CHAPTER I

INTRODUCTION

1.1Background of the Study

Banking sector is considered as pulse for every economy. Nepal Rastra Bank is the primarily regulatory authority for banking sector in Nepal. There are few other financial institutions in the country which are working under direct supervision of Nepal Rastra Bank. NRB is also known as the doctor who put the figure on the pulse and at the same time ensures the financial system of economy is working healthy however, on the other hand if the financial crisis incurred in the banking sector will transmits (Baral, 2005).

Nepal has established up comprehensive financial infrastructures such as commercial banks, development banks, finance companies, cooperatives, non-governmental organizations. Among the financial institutions, the common resource of supplies funds and the main source of financing to support the national economic performance are commercial banks. Commercial banks presently hold a large share of economic activities of the country constituted 82.10% of total assets (Jha, 2014).

In Nepal, several commercial banks make a way to the business after the liberalization in 1980, deregulation, advancement in information technology and globalization. Since then, many joint-venture banks (JVB) and domestic private banks (DPB) entered into the market. Although there is relatively a long history of evolution of the banking sector in Nepal, a formal and systematic capital market activities commenced from the early-1990s. There are presently 263 financial institutions among them 27 are commercial banks. Of the 27commercial banks, 3 are public sector and 24 are privately owned (17 domestic and 7 joint-ventures) (NRB, 2010).

Financial institutions like banks are the model of modernization of the society and play a vital role in the development of economic growth of the country. Commercial banks furnish necessary capital needed for trade and commerce for mobilization dispersed saving of the individuals. The primary functions of the commercial banks are raise and utilization of funds. Collected fund are utilized in various sector which is knows as capita of financial organization. Capital which is collected from general public be safe. In case if financial organization does not have enough capital to

provide a buffer against the future unexpected losses. Thus capital must be sufficient to protect depositors interest in one hand on the other encounter unexpected risk.

Traditionally the least regulatory obligation of the capital ratio was set by the NRB with internationalization in banking institutions, objectives of banks changed with the passage of time, as the world is converted into the global village. However the recent literature shows the evidences that there were other factors which influence the Capital Adequacy Ratio (CAR) in the banking sector of Nepal. Capital Ratio diverges from bank to bank according to objectives of banking institutions, these variables are not only limited to the regulatory obligation while other factors also contribute to set capital ratio in banking institution.

1.2 Statement of the Problem

International regulatory authority Basal Accord for banking institution issues Basel II which was imposed from Jan 01, 2008, which requires more rigorous techniques and method for the computation of Capital Adequacy Ratio (CAR) as compare to Basel I. Basel II is highly risk responsive as compare to previous standards for computation of CAR in banking institutions. Therefore, banking institution in Nepal has to maintain capital ratio defined by the regulatory authority mandatory requirement.

Due to difference in economic, political, government policy, legal and other internal and external financial crises capital adequacy of the banking institution of Nepal has been adversely affected. Present study is to explore the answer to the following question.

a) Was samplebanking institutions of Nepal adequately capitalized?

b) What was the financial performance of sample banks?

1.3 Objectives of the Study

Commercial banks play an important role in financial sector and accounts for more than 80% of the total assets and liabilities of the financial system and demonstrated a positive relationship with the economic growth of Nepal. The specific objectives of the study are:

a) To assess the capital adequacy maintained by sample banks.

b) To examine the financial performance of sample banks.

1.4 Significance of the Study

- It may help researcher/scholar to gain raw idea and feedback. Also ambiguity of this research.
- It may help government to foster fiscal policy for stepping economic activities.
- It may be help to providing feedback for respected banks to take the necessary steps to enhance their efficiency and effectiveness.
- Identification of loophole of sample banks may help other financial banks to strength their similar constraint.
- It may be helpfulNRB to know efficiency and effectiveness of commercial banks to make necessary policy setup to boost up their performance.
- General people may be benefited by knowing the performance of respected banks.

1.5 ResearchHypothesis

Hypothesis testing is statistical testing an assumption regarding a population parameter. It is used to infer the result of a hypothesis performed on sample data from a large population.

(http://www.investopedia.com/terms/h/hypothesistesting.asp)

To support the major research objective of this study sevenalternative hypotheses have been set with seven different variables are as under:

Hypothesis Used are as follows:

H1 : There is significant difference in EQR of JVB and PDB in Nepal.

H2 : There is significant difference in ROA of JVB and PDB in Nepal

H3 : There is significant difference in ROE of JVB and PDB in Nepal

H4 : There is significant difference in CRR of JVB and PDB in Nepal

H5 : There is significant difference in DAR of JVB and PDB in Nepal

H6 : There is significant difference in LAR of JVB and PDB in Nepal

H7 : There is significant difference in NPLR of JVB and PDB in Nepal

1.6 Limitations of the Study

The major limitations of this study are enlisted as follows

- The study is mainly based on secondary data collected from various sources. Hence, the reliability of the study depends upon authenticity of data.
- The study is based on capital adequacy norms and financial performance of commercial banks.
- The study covers the five year data from 2010/11 to 2014/15.
- This study will assess the current state of the Nepalese commercial banking system using conventional financial ratios analysis that is based on CAMEL model retrieved from balance sheet of respective banks.

1.7 Organization of the Study

The study has been organized into following fivechapters:

Chapter-I: This chapter includes general background of the study, statement of theproblems, objectives, hypotheses,and limitations ofthe study.

Chapter-II: This chapter presents the theoretical analysis as well as empirical literature. Empirical literature consists of international and national context.

Chapter-III: This chapter describes the methodology employed in preparing this study. It deals with research design, natural and sources of data, conceptual framework, population and sample and sources of data for study.

Chapter-IV: This chapter illustrates systematic format for the analysis as well as interpretation of the collected data that verified the rationale of the study.

Chapter-V: This chapter presents summary of the finding, conclusion and recommendations of the study.

References and appendices are also attached at the end of the study.

CHAPTER II

REVIEW OF LITERATURE

A number of studies have been conducted in Nepal and abroad to study the capital adequacy of commercial banks. These studies have been reviewed with a view to understand the objectives of these studies, research methodology, research findings, etc. and to identify the gap that exists in the literature in this area.

2.1Theoretical Review

Prior to 1988, there was no uniform international regulatory standard for setting bank capital requirements. In 1988, the Basel Committee on Banking Supervision (BCBS) developed the Capital Accord, which is known as Basel I, to align the capital adequacy requirements applicable especially to banks in G-10 (Japan, Germany, Belgium, Canada, France, Holland, Italy, Sweden, UK and United State) countries. Basel I introduced two key concepts. First, it defined what banks could hold as capital, as well as designating capital as Tier 1 or Tier 2 according to its loss-absorbing or creditor protecting characteristics. The second key concept introduced in Basel I was that capital should be held by banks in relation to the risks that they face. The major risks faced by banks relate to the assets held on balance sheet. Thus, Basel I calculated banks‟ minimum capital requirements as a percentage of assets, which are adjusted in accordance with their riskiness and assigning risk weights to assets. Higher weights are assigned to riskier assets such as corporate loans, and lower weights are assigned to less risky assets, such as exposures to government.

The BCBS released the "International Convergence of Capital Measurements and Capital Standards: Revised Framework", popularly known as Basel II, on June 26, 2004. This framework was updated in November 2005 and a comprehensive version of the framework was issued in June 2006. Basel II builds significantly on Basel I by increasing the sensitivity of capital to key bank risks. In addition, Basel II recognizes that banks can face a multitude of risks, ranging from the traditional risks associated with financial intermediation to the day-to-day risks of operating a business as well as the risks associated with the ups and downs of the local and international economies. As a result, the framework more explicitly associates capital requirements with the particular categories of major risks that banks face. The Basel II capital framework also recognizes that large, usually internationally active banks have already put in

place sophisticated approaches to risk measurement and management based on statistical inference rather than judgment alone. Thus, the framework allows banks, under certain conditions, to use their own „internal" models and techniques to measure the key risks that they face, the probability of loss, and the capital required meeting those losses. In developing the new framework, the Basel Committee incorporated many elements that help to promote a sound and efficient financial system over and above the setting of minimum capital requirements. Keeping this in mind, the Basel II framework incorporates three complementary „pillars" that draw on the range of approaches to help ensure that banks are adequately capitalized in commensurate with their risk profile.

