (2009) defines reliability as a measure of an instrument that ensures consistency, or reproducibility, of test scores. To establish reliability, the instruments were pilot-tested twice. According to Amin (2005), test-retest reliability can be used to measure the extent to which the instrument can produce consistent scores when the same group of individuals is repeatedly measured under same conditions. The results from the pre-test were used to modify the items in the instruments. Cronbach alpha coefficient was used and it generally increases as the inter-correlations among test items increase, and was thus known as an internal consistency estimate of reliability of test scores. This was generated from the SPSS data set for the study. The instrument is said to be reliable when the alpha (Cronbach) coefficient is greater than 0.7 (Amin 2005).

Table 3.2: Reliability Tests

Variable List	Cronbach's Alpha	No of Items
Interest rates	.704	15
Loan portfolio performance	.867	10
Overall	**0.786**	**25**

***Source**: Field data, 2023*

The reliability statistics indicates a Cronbach alpha coefficient of α = .786. This score is over the acceptable 0.7. The statistics imply that the instrument used in this survey is internally stable and the results are adequate for generalizability. Suggestively, this instrument can generate consistent results if administered several times on samples with similar characteristics.

Data Analysis

The data collected was analyzed using a computer package for social scientist (SPSS) version 20.0. Data from the field was sorted, edited, and cleaned to prepare it for analysis. Then the data was input in to the software package for analysis. The program was used to generate descriptive data in form of frequencies, percentages, means, and standard deviations. To Cleary address the research objectives, the program run multiple regression analysis to determine the effect of each of the predictor variables on the dependent variable. On the other hand, qualitative data was analyzed thematically and reported in narrative to form the major themes of the study.

Findings and Discussion

Descriptive Statistics

This paper has provided a summary statistics to the findings as presented in Table 4.1 below.

Table 4.1: Descriptive summary statistics

Variable List	Categories	Frequency	Percent
Gender	Male	72	74.2
	Female	25	25.8
	Total	**97**	**100**
Highest level of education	Diploma	4	4.1
	Degree	81	83.5
	Masters'	12	12.4
	Total	**97**	**100**
Age bracket	Below 24	9	9.3
	25 – 30	30	30.9
	31 – 35	22	22.7
	36 – 40	31	32
	41 – 45	5	5.2
	Total	**97**	**100**

Number of years in the bank	Less than 2 years	6	6.2
	2 - 5 years	44	45.4
	5 - 8 years	32	33
	8 - 11 years	15	15.5
	Total	**97**	**100**

***Source**: Field data, 2024*

The participation according to gender shows that 74.2% were men while 25.8% were female. The statistics provide some evidence that most of the participants in this survey were men. This can be attributed to the fact that most of the credit officers and client relationship managers are male who constituted largest in the sample. Again, this role is one of the most complex roles in banking industry that require a lot of travels even hard to reach areas as long as there is a customer there, fear of abuse from customers who have challenges in payment when it's time to recover the loans, a task that is not preferred by most female employees and a result they tend to consider joining other department with less complex tasks like operations.

The participation according to the highest level of education shows that 83.5% were degree holders, 12.4% were masters' degree holders while only 4.1% were diploma holders. The statistics suggest that most of the persons working in commercial banks are degree holders. This can be attributed to Most of the entry roles in Banking industry have degrees as a minimum requirement and this make the number of employees with degrees higher. Few employees go for masters because the reward system in banking is based on target/goal against what has been achieved as opposed to the additional levels of education. This does not motivate employees to go for further studies.

The participation according to age brackets shows that 62.9% were 35 years old and below, while 37.2% were over 35 years old. The percentage of the participants who were below 24 years was 9.3% while those over 40 years were 5.2%. The statistics suggest that most of the persons who working in commercial banks are youths (below 35 years). This can be attributed to the structure in the banking industry which has the lower-level employees constituting the larger part in the structure. Most of these employees have just finished university and fall in that age group.

Also, with the introduction of graduate trainee programme in most commercial banks has increased the number trainees are retained by banks as employees who also fall in the same age group.

