

MERGER AND ITS IMPACT ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NEPAL

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fulfillment of the requirements for the Master's Degree

by

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “The **Merger and its impact on financial performance of commerce bank in Nepal**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

(.....)

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REPORT OF RESEARCH COMMITTEE

Mr. Laxman Bahadur Dhama has defended research proposal entitled “**The Merger and its impact on financial performance of commerce bank in Nepal**” successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestion and guidance of supervisor Lecture Santosh pokhrel and submit the thesis for evaluation and viva voce examination.

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We have examined the dissertation entitled **MERGER AND ITS IMPACT ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NEPAL** presented by **Laxman Bahadur Dhami** for the degree of **Master of Business Studies (MBS)** and conducted the viva voice examination of the candidate. We hereby certify that the dissertation is acceptable for the award for degree.

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ABBREVIATION

AQ	=	Assets Quality
BAFIA	=	Bank and Financial Institution Act
BOK	=	Bank of Kathmandu Limited
CA	=	Capital adequacy
EPS	=	Earnings per share
FRA	=	Financial Ratio Analysis
M & A	=	Merger and acquisition
NI	=	Net Income
NPL	=	Non-performing assets
NRB	=	Nepal Rastra Bank
PM	=	Profit margin
SBL	=	Siddhartha bank limited
TLA	=	Total Loan and Advance
TOR	=	Total Operating Revenue
ROA	=	Return on Assets
ROE	=	Return on Equity

ABSTRACTS

The study entitled merger and its impact on financial performance of commercial banks in Nepal. The purpose of this research is to study the effect of merger on the financial performance of commercial bank when Nepal Rasta Bank introduced a forceful merger bylaws policy in the year of 2011. Three year pre-merger and post-merger financial performance is analysis of three commercial banks which are merged in 2016 AD. This study is based on the descriptive and analytical research design. Performance of commercial banks is measured by different variables such as ROA, ROE, EPS, profit margin, capital adequacy, assets quality, liquidity and debt to equity ratios. Pared sample t-test is used to measure the significant change pre-merger performance and post-merger performance. This study conclude that Returns on Assets, earning per share, profit margin, liquidity increased significantly after the merger of the banks. However return on equity, assets quality, debt to total equity and capital adequacy ratio are decreased after the merger. The assets quality ratios, which is measured by the total nonperforming assets to total loan and advance is decreased after the merger, which show that the performing assets of merged banks. The merged banks able to maintain nonperforming assets ratios as refers by Nepal Rastra Bank. Similarly the sampled merged bank able to meet the capital adequacy ratio.

CHAPTER I

INTRODUCTION

1.1 Background of the study

Mergers, acquisitions and takeovers, consolidation have been a part of the business world for so many years ago. In today's dynamic economic environment, the main objective of a company is to maximize the shareholder's wealth. Through mergers and acquisitions, a company can develop a competitive advantage and ultimately increase shareholder value. A merger involves a blend of two companies, rather than mere legal enjoinderment or absorption of one firm into another merger as a process in which one of the two companies loses its identity to make a one firm. In merger transaction involving two or more companies in the exchange of securities and only one company survives. (Kishore, 2009)

There are various strategic and financial objectives that influence mergers and acquisitions. According to Sudarsanam (2003) two organizations with often different corporate personalities, cultures and value systems are bought together. Merger or Amalgamation may take two forms: i) Merger through absorption: It is a combination of two or more companies combines together into an existing company. In absorption, all companies except one lose their identity. ii) Merger through consolidation: It is a combination of two or more companies into a new company. In case of consolidation through merger, all companies are legally dissolved and a new entity is created.

Bank mergers is claimed to be the sources of efficiency gains from the realization of economies of scale and economies of scope, the removal of overlapping services and the increasing awareness of innovative banking tools; however, one needs to read over the assertions with caution. It is due to the fact that much of the prior research has focused on the market driven merger or the voluntary merger. At the one hand, the voluntary bank merger refers to the process by which two or more banks merged and become one new entity. The merger takes place without any objection from the shareholders and the board of both banks. Banking sector plays a leading role in financing country economic activities. Its performance is crucial in determining a country's economy growth and stability.

Performance of banking sector is measured by Capital adequacy, assets quality, management efficiency, earning efficiency, liquidity. Performance of the banks is measured at two level, one is at the management and regulatory level of the banks and another is at external rating agencies. Purpose of regulatory and supervisory rating systems is to measure the bank performance at internal level and its compliance with regulatory requirements to keep the bank on right track. These ratings are highly confidential and are only available to the bank management. External credit rating agencies examine and evaluate the banks and issue ratings for the general public and investor in particulars. It is great importance that both these rating present the same results about the condition of the banks to provider clear information to investor and management.