Basel Committee on Banking Supervision (BCBS) released a comprehensive reform package entitled "Basel III: A global regulatory framework for more resilient banks and banking systems" (known as Basel III capital regulations) in December 2010. Basel III reforms are the response of the Basel Committee on Banking Supervision (BCBS) to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill over from the financial sector to the real economy. Basel III reforms strengthen the bank-level i.e. micro prudential regulation, with the intention to raise the resilience of individual banking institutions in periods of stress. Besides, the reforms have a macro prudential focus also, addressing system wide risks, which can build up across the banking sector, as well as the procyclical amplification of these risks over time. These new global regulatory and supervisory standards mainly seek to raise the quality and level of capital (Pillar 1) to ensure that banks are better able to absorb losses on both a going concern and a gone concern basis, increase the risk coverage of the capital framework, introduce leverage ratio to serve as a backstop to the risk-based capital measure, raise the standards for the supervisory review process (Pillar 2) and public disclosures (Pillar 3) etc. The macro prudential aspects of Basel III are largely enshrined in the capital buffers. Both the buffers i.e. the capital conservation buffer and the countercyclical buffer are intended to protect the banking sector from periods of excess credit growth.

The Basel Committees on Banking Supervision's (BCBS) recommendations on capital accord are important guiding frameworks for the regulatory capital requirement to the banking industry all over the world and Nepal is no exception. Realizing the

significance of capital for ensuring the safety and soundness of the banks and the banking system, at large, Nepal Rastra Bank (NRB) has developed and enforced capital adequacy requirement based on international practices with an appropriate level of customization based on domestic state of market developments. With a view of adopting the international best practices, NRB has already issued the Basel III implementation action plan and expressed its intention to adopt the Basel III framework, albeit in a simplified form. In line with the international development and thorough discussion with the stakeholders, evaluation and assessment of impact studies at various phases, this framework has been drafted. This framework provides the guidelines for the implementation of Basel III framework in Nepal. The Basel III capital regulations continue to be based on three-mutually reinforcing Pillars, viz. minimum capital requirements, supervisory review of capital adequacy, and market discipline of the Basel II capital adequacy framework (NRB, 2011).

2.1.1Comparison of Basel I, Basel II and Basel III

Features	Basel I	Basel II	Basel III
Main focus	Stability and fairness of International Banking system	Capital Adequacy Risk and Disclosure Requirement.	Emphasis on Reducing systematic Risk and Improving Transparency.
Risk Sensitivity	Low	Moderate	High
Focous	Backward looking	Some what forward looking	Forward looking

2.1.2 Comparison of Capital Requirement

Minimum Ratio of Total Capital to risk weighted assets (RWAs)	8%	8%	10.50%
Minimum Ratio of Common Equity to RWAs	2%	2%	4.50% to 7.00%
Tier I Capital to RWAs	4	4	6
Core Tier I capital to RWAs	Non	2%	5%
Capital Conservation Buffer to RWAs	None	None	2.50%
Leverage Ratio	None	None	3.00%
Counter Cyclical Buffer	None	None	0% to 2.50%
Minimum Liquidity Coverage Ratio	None	None	TBD (2015)
Minimum Net Stable Funding Ratio	None	None	TBD (2018)

Source: http://documents.tips/documents/comparison-of-basel-i-ii-and-iii.html

Jeff (1990) revealed that capital adequacy was reflected in asset size as a proxy of a well managed bank. Capital adequacy has considered the foremost benchmark and primary measure for safety and soundness for banks and financial institutions.

Ebhodaghe (1991) highlighted that capital adequacy level is a situation where the banks' adjusted capital is adequate to take up all unexpected losses arising in the future and cover fixed assets. Moreover there should be a sufficient surplus for running of day to day operations and future expansion.

Umoh (1991) argued that adequate capitalization is a significant variable in banking business. In addition to it, insured banks must have sufficient capital that may afford a cushion to absorb possible future losses. There should be also sufficient funds for banks' operation and expansion, as well as ensure protection and safety for stakeholder and depositors deposits.

Onoh (2002) revealed that adequate capital is considered as the proportion of capital that can efficiently protect operations of the banks from failure by absorbing losses. In addition, the level of capital has to be adjusted in the situation when it is expected that the total operational expenses and withdrawal requirements may increase.

2.2 Review of Previous Studies

Empirical study has been classified in two section international and national context.

2.2.1 International Context

Vashisht (1987) evaluated that the performance of public sector banks with regard to six indicators, viz. branch expansion, deposit, credit, priority sector advances, DRI advances, and net profit over the period 1971-83. The researcher has used composite weighted growth index to rank the banks as excellent, good, fair and poor. In order to improve the performance, he has suggested developing marketing strategies for deposit mobilization, profit planning and SWOT analysis.

Prasantha (1997) reviewed that the performance by selecting certain parameters like deposit mobilisation, analysis of advances, credit deposit ratios, interest spreads, employee productivity, customer services, profit as a percentage of working funds etc. One major conclusion drawn by the researcher is that the profits is in increasing trend, indicating a more than a proportionate increase in spread, than in burden. It has been brought out that there is a gradual increase in the percentage of profit on the working funds over the study period. There is decline in operating costs, responsiveness of the SBH during the study period which is a clear symptom of cost effectiveness/ productivity which has resulted in a profit though many banks were in red during the years 1992-93 and 1993-94 due to introduction of banking sector reforms.

Reynolds and Ratanakomut (2000) studied that the financial structure and bank performance using dependent variables (capital adequacy, liquidity, profitability, and loan preference) were regressed to structural variables (bank assets, net income, administrative expenses and time). His study conclude that profitability and loan

preferences increases with size, but capital adequacy decreases with size, so large banks have smaller capital adequacy ratios, and profit is directly related to capital adequacy.

Makhamreh(2000) sought to identifying factors affecting Jordanian banks performance for the period (1989 – 1966), in which four measures of financings performance of banks were used as dependent variables, including organizational factors such as bank size and technological level, addition to leadership factors such as borrowings to owners' equity ratio; as well as environmental factors including (GDP) and finally managerial or administrative factors including those related to bank's employees and decision makers. As for independent variables they included dividends per share, ROA ratio, and stocks market value. The study revealed that dividend per share and its market value are of the best measures used in determining performance of Jordanian commercial banks, along with organizational and leadership.

Yu (2000) found that the relationship between the equity-to-asset ratio and the liquidity ratio is significantly positive for small banks, but significantly negative for medium size banks. He studied Bank Capital Structure and the Liquid Asset- Policy considered liquidity and profitability as the main determinants of bank capital ratio in Taiwan

Tanaka (2002) investigated that banks capital adequacy regulation affects the monetary transmission mechanism. His finding reveals that by using a general equilibrium frame-work, the monetary transmission mechanism is weakened if banks are poorly capitalized or if the capital adequacy requirement is inflexible.

Al – Maleeji (2002) conducted a study aimed at developing an accounting model for judging the Egyptian commercial banks and to establish a standard that includes various element needed to assess capital adequacy, which reflects most of the risks facing commercial banks in general and credit, inflation liquidity and market risks in particular. The study reheated that capital adequacy established according to Basel banking decisions 1988 and Egyptian central bank decisions 1991, are not effective, as well as the new framework for capital adequacy (Basel, 1999), in maintaining commercial banks capital and assuring the safety of their financial positions along

with their inability to reflect various risks facing commercial banks operating in Egypt and do not include all elements necessary for the assessment of capital adequacy.

Chen (2003) analyzed that the situation and regulation of the capital adequacy of state commercial banks in China. Capital enhancement is always preferred and the mainly practical method which is adopted is to use subordinated debt in order to increase the supplementary capital requirements. There are several specific bank performance factors that have an influence on capital adequacy requirements of the banking system, particularly with reference to profitability, asset quality, and management efficiency, earning quality, liquidity and sensitivity.

Pathak (2003) studied that the performance of these banks in terms of financial parameters like deposits, advances, profits, return on assets and productivity since 1994-95 samples of 5 banks has been taken for financial analysis. Financial track record of all these banks was evaluated, and their financial performance was compared. The working of all the constituents was satisfactory but the HDFC Bank emerged as a top performer among them followed closely by the ICICI Bank.