In view of the participants' banking experience, 45.2% had a banking experience of about 2 to 5 years while 33% had a banking experience of 5 to 8 years. The percentage of those with less than 2 years experiences suggests that commercial banks have not recruited many employees in the recent past of 2 years due to covid- 19 which led to the reduced need for employees to physically be there to drive business and had to even push the existing employees to work from home to fulfill social distance requirement. Also, most commercial banks embraced digitization and emphasized utilization of digital platforms like agency banking, business online, internet banking, Point of Sale machines (POS) Flexipay merchants, mobile banking among others. This reduced the number of new employees required in commercial banks hence low recruitment during the period that explains few employees with 2 years and below experience.

Most of the participants had worked in the bank for about 2 to 5 years possibly because. This is because there was limited turnover by employees to leave commercial banks in search of new jobs because banks were rated as essential service providers by government and ministry of health during COVID 19 pandemic.

Descriptive Findings on Prime Lending Rate

The second objective of the study was to determine the effect of prime lending rate on loan portfolio performance. Variable indicator investigated was Prime lending rate and the results are presented in this sub-section of the report. Participants were asked to give their level of agreement or disagreement on the issues raised on Prime lending rates. The study aggregated participants' responses on "strongly agree' and "agree" and reported them as "agreement". Similarly, the study aggregated responses on "Strongly disagree' and "disagree" and reported them as "disagreement". The table below is a portrayal of prime lending rate in Stanbic bank.

Table 4.2 Descriptive Statistics on Prime Lending Rate

Prime Lending Rate	**D (%)**	**NS (%)**	**A (%)**	**Mean (%)**	**SD (%)**
I am aware of many customers in this bank who use different types of credit	13.4	0	86.6	4.44	1.035
I am aware of some customers who regularly make inquiries on new credit	15.4	0	84.5	4.10	1.076
This bank has many borrowers who repay their loans on time	32	0	68	3.90	1.136
At any point in time, most of the borrowers have low amount in outstanding debt	15.4	17.5	67	3.49	1.022
I know of many customers who have had a credit card open for a long time	18.6	14.4	67	3.41	1.049
Average					

***Source**: Primary data*

On average, 74.6% of the participants agreed with the issues raised on prime lending rate. From the highest extreme, 86.6% of the participants agreed that many of their customers use different types of credit while 84.5% agreed that their customers regularly make inquiries on new credits.

The findings seem to suggest that borrowing using prime lending rate is a common practice in Stanbic bank. This is simply because the prime lending rate is standard upon which bank can break even on the facility given out, and then depending on the level of risk the bank adds a margin on the prime. However, there are also loans which are priced below the prime lending rate but this is mainly because such funds are granted by donors with specific guidelines.

From the lowest extreme however, few borrowers leave their credit cards open for a longtime (67%) and keep low amounts in outstanding debt (67%). The decision to keep them open for a long time is simply to be able to cater for emergency and unforeseen needs that may require utilization of card. Keeping on the low amounts is to ensure they pay a low interest on the credit cards because payment of interest is based on the utilization. The higher the outstanding debt the more the interest paid.

Commenting on the importance of prime lending to the success of commercial banking, one interviewee said:

> *"…it acts like a motivation, call it a reward to, or recognition of outstanding clients. I must say that prime lending is very discriminative and unfair to some clients… but benefiting the bank. You see the more credit issued the more the profitability. As a bank, we only regret giving out loans only when the clients fail to repay…"* (Key Informant interview 6)

When asked why prime lending rates are not commonly published in the banking halls and the media adverts, one key informant reveals:

> *"…banks give prime rates to clients that have a proven credit record with a given bank. Your credit history in another bank is not the basis of qualifying for a prime rate in our bank. I think you can see why we do not publish these rates to all bank customers. Actually, the deal for prime lending is negotiated between the branch manager and client upon successful evaluation…"* (Key Informant interview)

These interviews reveal the circumstances under which prime lending operate affects the loan portfolio performance of the bank. Prime lending is given to clients with a credible credit history, and particularly those whom the bank has tried for their ability to repay. Generally, the findings seem to suggest that prime lending is key among the interest rates used in Stanbic bank. This can be attributed to the fact that Prime lending rate is a key determinant in interest rate pricing. Interest rate is arrived at be adding a margin on the prime. This also in consideration of risk involved and the loan term.

Inferential Statistics for Prime Lending Rate and Loan Portfolio Performance

This section presents correlation testing the relationship between prime lending rate and loan portfolio performance. Table 4.3 shows correlations between prime lending rate and loan portfolio performance.

