DETERMINANTS OF BANK DEPOSITS: EVIDENCES FROM NEPALESE COMMERCIAL BANKS

A proposal submitted to the Office of the Dean, Faculty of Management in partial fulfilment of the requirements for the Master's Degree

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1. Background of the study

Bank deposit represent the most significant component of the money supply used in by the public and change in money growth are highly correlated with change in the price of good and service in the economy. Deposit variability is frequently included an important determinants of portfolio strategy, the more volatile a bank deposit are, the more liquid its mix of assets has been. Deposit variability affects bank holding of cash and excess reserves, the distribution of total member bank reserves within the banking system and thereby the path and speed of monetary policy action. This is why deposits are very important for banks and as a result, for the economy of a country. Banks need inflow money from the people so that they can be able to give loans or financing to promote productivity and economic growth and at the same time to gain profit for themselves through interest or margin applied (Ostadi & Sarlak, 2014).

Commercial banks are institutions that engage in two distinct types of activities, one on each side of the balance sheet deposit-taking and lending (Kashyap, Rajan and Stein, 2002). Varman (2005) considered commercial banks as the backbone of the trade and commerce playing the intermediary role of capital formation and supply. Even if other financial institutions are available, commercial banks play a major role in facilitating the way that financial sector operates. Commercial banks perform various roles in the economy. According to Allen and Carletti (2008), commercial banks ameliorate the information problem between investors and borrowers by monitoring and ensuring a proper use of the depositors' fund. They provide inter temporal smoothing of risk that cannot be diversified at a given point in time as well as insurance to depositors against unexpected consumption shocks. Because of the maturity mismatch between their assets and liabilities, banks are subject to the possibility of runs and systematic risk. Commercial banks contribute to the growth of the economy. They perform an important role in corporate governance. The relative importance of the different roles of banks varies substantially across countries and times but banks are always critical to the financial system.

Commercial banks are important of all other financial institutions and macroeconomic environment. As to Ashcraft (2005), commercial banks failures involve significant macroeconomic cost, this researcher has developed evidence that bank failures have significant and apparently permanent effects on real economic activity. Therefore, banks are also important influencers in macroeconomic environment. In last decade the world has seen fall of some huge banks and taking the world's economy down with them.

Moreover, commercial bank has been affecting and will affect the overall economy of the specific country both in a good way or bad way. Commercial banks represent a vital link in the transmission of government economic policies (particularly monetary policy) to the rest of the economy. For example, when banks credit is scarce and expensive, spending in the economy tends to slow and unemployment usually increases (Sergeant, 2001). So, the event in the commercial banks will affect the country's economy in general.

Bank deposit is an amount of money in cash or checks form or sent via a wire transfer that is placed into a bank account. The target bank account for the bank deposit can be any kind of account that accepts deposits. Deposits play a pivotal role in bank's funding, as a predominant portion of commercial banks assets are usually financed through customer deposits therefore implies that a bank that is able to generate more deposits cheaply has been able to supply more loans competitively and hence make more profits if all other factors are held constant (Okun, 2012).

In Nepalese context, Pradhan and Paneru (2016) concluded that lagged log fixed deposit, numbers of branches, trend and lagged log saving deposit are considered as important variables for deposit in Nepalese banking sector. This implies that these explanatory variables have positive impact on the bank deposit of commercial bank and change in it will yield the highest change in banks deposit.

Dhungana (2011) found that higher the level of GDP, higher the deposit of the financial institutions, and economic growth of the nation. Similarly, high level of the deposit of commercial banks contributes for the enhancement of nominal GDP and economic growth of the nation. Shrestha (2008) analyzed the private savings behavior in Nepal: long-term determinants and short-run dynamics and the study found that real interest rate has positive influence on the private savings in Nepal and also significant.

2. Problem statement and research questions

Investigating the savings behavior of Mainland Chinese, Qin (2003) found that the expected savings potential was the chief determinant of bank deposits. Similarly, to their Taiwanese counterparts, interest rate seems to be an important consideration to Mainland Chinese in making deposits. This researcher concluded that that precautionary was one of the essential factors that motivated them to save. One of the important literatures on saving behavior was a study by Hondroyiannis (2004), who used cointegration approach in estimating the behavior of Greece households. He provided empirical evidence that in the long run savings function is sensitive to fertility changes, old dependency ratio, real interest rate, liquidity and public finance.
Agrawal (2001) studied the relationship between saving and growth in seven Asian countries (South Korea, Taiwan, Singapore, Malaysia, Thailand, Indonesia, and India) and found mixed results. Both high rate of growth of income per capita, and the rapidly declining age dependency ratio contributed to the high rate of saving in these countries. As for the interest rate, a significant positive relationship was found for Malaysia and Thailand and negative for Indonesia. Anoruo (2001) also used ASEAN countries in his saving-investment connection study and established the long run relationship between savings and investment for all countries under consideration.