Al-Mekhlafi (2004) investigated the influence of banks capital adequacy indicators on each of financial risk indicators and bank revenues along with their implications for the bank value, Nine banking capital adequacy indicators were employed, vis-a-vis capital to deposits ratio, capital to total Assets ratio, capital to debts ratio, capital to risky assets ratio, free capital to risky assets ratio, free capital to working assets ratio, capital to investment ratio capital to incidental liabilities ratio and capital to weighted risk assets ratio, in addition and capital to weighted risky assets ratio addition, three banking risk indicators including, credit risk, interest rate risk, and liquidity risk, As for banking return indicators, for banks ability to generate revenues, nine indicators were used and as follows Net interest margin, net income Margin, Assets turnover rate, ROA ratio, financial Leverage multiplier, ROE ratio, Return on deposits ratio, Return on available funds ratio, and Available resources revenue power. The study showed the acceptance of the study hypothesis which states that both banking risk indicators and returns are affected by bank capital adequacy and that this will be reflected in the bank value, The study also revealed the need for taking necessary internal actions and measures to ensure compliance with Basel 2 decisions regarding banking capital adequacy, and finally selecting the time scheduling that is suitable for execution.

Veni (2004) studied that the capital adequacy requirement of banks and the measures adopted by them to strengthen their capital ratios. The author highlighted that the rating agencies give prominence to Capital Adequacy Ratios of banks while rating the bank's certificate of deposits, fixed deposits and bonds. They normally adopt CAMEL Model for rating banks. Thus, Capital Adequate is considered as the key element of bank rating.

Khraiwsh(2004) aimed at identifying factors affecting banks security degree at Jordanian commercial banks for the period (1992 – 2002), Using multiple regression analysis, the study revealed the existence of a positive significant relationship between the degree of bank security and each of Return on equity, and return on investment, but a negative significant relationship between the degree of banking security and each of liquidity risk, capital risks, and credit risk.

Bokhar and Ali (2006) applied statistical tool such as weighted average least square on the penal data of financial statements of 12 sample banks for the period 2005-2009. The study revealed that average capital ratio (r = -0.09), capital ratio requirement (r = -0.13), and portfolio risk level (r = -0.07) shows weak correlation while share of deposits (r = -0.77) and return on equity (r = -0.32) are strongly but negatively correlated with Capital Adequacy Ratio. Results of model at first instance represent the coefficients of correlation (R) and coefficients of determination (R2) and the results shown the strong power of the co-relational degree among the descriptive variables of about 53.1 % (Multiple R = 0.531) and the independent variables in the selected model are explaining the behavior of the research model at approx. 28.25 (R-squared = 0.282).

Jain (2006) discussed that various ratios relating to profitability of the banks. He classified the various ratios under three categories, viz. Costing Ratio, Returns / Yield Ratio and Spread Ratios. Ratios are used to understand a bank's financial condition, its operation and attractiveness as an investment. He explained that such ratio analysis can be used to make an inter-branch comparison for investigating the strengths and weaknesses of individual bank's and to enable them to take strategic decisions and initiate necessary corrective actions. Under costing ratio, the author advocated for computation of average cost of deposits, average cost of borrowings, average cost of interest bearing liabilities, average cost of funds and operating expenses to average working funds. Similarly under yield/return category, he computed ratios like yield on

advances, yield on investment, average return on interest earnings, average return on funds and noninterest income to average working funds and total income. Under spread category, he sub-categorized the ratios like interest spread, net interest margin and burden ratios.

Brinda and Dubey(2007) made a study on an econometric analysis to evaluate a bank's performance.They have used the two profitability measures, i.e., return on assets (ROA) and operating profit ratio (OPR). Two banks with identical OPR can differ in terms of ROA; one, to difference in the risk of their loan portfolio; and two, efficiency measures used in their analysis are net interest margin (NIM) and operating expense Ratio (OER). They applied the statistical techniques like ordinary least square method and bounded influence to analyses the data. They concluded that private sector banks and foreign banks are not found to be superior to the PSBs in any of the performance indicators, namely, ROA, OPR and OER given the present regulation environment. They also found that PSBs scored well against benchmarks as well as against other bank groups in India in the area of profitability (ROA), Non-Performing Loans (gross) (NPL) and operating costs as a proportion of total Assets, Capital adequacy requirement, etc.

The observations support the econometric findings of their study that PSBs are not inherently less efficient than private sector banks and foreign banks, given the regulatory environment. While the boom in the economy has helped greater operational flexibility, and improved corporate governance has contributed to improved performance.

Gupta and Kaur (2008) examined the performance of Indian private Sector banks by using CAMEL model and by assigning rating to the top five and bottom five banks. They rated 20 old and 10 new private sector banks covering financial data for the period of 5 years i.e. from 2003-07. The research revealed that HDFC was at its higher position of all private sectors banks in India succeeded by the KarurVyasa and the Tamilnadu Mercantile Bank. However the Gobal Trust Bank and the Nedungradi Banks was considered as bad management. The findings summarized that new private sector of banks have attained the higher position due to core banking, aggressive marketing strategies and high level of technology. To attain perfection banks should always concentrate on new financial assets, excellent service and customer loyalty.

Wirnkar and Tanko (2008) analyzed that the adequacy of CAMEL in evaluating the performance of bank. This empirical research was implemented to find out the ampleness of CAMEL in examining the overall performance of bank, to find out the importance of each component in CAMEL and finally to look out for best ratios that bank regulators can adopt in assessing the efficiency of banks. The analysis was performed from a sample of 11 commercial banks operating in Nigeria. The study covered data from annual reports over a period of nine years (1997-2005). The analysis disclosed the inability of each component in CAMEL to congregate the full performance of a bank. Moreover the best ratios in each CAMEL parameter were determined.

Cinko andAvci (2008) used synthesis financial ratios to calculate components of CAMEL ratings for the period of 1996-2000. The financial ratios were also employed to anticipate the delegation of commercial banks in 2001 to the SDIF by adopting discriminant analysis, logistic regression and neural network models. They revealed that it is impossible to predict the transfer of a bank to SDIF by mode of CAMEL ratios.

Chiu, Jan, Sheny and Wang (2008) adopted two DEA methods – Banker-Charnes-Cooper and Super Efficiency – to investigate bank's technical efficiency is significantly different when capital adequacy (risk) is specified compared with when capital adequacy (risk) is not specified. The information is obtained from 46 Taiwanese banks for the period 2000 to 2002. The Malmquist total factor productivity (TFP) index is employed to measure the impact of productivity change on the panel data. The empirical results from the DEA approach are capital adequacy is proven to be an influential factor in evaluating the efficiency of banks. The average efficiency scores of banks with high capital adequacy (>8%) are significantly higher than those of banks with lower capital adequacy (<8%). The efficiency scores of banks with high risk capital requirement (above the average) are higher than those of banks with lower risk capital requirement (under the average). Banks with both high capital adequacy and high risk capital requirement are superior in performance than all the other banks, while banks with both low capital adequacy and low-risk capital requirement performance are the worst by contrast. Based on the Malmquist total TFP index bank productivity has not increased.

Dash and Das (2009) studied on the performance of public sector banks with that of private/ foreign banks. The analysis was performed from a sample of 58 banks of which 29 were public sector banks and 29 were private/foreign sector. The data used were from the audited financial statement for the financial years 2003-2008. The findings concluded that private/foreign banks have an edge over the public sector banks. The two factors of the CAMEL parameters that contribute to the best performance of the private banking/foreign were the Management Soundness and Earnings and profitability.

Kaur (2010) categorized that the banks into Public sector Bank, Private sector Banks and Foreign Banks. He used the CAMEL analysis technique with the purpose of ranking the banks. Each component of CAMEL has been interpreted using two ratios and a final composite index has been established. Secondary data tools were used with a sample of 28 public sector, 26 private sector and 28 foreign banks. Data were collected from statistical tables related to the Banks in India in the financial year 200-01 to 2006-07. The experiment revealed that the best bank from the public sector has been awarded to Andhra Bank and State Bank of Patiala. In the category of private sector banks, Jammu and Kashmir Bank has been assigned the first rank succeeded by HDFC Bank. Among the foreign sector banks, Antwerp has bagged the first rank followed by JP Morgan Chase Bank.