Table 4.3 ***Correlations between Prime Lending Rate and Loan portfolio performance***

		Prime lending Rate	Loan portfolio Performance
Prime Lending Rate	Pearson Correlation	1	.644**
	Sig. (2-tailed)		.000
	N	97	97
Loan Portfolio Performance	Pearson Correlation	.644**	1
	Sig. (2-tailed)	.000	
	N	97	97

** Correlation is significant at the 0.01 level (2-tailed).

Source*: Primary data*

Results of the study in Table 4.3 revealed a strong positive significant relationship between Prime Lending Rate and Loan portfolio performance with a Pearson correlation r = 0.644**and Sig = 0.000≤0.01. The positive relationship means that more usage of the prime lending rate will lead to a corresponding improvement in loan portfolio performance. Since the relationship is strong and significant, it implies that prime lending rate significantly influences loan portfolio performance at Stanbic Bank, Aponye Branch.

The finding show that prime lending has a significant effect on loan portfolio performance of commercial banks is consistent with the views of Wambari & Mwangi (2017) who show that interest rates at which commercial banks in developing countries lend credit are high and therefore negatively influence loan portfolio performance. They however note that commercial banks with lending rates oscillating around 4.3% influence loan portfolio performance positively. While the findings in Stanbic bank do not reveal the actual prime lending rate, the number of clients who continuously make inquiries on new credit is evidence enough to support the significant effect of prime lending rates on loan portfolio performance.

The significant effect of prime lending rate on loan portfolio performance of Stanbic bank is consistent with findings of Beck & Mooney (2021) who related revenue and loan diversification, performance of Caribbean commercial banks between 2005 and 2015. The study shows that loan portfolio diversification improves banking stability and profitability.

The findings that prime lending rates significantly affect loan portfolio performance in Stanbic bank seem to agree with the views of Francis, Caleb & Eton (2022) investigated credit management policies and loan portfolio performance in commercial banks in Uganda. The findings indicated that credit terms and credit standards were significantly related to loan performance of commercial banks.

The significant effect of prime lending rates on loan portfolio performance of Stanbic bank appear to be inconsistent with López-Penabad, Iglesias-Casal & Neto (2022) who established that interest rates have a non- significant effect on profitability of commercial banks in the short-term. Similarly, the findings disagree with the views of Shubita (2023) who found that interest rates are not important in predicting the portfolio performance of Jordanian banks. This is possibly because the customer can access cash to pay installment in case of an emergency where he is unable to raise funds and keeps a clean repayment record hence a good loan performance.

Descriptive Findings on Collateral Based Interest Rate

The third objective of the study was to ascertain the contribution loan collateral on loan portfolio performance. Variable indicator investigated was Loan collateral and the results are presented in this sub-section of the report. Participants were asked to give their level of agreement or disagreement on the issues raised on Loan Collateral. The study aggregated participants' responses on "strongly agree' and "agree" and reported them as "agreement". Similarly, the study aggregated responses on "Strongly disagree' and "disagree" and reported them as "disagreement". The table below is a portrayal of loan collateral-based rate in Stanbic bank.

Table 4.4: Descriptive Findings on Loan collateral

Collateral Security	D (%)	NS (%)	A (%)	Mean (%)	SD (%)
I know of some borrowers in this bank who have used real estates as collateral	14.4	0	85.6	4.17	1.081
I am aware of some borrowers in this bank who have secured financing based on their outstanding invoices	18.6	0	81.5	4.15	1.054
I am aware of some borrowers in this bank who have used business equipment as collateral	7.2	12.4	80.4	4.00	.965
I am aware of some borrowers in this bank who have given the bank the right to seize all their business assets should they fail to repay the loan.	9.3	14.4	76.3	3.98	1.010
I am aware of some borrowers in this bank who used inventory as collateral	28.8	0	71.2	3.71	1.029
I know of some borrowers in this bank who have used cash on their personal bank accounts to secure loans	18.5	20.6	60.8	3.49	.942
Average					

Source*: Primary data*

On average, 76% of the participants agree on the issues raised on collateral security. Specifically, the findings seem to indicate that real estates (85.6%), outstanding invoices (81.5%), and business equipment (80.4%) are the commonly used forms of collateral security in commercial banks. The dominance of real estates as the commonly used collateral can be attributed to Commercial banks prefer collateral that appreciates like land because this give banks comfort to recover in case the customer defaults and sale of the pledged security is to be conducted. Also, land / buildings acquire a higher value compared to business equipment and inventory.