It is often argued that branching stabilizes banking system by facilitating diversification of bank portfolios. Branch banking leads to more stable banking systems by enabling banks to better diversify their assets and widen their deposit base (Carlson and Mitchener, 2006). Masson et al. (1998) analyzed the international evidence on the determinants of private saving and the study found that demographic and growth rate are important determinants of savings but interest rate and terms of trade have a positive but less robust effect on deposit. Moreover, at low income level, with the increase in per capita gross domestic product, savings level increases but it decreases at high income level. Eriemo (2014) found that bank investment, bank branches, interest rate and the general price level are important determinants of bank deposit.

According toKhaniya (2014), real interest rate, population growth rate, GDP growth rate and inflation have significant impact on bank deposit. Bank specific variables such as lagged deposit and bank size are positively related with deposit whereas lagged bank size is negatively related to bank deposit. Among the macroeconomic variables lagged gross domestic product growth rate, inflation rate and lagged inflation rate have significant impact on deposit of Nepalese commercial banks.

As the study conducted in this particular area is rarely available academicians lacks the reference material of this area. The present study is, therefore, an endeavor to estimate the effect of macroeconomic variables and bank specific variables on the level of deposits in Nepalese commercial banks. It deals with the following research questions:

i. What is the situation of deposit in Nepalese commercial banks?
ii. Is there any relationship between bank specific variables with deposit of Nepalese commercial banks?
iii. To what extent macroeconomic variables affect the bank deposits of Nepalese commercial banks?

3. Purpose of the study

The major purpose of the study is to identify the factors affecting the deposit of Neplease commercial bank’s and to determine the relationship between total deposit and the identified factors. The specific objectives of the study are streamlined as follows:

i. To investigate the trend of total deposit in commercial banks in Nepal.
ii. To examine the effect of bank specific variables (saving, fixed deposit rate, number of branches, return on assets) on total deposit in Nepalese commercial banks.
iii. To analyze the impact of macroeconomic variables(population growth rate, money supply, gross domestic product ,consumer price index) on deposit in Nepalese commercial banks.

4. Conceptual framework

Many studies such as: Rachmawati and Syamsulhakim (2004), Finger and Hesse (2009) and Rasiah (2010) describes about the relationship between bank specific variables and total deposit of commercial banks. The country's economic, social and political factors also affect the commercial banks. According to Finger and Hesse (2009), country specific risks such as political, economic and financial risks may affect the propensity for depositors to place funds in the banking system. Based on the various researches, for measuring the determinant of commercial bank deposit the conceptual framework of this study has been developed. The conceptual framework of this study has been shown in figure 4.1.