Buyuksalvarciand Abdiogglu (2011) suggested that banks' annual reports for the period 2006 - 2010. Panel data methodology is used to study and analyzes relationships between independent variables; bank size (SIZE), deposits (DEP), loans (LOA), loan loss reserve (LLR), liquidity (LIQ), profitability (ROA and ROE), net interest margin (NIM) and leverage (LEV) and a dependent variable which is capital adequacy ratio (CAR). The results of the paper indicate that LOA, return on equity and LEV have a negative effect on CAR, while LLR and return on assets positively influence CAR. On the other hand, SIZE, DEP, LIQ and NIM do not appear to have any significant effect on CAR.

Abusharba(2013) covered the period of 2009 until the end of 2011. Multiple linear regression analysis and pair-wise correlation matrix are used to explain the effect of explanatory variables; profitability (ROA), assets earning quality (NPF), deposits structure (DEP), liquidity (FDR) and operational efficiency (OEOI) on a proxy variable which is the capital adequacy ratio (CAR). The study found that profitability

and liquidity are positively related to the capital adequacy requirements. Meanwhile, uncollectable funds measured by nonperforming financing (NPF) is significant but negatively related to the capital adequacy ratio. On the other hand, depositor's funds and operational efficiency have no significant effect on capital adequacy. Moreover, banks are committed over than 8 percent the minimum of capital requirements during the period of financial global crises. Finally, banks have an excessive fund to meet their obligations and protect the owners of capital.

Ochei(2013) employed cross sectional and time series of bank data obtained from Central Bank of Nigeria (CBN) and Annual Report and Financial statements of the sampled banks. The formulated models were estimated using ordinary least square regression method. The overall, study shows that Shareholders Fund/Total Assets (SHF/TA) which measures capital adequacy of banks (risk of default) have negative impact on ROA. The efficiency of management measured by operating expenses indices is negatively related to return on capital.

Dreca (2013) analyses a data set of observation for 10 banks in period of 6 years in B&H shows how Capital Adequacy Ratio (CAR) is influenced by many factors such as: capital structure, size of the bank, profitability indicators, participation of deposits and loans in total asset, and leverage. Selected variables are chosen on the previous research and analysis is done through several methods and some diagnostics tests are performed in order to determine the most appropriate model that explains determinants of CAR. Results indicate based on data that SIZE, DEP, LOA, ROA, ROE AND LEV have significant effect on CAR. On the other hand LLR and NIM do not appear to have significant effect on CAR. Variables SIZE, DEP, LOA and ROA have negative effect on CAR, while variables LLR, ROE, NIM and LEV are positively related with CAR. All variables except LOA and ROA have expected signs. It is hard to distinguish which CAR is better higher or lower, form stability aspect it is better to have higher CAR, but from profitability side lower CAR is more preferable.

Al-Tamimi (2013) using Multiple Linear Regression Analysis and the Correlation Coefficient (Pearson Correlation). There is a statistically significant positive correlation between the degree of capital adequacy in commercial banks and the following independent factors: liquidity risk, and the rate of return on assets. In another hand, there is an inverse relationship with statistical significance between the degree of capital adequacy of commercial banks and factors independent of the

following: the rate of return on equity and interest rate risk. There is inverse relationship is not statistically significant between the degree of capital adequacy in commercial banks and factors independent of the following: capital risk, credit risk, and the rate of force-revenue. As shown by the results of the study that the independent variables combined with a relatively high effect on the dependent variable and the changes that occur within, as the percentage of the interpretation of the independent variables of the dependent variable reached approximately 61 percent.

Bateni (2014) focused on influential factors (precisely seven financial factors) over capital adequacy for the period 2006–2012. The results obtained indicate negative relationship between bank size and capital adequacy ratio of banks and positive relationship between Loan Asset Ratio (LAR), Return on Equity (ROE), and Return on Asset (ROA), Equity Ratio (EQR), and capital adequacy ratio. RAR and DAR do not have any impact on capital adequacy ratio.

Workneh (2014) investigated quantitative researchapproach by using ordinary least square model of twelveyears (2002 - 2013) data for eight banks. The findings show that deposits,leverage, loan loss reserve and liquidity of the banks are important determinants of capitaladequacy ratio of commercial banks. However, management quality, profitabilityand size of banks are found to have no statistically significant impact on the capital adequacyratio of banks in Ethiopia. The analyses indicated that the variables of deposits, liquidity,leverage, and loan loss reserve were significantly related to capital adequacy ratio.

Raharjo, Hakim, Manurung and Maulana (2014) studied and analyzed that determinant of capital ratio of state-owned banks. Several variables have been used as proxy by applying panel data regression model. The capital ratio of state-owned banks is affected by asset growth (LNSIZE), equity to total liabilities ratio (EQTL), non-performing loan (NPL), interest rate risk (IRR), and operational cost to operational revenue ratio (BOPO) on a different level of significance

Aspal and Nazneen (2014) used multiple linear regressions for the data that focuses on Loans, Asset Quality, Management Efficiency, Liquidity and Sensitivity as the bank’s performance characteristics. Such characteristics reflect some anticipated risks like credit risks, operational efficiency risk, liquidity risks and sensitivity risks and

attempts to measure whether the these factors affect the variability of capital adequacy. The study highlighted that loans (Total Advances to Assets Ratio) has a statistically significant relationship with CAR which indicates that as loans and advances increase, the interest income and profitability will increase. It means the Indian Private Sector banks may have higher incentive to provide safeguard of their owner's capital. Similarly, management efficiency (Expenditure to Income Ratio) is found to have a statistically significant effect on CAR which reveals that banks with good income as compared to their expenditure tend to improve capital of Indian Private sector Banks.

2.2.2 National Context

Baral (2005) studied that the performance of joint ventures banks in Nepal by applying the CAMEL Model. His study was mainly based on secondary data drawn from the annual reports published by joint venture banks. His report analyzed the financial health of joint ventures banks in the CAMEL parameters. His findings of the study revealed that the financial health of joint ventures is more effective than that of commercial banks. Moreover, the components of CAMEL showed that the financial health of joint venture banks was not difficult to manage the possible impact to their balance sheet on a large scale basis without any constraints inflicted to the financial health.

Pandey (2008) stressed that main objective of a commercial bank is to safe guard money of depositors. With low level of capital adequacy rate, banks were formerly lending from the money of depositors because capital comprised a very small portion of the total risk-weighted assets. However, return of shareholders or promoters were reaping was quite high while risk of depositor were too high. Therefore, sine qua non for maintaining financial balance in the country and NRB’s effort in this direction are really worthy.

Rimal (2010) concluded that central bank should instead its measure toward indirect monetary control rather than loan on quantities individual bank ceiling. Indirect monetary policy through means of open market operation e.g. recent Treasury auction and opening up inter banking market and targeting broad financial variables like net foreign assets.

Pandit(2011) based on sample of three banks out of total. The sample banks are Nepal SBI Bank, Bank of Kathmandu (BoK)and Everest Bank (EBL) based on secondary data with objective to analysis investment policy. His study reveals that the liquidity position of SBI Bank is slightly good comparing to two others but result is not satisfactory to meet current obligation. Assets management ratio and profitability position of SBI Bank is not in position as prescribe. Risk ratio and Capital risk ration of BoK and EBL is in pick. Growth rate of SBI and BoK are not successful to increase its deposit ratio to increase their sources of fund.

Lamichhane (2012) conducted comparative study of investment policy of three commercial banks in Nepal. His study reveals Everest bank limited (EBL) is comparatively better in cash and bank balance to total deposit, cash and bank balance to current assets ratio than NABIL Bank and Bank of Kathmandu. NABIL Bank has lowest liquidity position in comparison to rest. EBL has good deposition collection and made enough investment on government securities but maintain moderate investment policy on loan and advance. In assets management ratio or activity ratio and total investment of EBL is comparatively satisfactory. Loan and advance to total deposit is higher in BoK but total investment to total deposit is higher of NABIL. Investment on shares and debenture to total working fund ratio is higher of BoK. Coefficient of variation is higher in EBL.

Dhakal (2012) took sample of two Joint Venture Bank Nepal Arab Bank Ltd (NABIL) and Nepal Investment Bank Ltd (IBL) for comparative study of Capital Adequacy. Study reveals that the liquidity position of both banks is below normal standard of 2:1 but on average IBL position is better. Both banks are found to be efficient to utilize their total assets. Capital structure is highly leveraged, capital adequacy ratio of IBL is better than NABIL and profitability position of both banks is not found satisfactory.