The findings seem to indicate that few borrowers use cash on their personal accounts as a form of collateral security to secure loans. This is possibly because most customers do not take on fixed deposits and prefer keeping the funds on personal accounts where they can access it anytime and this makes it difficult for the lender to rely on it because anytime the customer can access it and withdraw it.

The amounts kept on accounts are sometimes low to form collateral in relation to the loan that the customer is applying for.

One of the respondents was asked why commercial banks stick to collateral security even when they limit many interested borrowers from applying for credit. In response, the respondent said:

> *"…credit creation is one of the activities in the bank that are risky and indeed risky. From diverting the loan to investing it to failing ventures…. you just cannot guarantee the recovery…"* (Key Informant interview)

Another respondent reacted to the question of sticking to collateral, yet it eliminates many borrowers from accessing credit said,

> *"…I will tell you of one client who secured a loan and used the money to buy kilos of meat, kilos of rice, a cock, and fish on the very day he secured the loan. Tell me, how can you guarantee the recovery of such a loan?"* (Key Informant Interview)

These interviews reveal the importance of collateral in cushioning failure of recovering risky loans. The mere fact that the business world is volatile is evidence enough for the need to ask for collateral. In the absence of security, many banks are likely to lose their money to borrowers who invest in uncertain businesses.

Inferential Statistics for Loan collateral Interest and Loan Portfolio Performance

This section presents correlation testing the relationship between Loan collateral Interest and Loan Portfolio Performance. Table 4.5 shows correlations between Loan collateral Interest and Loan Portfolio Performance:

Table 4.5: Correlations of between Collateral Interest rate and Loan Portfolio performance

		Collateral Based Interest rate	Loan portfolio Performance
Collateral Based Interest rate	Pearson Correlation	1	.415**
	Sig. (2-tailed)		.000
	N	97	97
Loan Portfolio Performance	Pearson Correlation	.415**	1
	Sig. (2-tailed)	.000	
	N	97	97

** Correlation is significant at the 0.01 level (2-tailed).

***Source**: Primary data*

The table 4.5 shows a moderate significant positive relationship between Loan collateral Interest and Loan Portfolio Performance at Stanbic Bank (r=0.415**, Sig=0.000≤0.01). The two variables Loan collateral Interest and Loan Portfolio Performance move in the same direction. This means that as Stanbic Bank improves use of collateral-based interest, loan portfolio also improves as more borrowers repay their loans to recover their loan collateral.

The findings show a positive significant relationship between Loan collateral Interest and Loan Portfolio Performance at Stanbic Bank because banks are secured and borrowers continue paying loans to recover their assets.

The findings contradict the assertion of Gustafson, Ivanov & Meisenzahl (2021, who established that lenders associate collateral with extra costs of monitoring and repayment appraisal, which makes the loan expensive. They argue that collateral consists of transaction costs, collateral substitute, and the costs of using the collateral during the loan period. The number of clients who use cash on their personal accounts and inventory to secure loans provides some evidence that collateral is associated with extra costs during the period of using the loan.

The findings also support the views of Makokha (2019) who found that collateral security significantly affects financial performance because borrows honour their loan terms because of the assets being in custody.

The findings also support Muhindi & Ngaba (2018) who related loan portfolio and financial performance of commercial banks in Kenya and found a significant relationship between loan portfolio and financial performance of commercial banks in Kenya. The strength of the relationship is associated to the loan portfolios form the backbone of the assets in lending institutions. Such assets include mortgage loans, business loans, and government loans. Suggestively, performing banks need to have a portfolio mix that leans more to business and government loans than personal loans and educational loans.

Findings on Loan portfolio performance

Participants were asked to give their level of agreement or disagreement on the issues raised on loan portfolio performance in Stanbic bank. The study aggregated participants responses on "Strongly agree" and "agree" and reported them as "agreement". Similarly, the study aggregated responses on "strongly disagree" and "disagree" and reported them as "disagreement". The table below is a portrayal of loan portfolio performance in Stanbic bank.

