**DETERMINANTS OF COMMERCIAL BANKS' LENDING IN NEPAL**

A proposal submitted to the

Office of the Dean, Faculty of Management,

in partial fulfillment of the requirements for the Degree of

Master of Business Studies

by

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Kathmandu

December, 2023

## 1.1 Background of the study

The term "lending" is used by all banking and financial institutions (BFIs) to describe the process by which they give money to other commercial banks and financial sectors, to individuals, corporations, business-related groups, as well as to the government when it is in need (Adhikari & Jha, 2020). Commercial banks' loan services play an essential part in their customers' short-term, medium, and long-term financial goals. The banks offer loans and advances to their clients, including people, businesses, and governments, in accordance with official procedures. The customer invests the advance and loan in various business ventures. In general, it contributes to the rise in the nation's economic development (Olokoyo, 2011). The banks have acted as middlemen in the flow of the money. With regard to its impact on growth in developing nations, the ratio of surplus to deficit expenditure units cannot be overstated (Alhassan, Brobbey, & Asamoah, 2013).

Lending is not as simple as taking money and then just giving it back, it charges for borrowing money because lending has a cost to the lender (Charalambakis & Psychoyios, 2012). As bank lending is the source of generating earnings and it involves amount of risk, banks should aware to analyze the various determinants of bank lending behavior. The bank lending generate the sustainable profit and liquidity sources (Timsina, 2019). The lending practices of banks have provided additional information into the sustainable environment and economic growth of developing nations (Alkhazaleh, 2017).

Lending is affected by different factors like interest rate, inflation, liquidity, exchange rate, capital and economic growth (Akinlo & Oni, 2015). Thus, bank lending is determined by bank-specific factors and macro-economic factors, which include inflation, exchange rate, capital, economic growth, management efficiency and bank profitability (Kim & Sohn, 2017). According to (Moussa & Chedia, 2016), the lending is depends on the bank size, credit risk, interest rate and liquidity. The factors that influence lending have been the subject of numerous national and international research.

The lending activity is the heart of commercial bank’s banking business. Commercial banks accept deposits from customers who have excess funds while also using those funds to provide loans to financially deficient entities. The primary source of income for banks is known as interest income, and it comes from the loans they make to their customers. Therefore, banks would always be interested in providing loans and advances to their customers with the goal of profitability, regardless of the state of the economy (Cheboi, 2012). There are two groups of customers, which are groups of persons who have funds and others who do not. The group with surplus is better than the group without surplus. The two groups should constantly be in balance with one another. For this, the surplus group consistently makes the numerous financing options to the deficit group available. Thus, direct financing can be done between the two groups of surplus and deficit groups so, the both parties are linked by the help of lending practices (Acha, 2010).

## 1.2 Problem statement

This study deals with the issues of lending factors of commercial banks. Making resources available is difficult for banks because when the resources are available like capital, then only financing will be possible. There may be various queries regarding the relationship of the lending policies of commercial banks which is loan and advance with deposit, bank size and interest rate. So, there may be various relationship of different dependent and independent variables which arises the queries. Olokoyo (2011) found out positive relationship between total deposit, interest rate and loan and advance, (Adzis, Sheng, & Bakar, 2018) analyzed that there is positive effect of bank size and total deposit on loan and advance, and (Bhari, 2023) researched that interest rate has a positive and insignificant impact on loan and advance. Thus, this study will also check whether bank size, interest rate and total deposit has positive relationship with loan and advance or not. Therefore, the research will be directed towards answering the following questions:

1. Does the interest rate fluctuate over a certain period of time?
2. How do bank size, total deposits, and interest rates relate to loan and advance?
3. What is the impact of bank size, total deposit and interest rate on loan and advance?

## 1.3 Objectives of the study

For any study there has to be some objectives which highlights the purpose of doing the research work. The major objective of the study will be to determine the factors or determinants affecting bank loan and advance. The specific purpose of the study will be:

1. To examine the fluctuating interest rate of lending amount.
2. To examine the relationship of bank size, total deposit and interest rate with bank loan and advance.
3. To explore the impact of bank size, total deposit, and interest rate on bank loan and advance.

## 1.4 Hypothesis of the study

The study was carried out based on certain hypothesis. With the help of hypothesis, the study will be able to analyze the loan and advance with respect to various determining factors. Following will be the hypothesis made in order to study loan and advance.

Ho1: There is no significant impact of bank size on loan and advance.

Ho2: There is no significant impact of total deposit on loan and advance.

Ho3: There is no significant impact of interest rate on loan and advance.