Kandel (2012) study was based on Capital Adequacy of commercial bank of Nepal with sample of three banks, Nepal Bank Limited (NBL), Himalayan Bank Limited HBL) and Nepal Investment Bank Limited (IBL). His study reveals there is continuous growth in core capital, capital fund. The risk weighted asset was fluctuating in HBL. Average growth rate of capital fund core capital, RWA, % of capital fund to RWA, % of core capital to RWA were 6.79%,7.84%, 5.95%, 18.24% 17.31% respectively in HBL. Average growth rate of capital fund core capital, RWA,

% of capital fund to RWA, % of core capital to RWA were 34.93%, 28.13%, 37.29%, 15.93% 13.32% respectively in NBL. Average growth rate of capital fund core capital, RWA, % of capital fund to RWA, % of core capital to RWA were -72.25%, -16.64%, 3.39%, -27.94%, -35.63%respectively.

HBL has surplus core supplementary capital by Rs 772.83 million and Rs489.64 million in FY2004/05 and in all years the bank is successful in maintaining capital adequacy requirement. IBL was in surplus core and supplementary capital by Rs 421.66 million and Rs 78.14 million in FY 2004/05 and in all the years the bank is successful to maintain capital adequacy requirement except FY2002/03. In NBL deficit core capital and capital fund by Rs -24559.02 million and Rs -27614.92million FY2004/05 and in all the years, the bank was failed to maintain capital adequacy.

Timisina (2013) carried out his study based on capital adequacy of commercial banks of Nepal. Three commercial banks (Standard Chartered Bank Limited (SCBL), Nepal Investment Bank Limited (IBL) and Rastriya Banijya Bank Limited (RBBL)). were sampled for quantitative and qualitative analysis. His study tried to establish relationship among variable. There is positive correlation between capital fund and net profit but negative relationship between capital fund and non-performance loan of SCBL and IBL. All relations were significant in SCBL and IBL. But in case of RBBL there was negative relation between capital fund and net profit, capita fund and GDP, capital fund ad NPL. Relation of capital fund to net profit was significant but relation of capital fund to non-performance loan was insignificant.

Jha andHui (2012) studied with objective to compare the financial performance of different ownership structured commercial banks in Nepal based on their financial characteristics and identify the determinants of performance exposed by the financial ratios, which were based on CAMEL Model. Eighteen commercial banks for the period 2005 to 2010 were financially analyzed. In addition, econometric model (multivariate regression analysis) by formulating two regression models was used to estimate the impact of capital adequacy ratio, non-performing loan ratio, interest expenses to total loan, net interest margin ratio and credit to deposit ratio on the financial profitability namely return on assets and return on equity of these banks.

Financial ratios analysis compares the financial performance among commercial banks, the same bank had different ranks under the different financial ratios. The

ROAs of public sector banks were higher than those of joint venture and domestic public banks due to having utmost total assets but the overall performance of public sector banks was not observed sound because other financial ratios including ROE, CDR, and CAR of most of the joint venture and domestic public banks were found superior. High overhead costs, political interventions, poor management and low quality of collateral created continued deterioration in the financial health of the public sector banks. The values determined for the financial ratios reveal that joint venture and domestic public banks are also not so strong in Nepal to manage the possible large-scale shocks to their balance sheet.

Bhattarai(2016) examined that the effect of credit risk on performance of Nepalese commercial banks. The descriptive and causal comparative research designs have been adopted for the study. The pooled data of 14 commercial banks for the period 2010 to 2015 have been analyzed using regression model. The regression results revealed that 'non-performing loan ratio' has negative effect on bank performance whereas 'cost per loan assets' has positive effect on bank performance. In addition to credit risk indicators, bank size has positive effect on bank performance. Capital adequacy ratio and cash reserve are not considered as the influencing variables on bank performance. This study concludes that there is significant relationship between bank performance and credit risk indicators.

2.3 Research Gap

As per the literature reviewed, most of the study both national and international were found to be using CAMEL model, few among various factors were used in those study and most study was doneeither about individual banks or comparing two or three different banks of similar category but this study attempts to uncover the information by conscious effort by categorizing JVB and PDB with 3 sample banks each. This study attempts to compare the Assets, Equity, Deposit, Loan, Income, LAR, EQR, ROA, ROE, DAR, CAR, CRR and NPLR among the categories.

CHAPTER III

RESEARCH METHODOLOGY

This chapter basically deals blue print that is used in collection of sample from the population, sources of data retrieved, tools and techniques used to justify the objective of this research.

3.1 Research Design

For this study although co-relations of several factors have been used but to get the clear picture of condition of capital adequacy among financial institution of Nepalese bank, in the process of gathering information about the financial statement of financial institution specific panel data has been used so basically this study is based on descriptive research design.

3.2 Nature and Sources of Data

The nature of study is descriptive as well as analytical. The data are based on secondary sources. Sources of data are listed below:

- Annual report of sample banks.
- Quarterly bank and financial institution statically published by NRB.
- Annual reports of commercial banks published by NRB.
- Economic Survey published by Nepal Government, Ministry of Finance.
- Previous Research Studies and Articles on related subject.

3.3 Conceptual Framework

The Central bank of Nepal (NRB) has also implemented CAMEL Framework for performance evaluation of the banks and other financial institutions. CAMEL stands for capital adequacy, asset quality, management efficiency, earnings performance and liquidity and have used CAMEL model to examine factors affecting bank profitability with success (Jha, 2014).

Nepal Rastra Bank uses return on total assets as an indicator of profitability of a commercial bank. For the purpose of measure liquidity risk, Nepal Rastra Bank uses total loan to total deposit ratio, cash and equivalents to total assets ratio, cash and equivalents to total deposit ratio, NRB balance to total deposit ratio to measure the

liquidity position of commercial banks in the course of the performance evaluation of commercial banks (Baral, 2005).

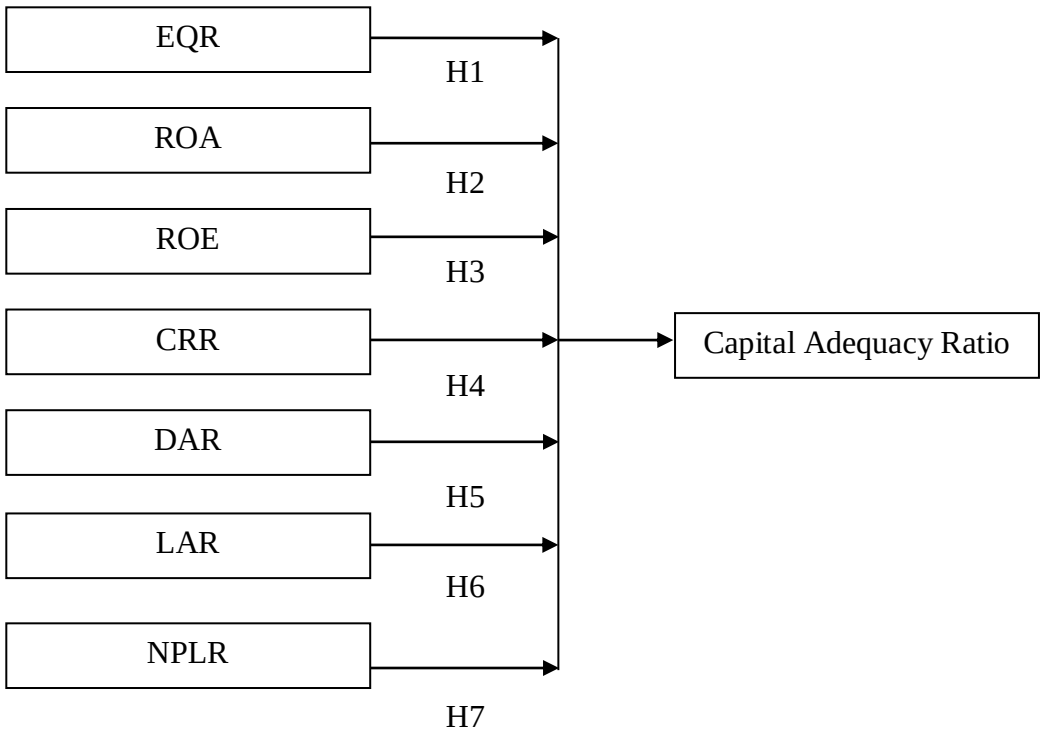
The evaluation of a firm's performance usually employs the financial ratio method, because it provides a simple description about the firm's financial performance in comparison with previous periods and helps to improve its performance of management (Lin et al., 2005).