Table 4.2 Descriptive Statistics on Prime Lending Rate

Variable List	D (%)	NS (%)	A (%)	Mean (%)	SD (%)
This bank reports the entire outstanding balance of the delinquent loan	5.2	6.2	88.7	4.42	1.010
When borrowers find it difficult to pay, this bank spreads the remaining balance for a longer term	3.1	10.3	86.6	4.351	0.945
Most of the lending in this bank are small business loans	19.6	0	80.4	4.22	1.02
Most of the loans from this bank are repaid monthly	10.3	10.3	79.4	3.83	1.540
I know of some loans, which this bank has written off	8.2	13.4	78.3	3.73	1.188
This bank has got a lot of assets in collaterals	22.7	0	77.4	3.66	1.032
Loans from this bank are less collateralized	25.7	0	74.2	3.57	1.010
Most of the loans in this bank are repaid at the end of the loan period	11.3	16.5	72.2	3.53	1.030
This bank reports the actual late payment on the loan	7.3	24.7	68	3.46	0.944
Most of the loans from this bank are repaid weekly	13.4	19.6	67.1	3.43	1.23
Average					

***Source**: Field data, 2024*

On average, 77.2% of the participants agreed with the issues raised on loan portfolio performance in this study. Specifically, the findings indicate reporting the entire outstanding balance of delinquent loans (88.7%), spreading the remaining balance when borrowers fail to pay (88.6%), and extending small business loans are key loan portfolio performance. The statistics suggest that Stanbic bank has managed her portfolio performance by reporting the entire outstanding balance of delinquent loans.

This approach to loan portfolio performance is commendable because it shows the bank the actual risk at hand, provide the possible loss and at the same time start the recovery process early to reduces on provisions for bad debts and possibility of this loan going into write off.

From the lowest extreme, respondents indicate that weekly loan repayments (67.1%), and reporting the actual late payment of the loan (68%) are weak loan portfolio performance practices. The statistics suggest that weekly loan repayments can least contribute to loan

portfolio performance possibly because This is because the risk of default is low since on a weekly basis the bank can recover both interest and principal.

Multiple Regression Analysis

Regression is the statistical technique for predicting the influence of a set of independent variables on the dependent variable. Given the current study, interest rate, measured in terms of central bank rate, prime lending rate, and collateral security is the independent variable while loan portfolio performance is the dependent variable. Regression uses the beta coefficients to measure the influence in the dependent variable explained by the independent variable and significant values to measure the statistical significance of the cause-effect relationship. Due to the multiplicity of the independent variables measured against a single dependent variable, this study used multiple regressions.

Table 4.7: Multiple regression of Loan Portfolio Performance on Interest Rate

Unstandardized Coefficients			Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.247	.433		2.883	.005
Central Bank Rate	.073	.090	.066	.813	.418
Prime Lending Rate	.495	.082	.560	6.019	.000
Collateral Security	.152	.096	.144	1.577	.118
R = .657; R Square = .431; Adjusted R Square = .413; Std. Error of Estimate = .47090					

a: Dependent Variable: Loan Portfolio Performance

b: Predictors: (Constant), Collateral Security, Central Bank Rate, Prime Lending Rate

***Source**: Primary data*

Results in Table 4.7, illustrate that the adjusted R Square which is a coefficient of determination. The table gives adjusted R-square value = 0.413 which indicates that central bank rate, prime lending rate and collateral security all together combined as interest rate influences variation in loan portfolio performance at Stanbic bank Aponye branch by 41.3 % and the remaining 58.7% is contributed by other factors.

Results from table 4.7 further show that Central bank rate, Prime lending rate and collateral security all have positive relationship with loan portfolio performance. However only prime lending rate has a significant relationship with loan portfolio performance as seen from the beta values of 0.066 for Central bank rate, 0.560 for prime lending rate and 0.144 for collateral security. The multiple regression indicates that among the three variables, Central bank rate, prime lending rate and collateral security, prime lending rate is the best predictor of loan portfolio performance with t - value 6.019 and P value of 0.000< 0.01. By implication, a variation in interest rates is likely to vary loan portfolio performance significantly. Interest rates have a significant effect in the loan portfolio performance among Stanbic bank, Aponye branch. High Interest rate result to increased cost of borrowing implying that the customer will pay more money to a loan obligation as compared to when it would be low. This drains the business income and sometimes eats into capital of the business if it's a long-term loan and eventually failure to pay if the part of the capital is used to pay back. This will lead to poor loan performance.

Conclusion and Recommendations

This chapter presents the summary of the findings, conclusion, and recommendations on interest rates and loan portfolio performance. The summary, conclusion, and recommendations are presented according to objectives.