Independent variables **Dependent Variables**

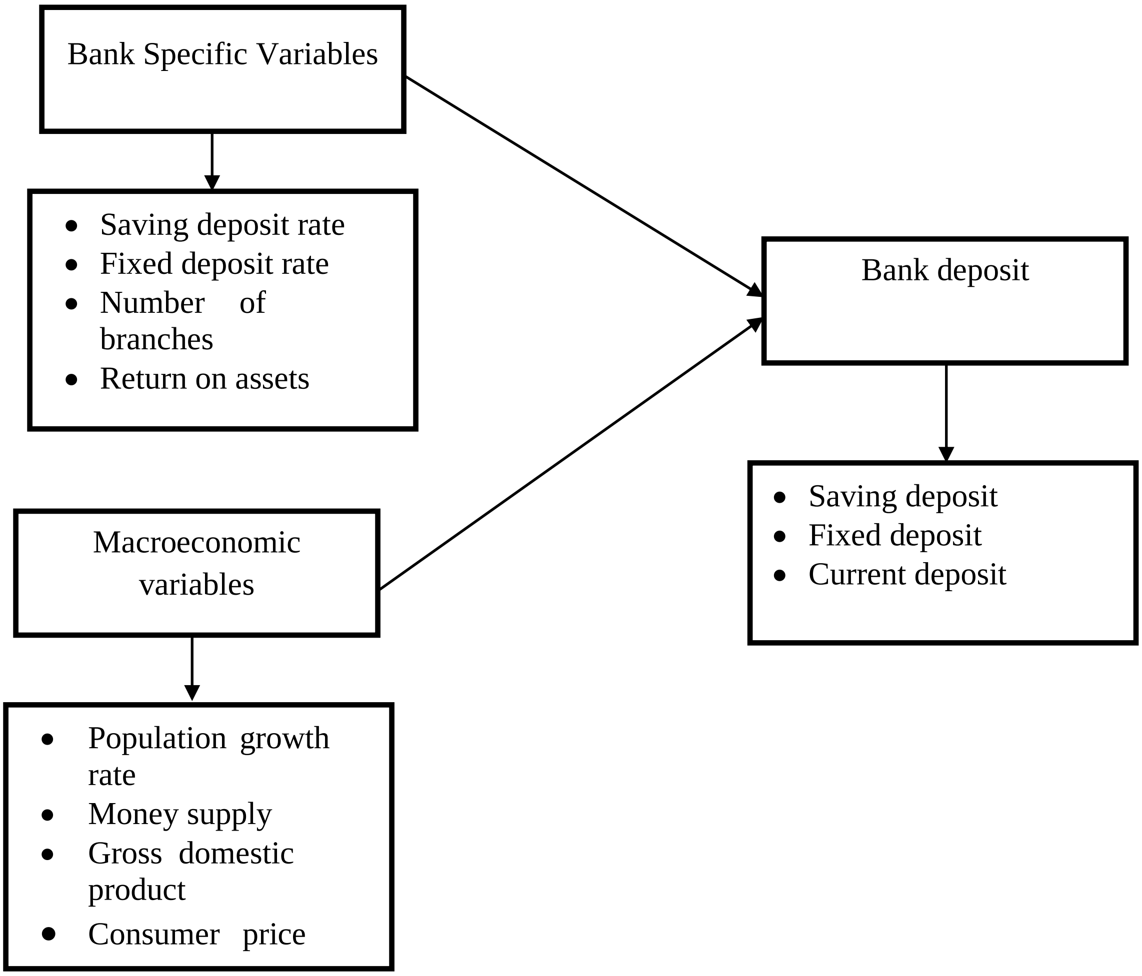

Fig 4.1: Conceptual Framework

5. Significance of the study

The study conducted on the title of Determinants of Bank Deposits is expected to be used and/or applied by both the academicians and bank managements. Accordingly, the following two are the significances that are attained by the study.

i. This study will help commercial banks to manage their deposit by letting them know what affects it and which variable is the most important so that should be given due emphasis.

ii. The study adds knowledge on the field of finance. The studies that are conducted on the factors affecting commercial banks deposit are rare; therefore, the study has been an important reference material on the field of finance.

6. Limitations of the study

i. Other variables affecting commercial banks deposit are totally ignored.
ii. The overview of the study has taken into consideration of some selected commercial banks so that the study might not cover the whole commercial banks.
iii. The study is based on co-relation and regression method of analysis and using secondary data of selected commercial bank so other research design and primary data is not taken into consideration.
iv. This study only focus on banks specific variables such as saving deposit rate, fixed deposit rate, number of branches ,ROA and macroeconomic variables such as population growth rate, money supply, GDP, consumer price index so other variable are not focus for the study.
v. This study has analyzed last 7 years data beginning from 2013/14 to 2019/20

7. Literature review

This section deals with the brief review of existing and prior empirical studies, related to the subject of this study. The study of determinants of bank deposit of the commercial banks has been a matter of interest for researchers for long time. Many studies have been carried out in developed as well as developing economies relating to this topic.

While talking about the study of the effects of interest rates on savings in developing countries, the evidence was not conclusive, time-series estimates for individual countries as well as cross-section and time-series estimates for a number of countries pointed to the positive effects of interest rates on savings. At the same time, a variety of factors had reduced the statistical significance of the estimates. (Balassa B. , 1989) Although most studies have relied on domestic or private sector saving data, the study about the household savings in developing countries used household data available from the U.N. System of National Accounts for a sample of 10 countries. Household saving functions are estimated using combined time-series and cross-country observations in order to test household's response to income and growth, rates of return, monetary wealth, foreign saving, and demographic variables. The results showed that income and wealth variables affect saving strongly and in ways consistent with standard theories. Inflation and the interest rate do not show clear effects on saving, which is also consistent with their theoretical ambiguity. Foreign saving and monetary assets have strong negative effects on household saving, which suggests the importance of liquidity constraints and monetary wealth in developing countries. (Schmidt-Hebbel, Webb and Corsetti, 1992)

The aim of the study about the factors affecting deposits in Indonesia was to figure out the factors affecting deposits in Indonesia using a well-known econometrics cointegration method. It uses quarterly time series in the period of 1993-2003. Four variables, GDP, number of Islamic bank's branch offices, profit sharing rate, and interest rate are thought to have influence on the volume of deposits. The cointegration test indicates that the number of Islamic bank's branch offices and profit-sharing rate are significantly affects the volume of deposits in Indonesia in the long run, while GDP and interest rate are not. The study concluded that the volume of deposits in Indonesia does not depend on income or interest rate, but depend on profit sharing rate and the number of branch offices of the Islamic commercial banks. This finding supported the view that depositors are attracted to put their money in Indonesian Islamic banks partly due to welfare maximization reasons, not only because of their religious considerations. Moreover, in order to increase the volume of deposits in Indonesia, it is suggested that more branch offices in Islamic commercial banks are built. Indonesian Islamic commercial banks should also provide an optimal profit-sharing rate in order to attract more depositors. (Rachmawati and Syamsulhakim, 2004)

Gupta (1987) examined the effects of real interest rates on personal savings of rural and urban households in a survey of a group of Asian and Latin American countries, using per capita aggregate savings as the dependent variables. The study concluded that though per capita income levels were low, incentives such as positive real interest rates could lead to higher savings especially from the urban sector. The study further observed that real interest rates have an effect on the structure of savings. In his findings, financial savings as a percentage of total savings increases with increases in deposit rates.