NPL ratio is one of the key indicators that can be used in assessing the performance and quality of bank assets. The NPL ratio shows the ability of bank management in managing problem loans. Thus, the higher the NPL ratio indicates the worse the quality of bank credit and the amount of credit risk faced by banks are getting bigger and the impact on the bank's earnings (Nasser, 2003).

Theoretical frame work used for this study is figured as below:

Figure 3.1

Theoretical Framework



Variables on left hand side are independent and on the right hand are dependent. Each independent variable and dependent variable was analyzed individually

3.4 Population and Sampling

Data used for the study covers the period of 2010/11-2014/15. Having population of 27 commercial banks, six banks were selected for this purpose. Out of total number of bank three sample banks are JVB and rest are PDB. In selecting sample judgmental sampling was applied.

3.5 Data Analysis Tools

Secondary data obtained from the various sources was tabulated for financial ratio, correlation and trend analysis. Following tools are used:

- Table and graph is used for comparison and to analysis trend
- Financial Ratio was done by tabulating the value from the balance sheet of respected banks.

  Capital Adequacy Ratio (CAR) = $\frac{Corecapital+SupplementaryCapital}{TotalWeightedAssets} * 100\%$

  Loan Assets Ratio (LAR) =$\frac{TotalLoan}{TotalAssets} * 100\%$

  Equity Ratio (EQR) = $\frac{Total\ Equity}{Total\ Assets} * 100\%$

  Return on Assets (ROA) = $\frac{Net\ Income}{Total\ Assets} * 100\%$

  Return on Equity (ROE) = $\frac{Net\ Income}{Total\ Equity} * 100\%$

  Deposit Assets Ratio (DAP) = $\frac{Total\ Deposit}{Total\ Assets} * 100\%$

  Non Performance Loan Ratio (NPLR) =$\frac{Non\ performance\ Loan}{Total\ Loan} * 100\%$

- Statistical tools: SPSS statistical tools were applied to define correlation of variables.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Presentation of Data

In this section collected data and information are presented with various tables, charts and graphical tools.

4.1.1 Capital Adequacy Ratio

Capital adequacy ratio is used to determine whether bank has enough capital to support the risk on its balance sheet i.e. it is used to mitigate bank solvency problem. Formula used to calculate capital adequacy ratio is below:

$$\text{CAR} = \frac{CoreCapita + SupplementaryCapital}{TotalAssets} * 100\%$$

- Core Capital: Core capital consists of share holder's equity and retained earnings. It is indented to measure financial health and is used when a bank must absorb loss without ceasing business operation.
- Supplementary Capital: Supplementary capital includes revaluation reserve, hybrid capital instrument and subordinated tern debt, general loan-loss reserve and undisclosed reserve.
- Total Assets: Total Risk Weighted Assets is the assets held by the financial institution to which degree of risk have been assigned.

4.1.1.1 Joint Venture Bank

Table 4.1

Joint Venture Bank

	BoK			EBL			SBI					
F/Y	**CAR**	**CCR**	**SCR**	**CAR**	**CCR**	**SCR**	**CAR**	**CCR**	**SCR**	**ACAR**	**ACCR**	**ASCR**
2010/11	11.62	10.37	1.24	10.43	8.46	1.97	11.52	10.32	1.20	11.19	9.72	1.47
2011/12	11.07	10.11	0.96	11.02	9.61	1.41	11.21	9.16	2.05	11.10	9.63	1.47
2012/13	12.58	9.50	3.07	11.59	9.31	2.28	12.39	9.59	2.80	12.19	9.47	2.72
2013/14	11.57	8.77	2.80	11.31	9.35	1.96	13.28	10.19	3.09	12.05	9.44	2.62
2014/15	13.00	9.43	3.58	13.33	10.44	2.89	14.03	11.20	2.84	13.45	10.4	3.10

Table 4.1 explains that the capital adequacy ratio of Joint venture banks individually. During the five year period capital adequacy ratio of BoK is 11.62, 11.07, 12.58, 11.57 and 13 percent. Capital adequacy ratio of EBL is 11.52, 11.21, 12.39, 13.28 and 13.33 percent and capital adequacy ratio of SBI is 11.52, 11.21, 12.39, 13.28, 14.03 percent. According to the panel data of above EBL bank is more efficient that rest of joint venture bank. The EBL is capable of keeping its capital adequacy ratio less fluctuation than rest of Banks.

4.1.1.2 Private Domestic Bank

Table 4.2

Private Domestic Bank

	KBL			LBL			MBL					
F/Y	CAR	CCR	SCR	CAR	CCR	SCR	CAR	CCR	SCR	ACAR	ACCR	ASCR
2010/11	13.76	10.29	2.47	11.63	9.79	1.84	10.85	9.99	0.86	12.08	10.02	1.72
2011/12	12.20	12.35	2.05	11.02	9.52	1.50	15.04	14.11	0.93	12.75	11.99	1.49
2012/13	12.17	11.3	1.41	12.23	9.15	3.08	12.54	11.59	0.95	12.31	10.68	1.81
2013/14	11.81	11.24	0.90	11.91	9.82	2.29	10.63	9.69	0.94	11.45	10.25	1.38
2014/15	10.84	10.85	0.96	10.81	9.17	1.85	12.24	11.14	1.10	11.30	10.39	1.30

Table 4.2 explains that the capital ratio of private domestic bank individually of year 2010/11 to 2014/15. Capital adequacy ratio of KBL is 13.76, 12.20, 12.17, 11.81, and 10.84 percent. Capital adequacy ratio of LBL is 11.63, 11.02, 12.23, 11.91 and 10.81 percent. Capital adequacy ratio of MBL is 10.85, 15.04, 12.54, 10.63 and 12.24. Above panel data reveals that LBL is more efficient in keeping less fluctuation of its capital adequacy ratio.

4.1.2 Comparing Capital Adequacy Ratio of JVB and PDB

Comparison of JVB and PDB is done with the help of graph which is listed below:

Figure 4.1

Average Capital Adequacy RatioJVB and PDB

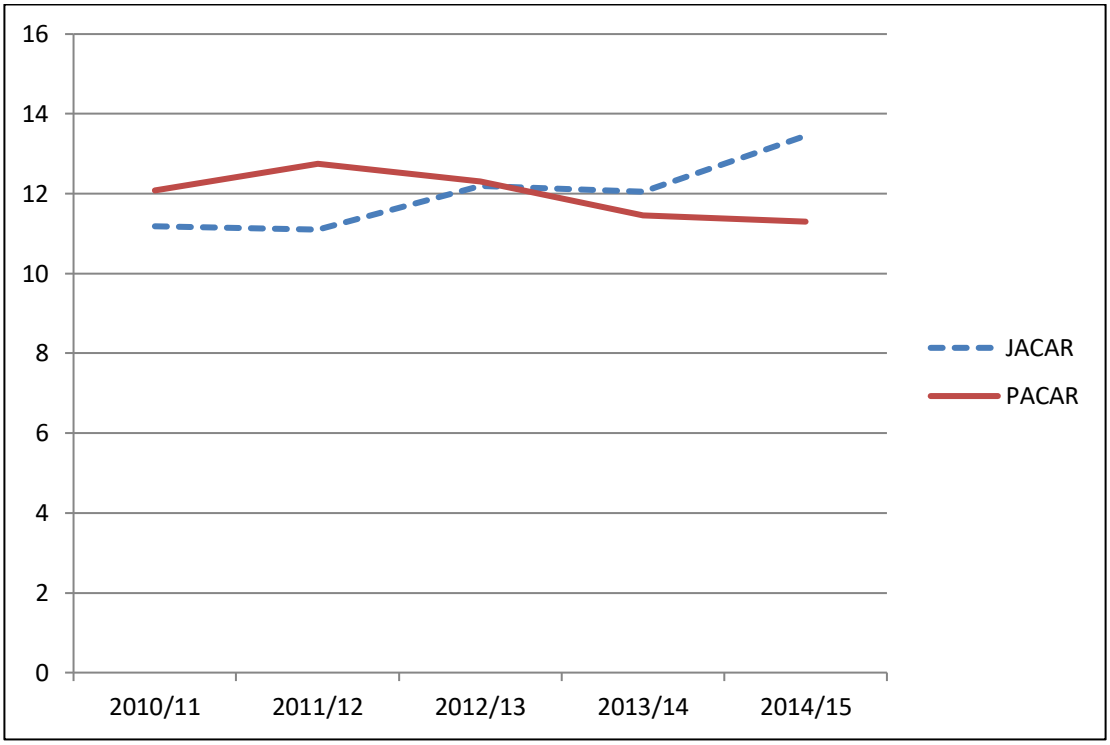


Figure 4.1 depicts that average capital adequacy ratio of Joint Venture Bank of Nepal is quite better off than average capital adequacy ratio of Private Domestic Bank. At initial period the capital adequate ratio of PDB is greater than JVB. As time duration the capital adequacy ratio of PDB decline while JVB incline. This mean JVB are more efficient to safe guard the deposit of public.