## Rationale of the study

The study attempts to examine the factors affecting on bank loan and advance. The findings of this study may be useful for banking institutions. This study will aid future researchers in giving a standard and accompanied way of making their work accessible. The significance of the study are as follows:

1. This study will provide a useful feedback for academic institution, bank employee, trainees and financial person concerned with commercial bank.
2. This study will be a useful reference for the researcher who would plan to make any related study precisely.

## 1.6 Limitations of the study

Study limitations are the limits placed on the ability to generalize from the results, to further describe applications to practice, and to the utility of findings as a result of the methods used to establish internal and external validity, or as a result of unanticipated challenges that emerged during the study. The limitations of the study will be as follows:

1. This study will be mainly based on secondary data which are collected from banks.
2. The study will be carried out within limited time period.
3. Only three independent variables i.e. bank size, total deposit and interest rate will be considered in the entire study.
4. This study will concentrates only on those factors that are related with lending.

## 1.7 Chapter plan

This study will be divided into five chapter viz. introduction, literature review, research methodology, analysis and discussion, and summary and conclusion. The first chapter will include background of the study, problem statement, objectives of the study, hypotheses of the study, rationale of the study, limitation of the study and chapter plan. The second chapter will deal with theoretical review, empirical review and research gap. The third chapter will contain research framework and definition of the variables, research design, population and sample, and sampling design, nature and sources of data, and the instrument of the data collection and methods of analysis. The fourth chapter will present the analysis of the data and discussion in the form of various tables and figures. And the fifth chapter will include summary and conclusion. At last, bibliography and appendices also will attached at the end of the study.

## 2.1 Theoretical review

The theories that were reviewed in this study are: Loan pricing theory and Market power model.

### 2.1.1 Loan pricing theory

Stiglitz and Weiss (1981) proposed that banks should not always focus on delivering very low interest rates on deposits but instead charge high interest rates on loans to improve their profits. Rather, when strategizing for increased revenue, companies should be cautious about behavioral risk and wrong selection because it is difficult to understand the type of borrower with confidence when beginning a client relationship (Stiglitz & Weiss, 1981). By making high costs attractive to high-risk borrowers, for instance, high interest rates can lead to the issue of poor selection. Once these borrowers have obtained loans, the lenders are more likely to engage in risky behavior as a result of the start of projects and highly risky investments (Chodechai, 2004). Based on Stiglitz and Weiss' analysis, it is typical to find that the interest rate imposed by banks is not always appropriate to the risk of the borrowers.

Makanile and Pastory (2022) and Olokoyo (2011) research on the determinants of lending behavior of commercial banks while implementing this theory and did their research.

Furthermore, this study will be conducted on the basis of loan pricing theory.

### 2.1.2 Market power model

This model was developed by (Gorton & Winton, 2000). According to the hypothesis, banks with higher capital ratios should be more resistant to runs (from both deposits and short-term wholesale funding), since capital serves as a loss-absorbing buffer. High-capitalized banks are able to provide more loans because of the reduced run risk. (Repullo, 2004) has made the case that banks only choose to handle their liquidity risk responsibly when their leverage is modest. The bank's capacity to lend decreases as its capital ratio falls. A bank has to retain a lot of liquid assets to increase its lending capacity. A bank with minimal capital will thus have a relatively low ability to lend and will discover that protecting against lending risks is rather expensive.

Makanile and Pastory (2022) research on the determinants of lending behavior of commercial banks while implementing this theory and did their research.

Furthermore, this study will be conducted on the basis of market power model.

## 2.2 Empirical review

Olokoyo (2011) investigated the determinants of commercial banks' lending behavior in Nigeria. From this study it was found that the volume of deposit, investment portfolio, foreign exchange and gross domestic product had positive and significant effect on loan and advance. Interest rate, cash reserve ratio and liquidity ratio also had significant effect on loan and advance. From the regression analysis, the model was found to be significant and its estimated turned out as expected.

Adzis, Sheng, and Bakar (2018) investigated the bank specific and macroeconomic determinants of commercial bank lending in Malaysia. The findings of this study concluded that bank size, liquidity and volume of deposit had a significant relationship with the commercial bank. The bank size and deposit volume had positive impact on commercial bank, whereas liquidity had a negative impact on lending activities. In terms of macroeconomic drivers, this study found no clear evidence to support the influence of gross domestic product, lending rate, and cash reserve requirement on commercial bank lending activities in Malaysia.

Bhattarai (2019) conducted the determinants of lending operations among commercial banks. From this study, it was found that cash reserve ratio, interest rate spread and exchange rate were significant in determining lending behavior in Nepal's commercial banks. The positive effect of exchange rate inferred that commercial banks in Nepal had sufficient insights into the international market and trade and that they are prepared to meet short-term and long-term commitments. The findings showed interest rate spread negatively and significantly on total loans advanced to individual and institutions.