Summary of findings

From the findings above, the study showed significant relationships between interest rate and Loan Portfolio Performance. The study revealed that interest rate influences variation in loan portfolio performance at Stanbic bank Aponye branch by 41.3 %. The summary of the findings are presented below:

Effect of prime lending rate on loan performance of commercial banks in Uganda

The findings revealed a strong positive significant relationship between Prime Lending Rate and Loan portfolio performance with a Pearson correlation r = 0.644**and Sig = 0.000≤0.01. The positive relationship means that more usage of the prime lending rate will lead to a corresponding improvement in loan portfolio performance. Since the relationship is strong and significant, it implies that prime lending rate significantly influences loan portfolio performance at Stanbic Bank, Aponye Branch.

The finding show that prime lending has a significant effect on loan portfolio performance of commercial banks is consistent with the views of Wambari & Mwangi (2017) who show that interest rates at which commercial banks in developing countries lend credit are high and therefore negatively influence loan portfolio performance.

Effect of loan collateral on portfolio performance in commercial banks

The significant positive relationship between Loan collateral Interest and Loan Portfolio Performance at Stanbic Bank (r=0.415**, Sig=0.000≤0.01). The two variables Loan collateral Interest and Loan Portfolio Performance move in the same direction. This means that as Stanbic Bank improves use of collateral-based interest, loan portfolio also improves as more borrowers repay their loans to recover their loan collateral.

The findings show a positive significant relationship between Loan collateral Interest and Loan Portfolio Performance at Stanbic Bank because banks are secured and borrowers continue paying loans to recover their assets.

The findings contradict the assertion of Gustafson, Ivanov & Meisenzahl (2021) who established that lenders associate collateral with extra costs of monitoring and repayment appraisal, which makes the loan expensive. They argue that collateral consists of transaction costs, collateral substitute, and the costs of using the collateral during the loan period. The number of clients who use cash on their personal accounts and inventory to secure loans provides some evidence that collateral is associated with extra costs during the period of using the loan.

The findings also support the views of Makokha (2019) who found that collateral security significantly affects financial performance because borrows honour their loan terms because of the assets being in custody.

Conclusion

This study has established that interest rates significantly affect the loan portfolio performance of Stanbic bank. Commercial banks in Uganda that vary their interest rates show superior loan portfolio performance. This is because High interest rates attract poor loan performance while low interest rates attract good loan performance.

This conclusion is consistent with many previous studies that contend that interest rates significantly influence loan portfolio performance (Liu & Lee 2022).

Prime Lending Rate and Loan Portfolio Performance

The study found a significant relationship between prime lending rate and loan portfolio performance of Stanbic bank in Uganda. Commercial banks that diversify their loan portfolio including prime lending register superior performance to those that ignore prime lending. The study confirms objective two of the study that sought to determine the effect of prime lending rate on loan portfolio performance.

Collateral Security and Loan Portfolio Performance

The study found a significant relationship between collateral security and loan portfolio performance of Stanbic bank. Commercial banks in Uganda that rely on collateral security to guarantee portfolio performance stand high chances of getting the loans repaid. The third objective that sought to ascertain the contribution loan collateral to loan portfolio performance is confirmed.

Recommendations

This study has established that interest rate significantly affect loan portfolio performance in Stanbic bank. The study therefore recommends the following:

Prime Lending Rate and Loan Portfolio Performance

Since prime lending rate is the best predictor of loan portfolio performance, there is need for strengthening and maintaining to encourage more clients borrow and pay back their loans.

Collateral Security and Loan Portfolio Performance

Collateral security should be used effectively to enhance portfolio performance as most customers fear losing their property offered as collateral.

Areas for future research

This study was conducted basing on Stanbic bank in Kampala branches. The findings are limited to Stanbic bank as a commercial bank. Future researchers should consider a comparative study of the effects of interest rates on the financial performance of commercial banks in Uganda.

Limitations of the Study

The study was limited to banking staff. Such a population could not give a practical experience on borrowers" experiences on collateral security. Future researchers should consider assessing the role of collateral security in securing credit from a borrowers' perspective.

The study adopted a cross-sectional design, which reports situations are they stand at the time of investigation. Such a design cannot explain the loan portfolio performance in the previous period. Future researchers should consider a longitudinal study on the loan portfolio performance of commercial banks in Uganda.

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