Figure 4.2

Average Core Capital of JVB and PDB

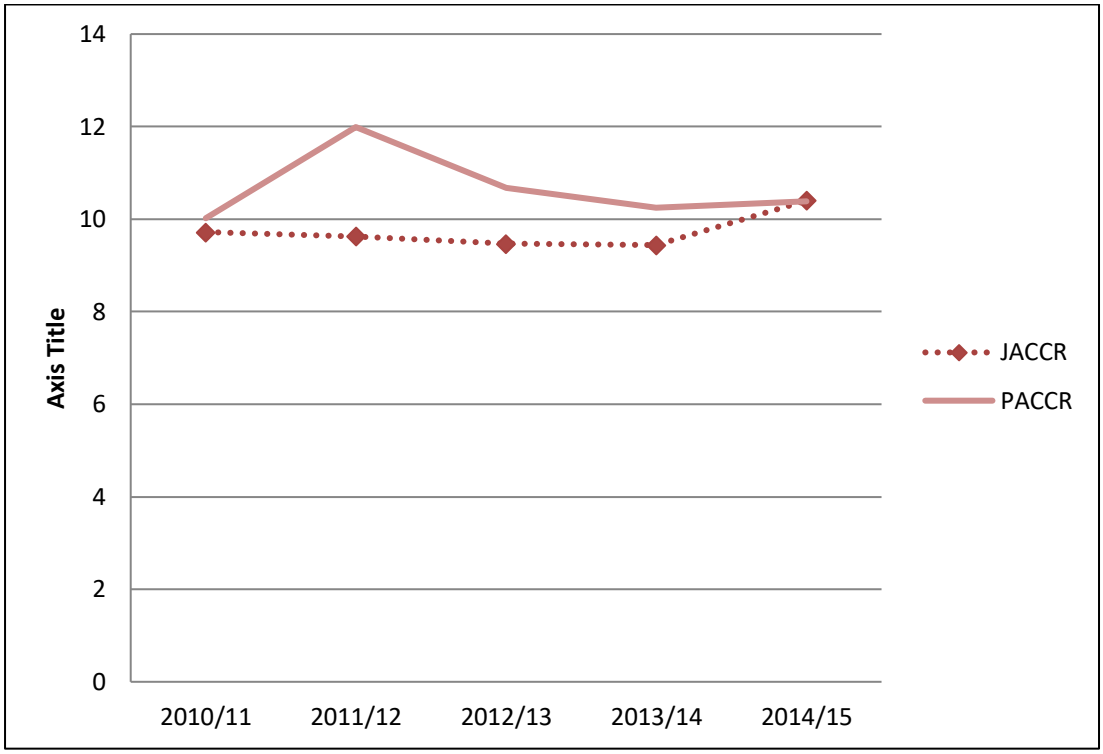


Figure 4.2 forecasts that in the initial stage core capital of JVB is in slow pace while PDB in higher pace. During time period the pace of PDB decline in one hand on the other hand pace of JVB increase. This indicates that the JVB are more effective in keeping core capital high.

Figure 4.3

Average Supplementary Capital of JVB and PDB

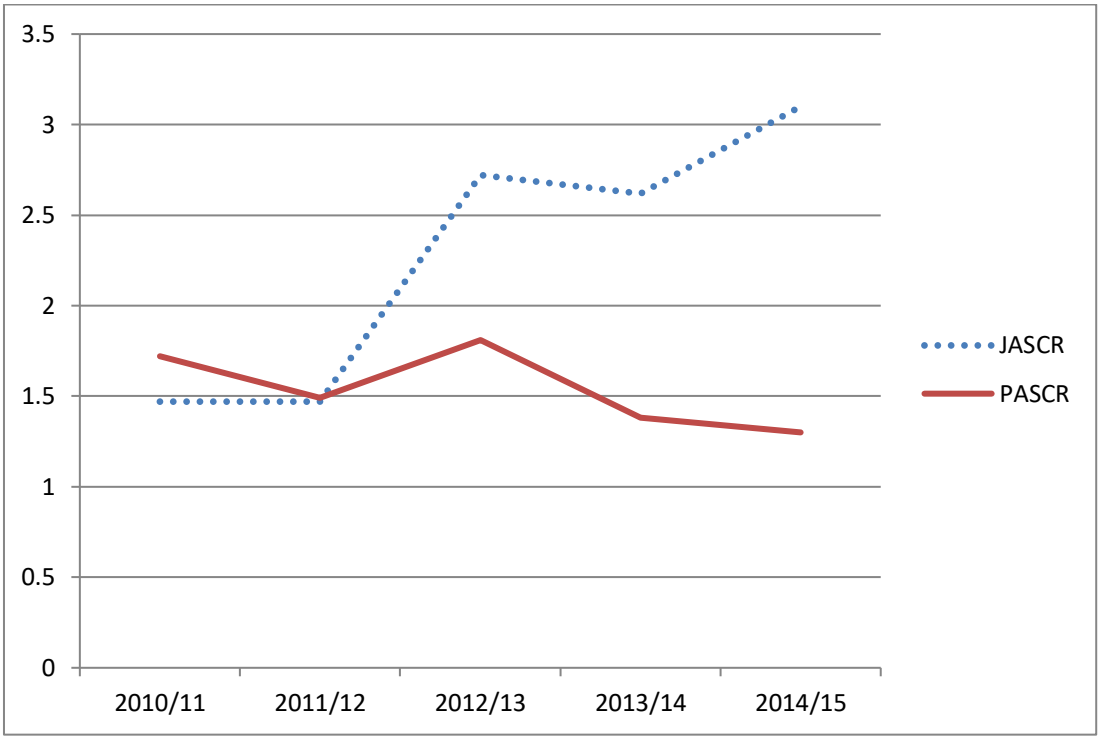


Figure 4.3 explains that the supplementary capital of JVB is quite high than PDB. This indicates that higher the supplementary capital mean higher the alternative capital. Higher supplementary capital holds higher risk and management efficiency of Management.

4.2 Mean Value of Group Statistic

Mean value of group statistic are basically done to do the comparison among variables of different entities. Table below will show the mean value of proposed variable of JVB and PDB of Nepal.

Table 4.3

Group Statistics

Variables	Bank type	Mean	SD
Assets	Joint venture	47483.55	15600.94
	Domestic	26201.58	9345.91
Equity	Joint venture	2618.71	1059.71
	Domestic	2054.35	478.32
Deposit	Joint venture	41339.97	14201.02
	Domestic	23053.06	5913.98
Loan	Joint venture	27939.99	9678.69
	Domestic	18255.71	4209.39
Income	Joint venture	784.52	356.56
	Domestic	291.13	157.90
LAR	Joint venture	59.72	9.74
	Domestic	103.98	145.51
EQR	Joint venture	6.42	1.92
	Domestic	13.31	23.28
ROA	Joint venture	1.69	0.52
	Domestic	1.08	0.56
ROE	Joint venture	31.06	9.01
	Domestic	14.78	9.15
DAR	Joint venture	86.51	2.72
	Domestic	133.72	197.27
CAR	Joint venture	12.00	1.04
	Domestic	11.98	1.19
CRR	Joint venture	11.42	4.85
	Domestic	11.82	4.03
NPLR	Joint venture	1.07	0.89
	Domestic	2.03	1.15

Table 4.3 explains that variable Assets, Equity, Loan, Deposit and Income which Mean value of JVB is greater in all respect than PDB. Similarly, Mean value of LAR of PDB is higher than JVB. Higher this ratio indicates bank liquidity is low. The higher the ratio, the more risky a bank may be to higher defaults.

EQR mean value of PDB is more than JVB. This indicates the performance of financial institution, its effects on banks profitability is equivocal.