Bhattarai (2020) investigated to determine the commercial banks' lending in Nepal. From the estimation results, it was found that investment portfolio, bank size and cash reserve ratio had positive and statistically significant with loan and advance. But liquidity had negative and statistically significant with loan and advance. The macroeconomic variables gross domestic product growth rate and inflation rate had no effective roles to determine the loan and advance.

Yunusa, Ariyibi and Olaiya (2021) examined the impact of the lending rate on bank lending in Nigeria. The findings showed a long-run link between the variables of the study. It was also revealed that the lending rate and liquidity ratio are inversely connected to bank lending growth. Deposit growth and money supply both had a positive significant impact on bank lending growth.

Makanile and Pastory (2022) examined the determinants of the lending behavior of commercial banks in Tanzania. The study found that the statistical insignificant and positive effect in relationship between interest rate and lending of bank. The results found that there is a statistically significant relationship between the capital adequacies and liquidity and the lending of banks in Tanzania while interest rate and management efficiency showed an insignificant relationship towards the lending of banks.

Bhari (2023) aimed to identify the effect of macroeconomic variables, industry-specific variables and bank-specific variables on Nepalese commercial banks' lending. The result showed that the inflation rate, exchange rate, return on assets, bank size, total deposit and liquidity ratio had significant effect on bank loans and advances. However, gross domestic product, cash reserve ratio and lending interest rate showed insignificant effect on loan and advance.

Table 1

*Review of empirical studies*

|  |  |
| --- | --- |
| Study | Major findings |
| Olokoyo (2011) | * Found significant and positive effect of volume of deposit on loan and advance. * Identified significant effect of interest rate and cash reserve ratio on loan and advance. |
| Adzis, Sheng, and Bakar (2018) | * Identified significant and positive effect of bank size and volume of deposit on loan and advance. |
| Bhattarai (2019) | * Found significant and positive effect of interest rate on lending behavior. * Found significant and negative effect of cash reserve ratio on lending behavior. |
| Bhattarai (2020) | * Identified significant and positive effect of bank size and cash reserve ratio on loan and advance. |
| Yunusa, Ariyibi, and Olaiya (2021) | * Found that the lending rate and liquidity ratio are inversely connected to bank lending growth. |
| Makanile and Pastory (2022) | * Found insignificant and positive effect of interest rate on lending of bank. * Found significant effect of capital adequacy on lending of bank. |
| Bhari (2023) | * Identified significant and positive effect of bank size and total deposit on loan and advance. * Showed positive and insignificant effect of lending interest rate on loan and advance. |

## 2.3 Research gap

The empirical review had contributed to enhance the fundamental understanding and knowledge, which made the study meaningful and purposeful. The researcher had used various independent variables such as cash reserve ratio, interest rate, bank size, total deposit, liquidity ratio, gross domestic product, inflation rate etc. whereas loan and advance had used as dependent variable (Bhattarai, 2020), (Bhari, 2023), (Olokoyo, 2011) and (Makanile & Pastory, 2022). They used descriptive statistics, correlation and regression to find the relationship between the dependent and independent variables. But in the context of this study three independent variables will be taken and they are bank size, total deposit and interest rate whereas dependent variable will be loan and advance.

### 3.1 Research framework and definition of the variable

Loan and advance is a function of independent variables such as bank size, total deposit and interest rate. The research framework of the study is in Figure 1.

Independent Variables Dependent Variable

Bank Size

Total Deposit

Loan and Advance

Interest Rate

*Figure 1. Research framework of the study*

From the research framework and objectives of the study, it is clear that the study is aimed at determining the effect of selected variables namely bank size, total deposit and interest rate on bank loan and advance.

Table 2

*Source of variables*

|  |  |  |
| --- | --- | --- |
| Variables | Sources | |
| Bank size | | * Adzis, Sheng, and Bakar (2018), Bhattarai (2020) and Bhari (2023) |
| Total deposit | | * Olokoyo (2011), Adzis, Sheng, and Bakar (2018) and Bhari (2023) |
| Interest rate | | * Olokoyo (2011), Bhattarai (2019), Yunusa, Ariyibi and Olaiya (2021), Makanile and Pastory (2022), and Bhari (2023) |
| Loan and advances | | * Olokoyo (2011), Adzis, Sheng, and Bakar (2018), Bhattarai (2019), Bhattarai (2020), Yunusa, Ariyibi and Olaiya (2021), Makanile and Pastory (2022), and Bhari (2023) |