Larbi-Siaw and Lawer (2015) investigated the influence of selected macroeconomic and financial level variables on bank deposits in Ghana. It specifically examined the dynamic effect of deposit interest rate, inflation, monetary policy rate, growth of money supply and stock prices on the level of bank deposits. The dataset for the study used of quarterly data spanning the years of 2000 to 2013 gathered from the Bank of Ghana monetary time series database. The findings from the study indicated a significantly negative short-term impact of both inflation and growth of money supply of bank deposits in Ghana.

Pradhan and Paneru (2016) investigated the macroeconomic determinant of bank deposit of Nepalese commercial banks. The study considered both bank specific and macro-economic factors. It is based on pooled cross-sectional analysis of secondary data of 18 commercial banks listed in NEPSE with 108 observations for the period of 2008 to 2013. This study concluded that lagged log fixed deposit, numbers of branches, trend and lagged log saving deposit are considered as important variables for deposit in Nepalese banking sector. This implies that these explanatory variables have the heights impact and influence on the bank deposit of commercial banks and change in it will yield the highest change in banks deposit.

8. Methodology

Research methodology refers to the various sequential steps to be adopted by a researcher so as to obtain answer to the research question. In this chapter, the focus has been made on research design, nature and sources of data, sampling procedure, tools used for analysis of data.

8.1 Research design

The study was based on descriptive designs. The descriptive research design has been adopted for fact-finding and searching for adequate information about the fundamental issues associated with variables affecting deposits of Nepalese commercial banks. The study also used causal comparative research design to establish the cause and effect relationship between bank deposits and its determinants of Nepalese commercial banks.

8.2 Population and sample

Convenience sampling technique has been taken to select the samples among population. There are 27 commercial banks listed in NEPSE during the research period. For the study purpose, banks involving in banking services at least for five years has been considered for sample. Since all of them did not provided scope for the study, 13 different Nepalese commercial banks has been taken as a sample out of 27 Nepalese commercial banks for the period of 2013/14 to 2020/21.

8.3 Sources of data

This section elaborates on how data has been collected to carry out this study. The study has been based on secondary data. The variables used in the study are deposit variables (saving deposit, fixed deposit and current deposit), macro-economic variables (gross domestic product, population growth rate, money supply and consumer price index) and firm specific variable (saving deposit rate, fixed deposit rate, number of branches and return on assets). The necessary secondary data and information has been collected from the annual reports of selected commercial banks, annual reports of SEBON, NEPSE, newspaper, published articles, book reviews, economic reports and journals related to the concerned company.

8.4 Data analysis tools and techniques

Descriptive, co-relation and regression methods of analysis has been used in the study. The descriptive statistics contains mean, standard deviation, minimum and maximum values of variables which use to explain the characteristics of sample firms. The correlation analysis has been used to measure the direction and magnitude of relationship between dependent and independent variables. The regression analysis has been used to find out the influence of independent variable over dependent variable solely and combined with other variables. It explains the different statistical tests of significance for validation of model linear regression analysis. All models are tested for individual effects by running F-test using statistical package for social science (SPSS).

9. Chapter plan

A chapter plan is an outline that helps us to organize material is a way that is easy to comprehend. It can be a very useful tool in helping to find the main points of the chapter. This report has been divided into five chapters.

Chapter I: Introduction

Chapter one gives detail about the study area and the concept note about the research problem under study. It includes background of the study problem statement, objectives, significance of the study, limitations and the conceptual framework.

Chapter II: Literature review

Review of literature gives the investigator a throughout and profound knowledge of the research topic. It provides guidelines to use statistical methods for analysis of collected data.

Chapter III: Methodology

This chapter discusses in detain the research methodology applied in the context of this study. It includes research design, data sources, variables, population sample and sampling techniques, research tools and techniques and plan for data analysis.

Chapter IV: Results

Data analysis includes tabulation, coding and classification of data gathered in accordance with the research design, to perform quantitative and qualitative analysis. The details about the analysis and interpretation of the findings are described here.

Chapter V: Conclusion

This chapter presents the brief background of the study, objectives, literature review and methodologies. Chapter focuses on the major findings and compares them with theory and other empirical evidence to extend possible.

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