ROA and ROE value of JVB is more than PDB. ROA and ROE is the proxy of profitability.

DAR of PDB is more than JVB. This indicate that the lesser the ratio higher the deposit were save enough.

CRR of PDB is greater than JVB. This means that PDB is less effective in generating money supply.

Similarly, non performance of loan ratio of PDB is greater than JVB. This means that private domestic bank less effective in super vision and follow of in assets managements.

4.3 Correlation Matrix

The purpose of using correlation matrix is to find out whether there is significant correlation between dependent (CAR) and explanatory variables as defines.

Table 4.4
Correlation

	LAR	EQR	ROA	ROE	DAR	CAR	CRR	NPLR
LAR	1							
EQR	.996**	1						
ROA	-0.28	-0.284	1					
ROE	-0.342	-0.361	.941**	1				
DAR	.996**	.995**	-0.295	-0.347	1			
CAR	0.09	0.079	-0.149	-0.109	0.093	1		
CRR	-0.007	0.04	0.167	-0.016	-0.025	0.137	1	
NPLR	0.25	0.211	-.435*	-.406*	0.206	0.006	-0.175	1

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

* Correlation is significant at the 0.05 level (2-tailed).

Correlation matrix (Table 4.4) shows the relationship between various variables pertaining to capital adequacy of commercial banks. The significantly correlated values have * sign with them. It was found that the set of variables viz. LAR and EQR, LAR and DAR, EQR and DAR; and ROA and ROE have significantly positive

correlation at 1 per cent level of significance. Similarly, NPLR is negatively correlated with ROA and ROE at 5 percent level of significance. The variables under our interest i.e. CAR have not been significantly correlated with any other variables under study. Therefore, there is no need for estimating Simple Linear Regression (Ordinary Least Square) by treating CAR as dependent variable.

4.4 Difference between Joint Venture and Private DomesticBanks

Table 4.5

Independent Samples TestLevene's Test for Equality of Variances

Variables	Assumption	F	p-value	t	Df	p-value
LAR	Equal variances assumed	3.589	0.069	1.176	28.000	0.250
	Equal variances not assumed			1.176	14.125	0.259
EQR	Equal variances assumed	3.347	0.078	1.142	28.000	0.263
	Equal variances not assumed			1.142	14.190	0.272
ROA	Equal variances assumed	0.165	0.687	3.091	28.000	0.004
	Equal variances not assumed			3.091	27.801	0.005
ROE	Equal variances assumed	0.384	0.541	4.910	28.000	0.000
	Equal variances not assumed			4.910	27.993	0.000
DAR	Equal variances assumed	4.424	0.045	0.927	28.000	0.362
	Equal variances not assumed			0.927	14.005	0.370
CAR	Equal variances assumed	0.027	0.871	0.044	28.000	0.965
	Equal variances not assumed			0.044	27.490	0.965
CRR	Equal variances assumed	0.415	0.525	0.248	28.000	0.806
	Equal variances not assumed			0.248	27.096	0.806
NPLR	Equal variances assumed	2.262	0.144	2.560	28.000	0.016
	Equal variances not assumed			2.560	26.387	0.017

The p-value of t-test between joint venture and domestic private banks in LAR is 0.250 which is greater than level of significance (0.05), null hypothesis for this case could not be rejected. This means there is no significance difference between Joint Venture Bank's LAR and that of Domestic Private Banks.

The p-value of t-test between joint venture and domestic private banks in EQR is 0.263 which is greater than level of significance (0.05), null hypothesis for this case

could not be rejected. This means there is no significance difference between Joint Venture Bank's EQR and that of Domestic Private Banks.

The p-value of t-test between joint venture and domestic private banks in ROA is 0.004 which is greater than level of significance (0.05); null hypothesis for this case could not be rejected. This means there is no significance difference between Joint Venture Bank's EQR and that of Domestic Private Banks.

The p-value of t-test between joint venture and domestic private banks in ROE is 0.000 which is greater than level of significance (0.05); null hypothesis for this case could not be rejected. This means there is no significance difference between Joint Venture Bank's ROE and that of Domestic Private Banks.

The p-value of t-test between joint venture and domestic private banks in DAR is 0.370 which is less than level of significance (0.05); null hypothesis for this case could not be rejected. This means there is significance difference between Joint Venture Bank's DAR and that of Domestic Private Banks.

The p-value of t-test between joint venture and domestic private banks in CAR is 0.965 which is greater than level of significance (0.05); null hypothesis for this case could not be rejected. This means there is no significance difference between Joint Venture Bank's CAR and that of Domestic Private Banks

The p-value of t-test between joint venture and domestic private banks in CRR is 0.806 which is greater than level of significance (0.05); null hypothesis for this case could not be rejected. This means there is no significance difference between Joint Venture Bank's CAR and that of Domestic Private Banks

The p-value of t-test between joint venture and domestic private banks in NPLR is 0.016 which is greater than level of significance (0.05); null hypothesis for this case could not be rejected. This means there is no significance difference between Joint Venture Bank's NPLR and that of Domestic Private Banks

CHAPTER V

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

Financial institutions like banks are the model of modernization of the society and play a vital role in the development of economic growth of the country. Commercial banks furnish necessary capital needed for trade and commerce for mobilization dispersed saving of the individuals. The primary functions of the commercial banks are raise and utilization of funds. Collected fund are utilized in various sector which is knows as capita of financial organization. Capital which is collected from general public be safe. In case if financial organization does not have enough capital to provide a buffer against the future unexpected losses. Thus capital must be sufficient to protect depositors interest in one hand on the other encounter unexpected risk.

This research is conductedfor comparatives examination of the sufficiency of capital adequacy and financial performance of commercial banks of Nepal. In order to justify the objective of this research secondary sources of data are used from total number of 27 banks. Sample consists of 3 from Joint Venture Banks and 3 from Private Domestic Banks.Paneldata is used for descriptive by tabulating for financial ratio, correlation and trend analysis. Table and graph were used for analysis, financial ratio for comparison and SPSS tools for correlation of the panel data which were collected for the FY 2010/11 to 2014/15. Some of the major findings of the study are as follows:

- Joint Venture banks are more capable to safe guard the deposit of public.
- Management of Joint Venture Banks is comparatively more efficient and effective.
- ROA and ROE are highly correlated mean higher profitability.
- Liabilities and equities ratio of banks are highly related with deposit ratio.
- Non- Performance loan are inversely related with profitability.
- Capital adequacy ratio is determined by the exogenous variable.

5.2 Conclusion

The outcome of this research foster that, EBL bank is more efficient that rest of JVB. The EBL is capable of keeping its capital adequacy ratio less fluctuation than rest of Banks. Likewise, LBL is more efficient in keeping less fluctuation of its capital adequacy ratio than rest of Private Domestic Banks. This research also highlight that the Average capital adequacy ratio of PDB decline while JVB incline. This mean JVB are more efficient to safe guard the deposit of public. During the research sampled year the pace of average core capital of PDB decline in one hand on the other hand pace of JVB increase. Average supplementary capital of JVB is quite high than PDB.

Mean value of group statistic explains that variable Assets, Equity, Loan, Deposit and Income which Mean value of JVB is greater in all respect than PDB. Similarly, Mean value of LAR, EQR, DAR, CRR and NPLR of PDB is higher than JVB. It was found that the set of variables viz. LAR and EQR, LAR and DAR, EQR and DAR; and ROA and ROE have significantly positive correlation at 1 per cent level of significance. Similarly, NPLR is negatively correlated with ROA and ROE at 5 percent level of significance. The p-value of t-test between joint venture and domestic private banks in LAR, EQR, ROE, ROA, CRR and NPLR is greater than level of significance (0.05), null hypothesis for this case could not be rejected. This means there is no significance difference between Joint Venture Bank's LAR and that of Domestic Private Banks.

5.3 Recommendations

The recommendation of this study may be the important information for those who are very much concerned directly with the capital adequacy norms. Thus, following recommendation and suggestion can be outlined.

i) Capital adequacy should be kept in constant ratio.

ii) The banks are required to maintain improve capital structure by increasing equity base.

iii) Banks should follow control mechanism of Non-performing loan which has adverse effect on profitability of banks.

iv) Other banks should learn management procedure from Joint Venture Banks.

v) LAR should be used as efficiency indicator for efficiency and will help in the strategic planning.

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