### 3.1.1 Bank size

Bank size is determined by the size of total asset of a bank (Adzis, Sheng, & Bakar, 2018). Commercial bank lending concluded that bigger banks tend to provide higher credit facilities to the public (Rabab'ah, 2015). According to (Chemykh & Theodossiou, 2011) large banks are typically more diversified, have large funds, and are more accessible to large-company borrowers with high credit card balances. They also have enough resources to build advanced technologies to manage and assess credit risks. This increases the degree of lending facilities that the biggest banks can offer. In this study bank size will be the total assets. The bank size can be calculated by:

Bank size = Total assets

Where, Total assets = Current assets + Fixed assets

### 3.1.2 Total deposit

Total deposit is the money held at a bank. When a customer deposits money, they do it into the bank. The depositor gives the bank permission to hold their money in a safe place for a while in exchange for interest payments from the bank. The bank invests or lends this money to its customers, who then pay interest to the bank in exchange. Deposit mobilization growth is determined by interest rates, inflation, economic growth, remittance inflows and the amount of currency in circulation (Bhari, 2023) and (Olokoyo, 2011). This study will include total deposit as a current, saving and fixed deposit. These are the direct deposits and bank lends these deposit to the customers.

### 3.1.3 Interest rate

The interest rate refers to the amount a lender charges for the use of assets expressed as a percentage of the principal (Makanile & Pastory, 2022). The interest rate measures how well a bank performs its role as an intermediary by monitoring how much money it lends while similarly borrowing at a lower interest rate. Bank collects the fund at cheaper interest rate and granting them at higher interest rate. A high interest rate affects loan demand while only a small number of borrowers with projects that are highly risky may have their demand met. Thus, interest rate will be the cost of loan and advance.

### 3.1.4 Loan and advance

Giving money to someone else in exchange for repayment of the loan principal plus interest is known as lending. In addition, the amount lent by the lender to the borrower for a specific purpose like the construction of the building, capital requirements, purchase of machinery, manufacturing of the products, education sector and so on, for a particular period of time (Bhattarai, 2019). The lending organization investigates the customer's credit report before approving loans to learn more about his reputation, financial situation, and repayment capabilities. A loan is classified as secured or unsecured based on security or demand, time or instalment loan based on the repayment mode. Likewise, for businesses to meet their short-term financial needs, banks provide money to them in the form of advances. It is a credit facility which should be repaid within one year as per the terms, conditions and norms issued by Nepal Rastra Bank.

## 3.2 Research design

Quantitative research approach will be applied for the study to examine and analyze factors affecting lending policy. Based on the objectives of the study relational and causal research design will be applied in the study. Relational research design examines the relationship between variables without the researcher manipulating any of them. It shows the intensity or direction of the link between two or more variables. A correlation might be in positive or negative direction. Causal research design analyzes the cause and effect link between two different situations. Researchers create experiments to get statistical proof of the relationship between the circumstances since numerous alternative factors might affect cause and effect.

## 3.3 Population and sample, and sampling design

The population of this study will be 20 commercial banks. Out of the total population 2 commercial banks will be chosen by applying convenience sampling method. Among these 2 sample of commercial bank, one will be Nepal Bank Limited and another will be Siddhartha bank limited. This study will examined ten year panel data for the period of 2012/13 to 2021/22.

## 3.4 Nature and sources of data and the instrument of data collection

The study will be based on secondary data. The annual reports of the respective companies will be recorded in excel for the period of ten years from fiscal year 2012/13 to 2021/22. The data would be collected on the basis of the variables: dependent variable include loan and advance whereas independent variables include bank size, total deposit and interest rate.

## 3.5 Method of analysis

Various statistical tools will be applied in this study. SPSS software will be used in order to calculate and analyze the data. The following subsections discuss the statistical methods that will be use in this study to examine the data findings:

### 3.5.1 Descriptive statistics

A statistical measure focuses on descriptive statistics uses specific numbers, such as mean, median and mode, to characterize data in order to make it simpler to interpret and analyze. The data that is accessible (sample) is what descriptive statistics describe, and they are not dependent on any theory of probability because they don't include any generalization or inference beyond what is immediately available.

### 3.5.2 Correlation

Correlation is a statistical tool used to measure how strong a relation is between two variables. Correlation are useful because they can indicate a predictive relationship that can be exploited in practice. Thus, it is helpful. It is calculated as follows:

Where,

n = Number of observations

x = Value of independent variables

y = Value of dependent variable

### 3.5.3 Regression analysis

Regression is a statistical measure that attempts to determine the strength of the relationship between one dependent variable and one or more independent variables. In this study, regression analysis will be applied to show the impact of independent variables on dependent variable. It is calculated by applying following formula:

Where,

Y = Loan and advance

a = Intercept

b1 = Coefficient of bank size

b2 = Coefficient of total deposit

b3 = Coefficient of interest rate

X1 = Bank size

X2 = Total deposit

X3 = Interest rate

ein = Error term

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