The central bank planned to improve the health of the financial sector by introducing the Merger by law 2011 grounded on the Company Act 2006 article 177, Bank and financial institution act (BAFIA) 2006 article 68 and 69 that pressurize all the BFIs for immediate merger as a consolidation. A merger was not a choice of the Nepal Rastra bank (NRB) but it was a compulsion strategy to increase the capital and strengthen their capacity to face the competitive market. It is perceived that, merger result in newer and larger organizations which are supposed to be efficient in allocating resources, human and capital and maximize the output gains. It is believed that the larger banks, with more resources can offer more products and services at lesser operating cost i.e. at economies of scale. (www.nrb.gov.np). However, the perceived gains do not occur, at least not to the extent that is perceived. Some of the genuine impacts or effect of mergers on the banking industry can be observed around the world, which has been the reduced availability of loans to the customer base after merger. It is mainly because of decline in competitiveness in banking industry and increase in the interest rates above reasonable level. Banks have been observed to be engaged in activities ranging from anti-competitiveness to corruption after the merger. When economies of scale are observed, there is a significant uncertainty over how wide the range of scale is. There is often increase in dissatisfaction among employees after merger of the institutions. A lot of issues can be found in the management of staff after the merger.

Brief introduction of sampled bank**Bank of Kathmandu Limited.**

One of the prominent banks in Nepal, Bank of Kathmandu Limited (BOK) was established in the year 1995 with a vision to become a significant contributor to the economic development of Nepal distinguishing the bank as an efficient, competitive, safe and top quality financial institution. The bank with its corporate slogan 'we make your life easier' is committed to deliver quality services to its customers, generating good returns to the shareholders, providing attractive incentives to the employees and serving the community through strong corporate social responsibility. Horizontal merger is held between Bank of Kathmandu and Lumbini bank limited in 2016 AD and transaction operated by the name of Bank of Kathmandu Lumbini Limited.

NMB Bank Limited

NMB bank limited licensed as "A" class financial institution by Nepal Rastra Bank in May 2008 has been operating in the Nepalese Financial market for the twenty years and is one of the leading commercial banks in the banking industry. The bank has a Joint Venture agreement with Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden (FMO) wherein FMO holds 17% of the bank's shares and is the largest shareholder of the bank. In September 2016 the bank signed a Joint Venture Agreement with Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden (FMO), the Dutch development bank following which FMO became the single largest shareholder of the bank. NMB bank was horizontally merged with the Pathibhara Bikash Bank limited, Clean Energy Development limited and Prudential Financial Co-operative limited in 2016 and transaction is operated by the name of NMB bank limited.

Siddhartha bank limited.

Siddhartha Bank Limited (SBL) established in 2002 and promoted by prominent personalities of Nepal, today stands as one of the consistently growing banks in Nepal. While the promoters come from a wide range of sectors, they possess immense business acumen and share their valuable experiences towards the betterment of the bank. Horizontal merge held between Siddhartha Bank Limited and Business

Universal Development Limited in 2016 AD and transaction operated by Siddhartha Bank Limited.

1.2 Problem statement.

The study covers the analysis of the merger and its impact on financial performance of commercial banks in Nepal. Shareholders and managers of banks turn to mergers and acquisitions in the hope of improving financial performance in their banks but studies on this subject have produced mixed results. It is new concept in Nepalese BFIs and there is a lot of confusion about the merger and their impacts on the long term growth and profitability of the BFIs. Mergers have become the main means of attaining higher performance which is the ultimate goal of every firm, including banks. Some studies have suggested that merging banks perform better than the individual banks performed before the merger whereas other studies have not found any meaningful improvement in financial performance as a result of a merger.

Many studies carried out in the area of M&A have established inconsistent results. Fairs mean lowered productivity, labor unrest, higher absenteeism and loss of shareholder value. A study conduct by Shah & Khan (2017) on Impacts of Mergers and Acquisitions on Acquirer Banks' Performance, researchers concluded that most of the profitability ratios, including ROE, ROA, net markup and non-markup income to total assets have declined in the post-merger period. Only an insignificant improvement is observed in net interest margin and administrative expenses to profit before tax ratios in the post-merger period. Deterioration is also observed in the liquidity ratios of the acquirer banks in the post-merger period. The cash and cash equivalent to total assets has declined significantly and advances, and investment to total assets ratios are increased, but insignificantly. Similarly the performances of the acquirer banks do not reflect any worthwhile improvement in terms of capital stability in the post-merger period. The deposit to owners' equity ratio is significantly increased, but the capital adequacy has declined, showing an unfavorable effect on the performances of the acquirer banks in the post-merger period. Shrestha, Thapa & Phuyal (2017), carried out the study on a comparative study of merger effect on financial performance of banking and financial institutions in Nepal.

Shrestha, Thapa & Phuyal (2017), study also shows that there is a significant change in performance before and after the merger and acquisition of banks. Mergers and acquisitions continue to be a highly popular form of corporate development in today's banking industry world over. However, in a paradox to their popularity, acquisitions appear to provide at best a mixed performance to the broad range of stakeholders involved. While target firm shareholders generally enjoy positive short-term returns, investors in bidding firms frequently experience share price underperformance in the months following acquisition, with negligible overall wealth gains for portfolio holders. This study is designed to fill the knowledge gap by answering the research question, what is the impact of Mergers and Acquisitions on the overall financial performance of commercial banks in Nepal? This study tries to answering the following questions.

- i. What is the impact of merger on liquidity position of banks?
- ii. What is the profitability position change after the merger?
- iii. Is there any different in capital adequacy position before and after the merger?

1.3 Objectives of the study

The main objective of the study is to analysis the effect merger on the financial performance of banks.

- i. To analyze the impact of merger on liquidity position of banks.
- ii. To examine the impact of merger on profitability position of banks.
- iii. To assess the impact of merger on capital adequacy position of banks.

1.4 Rationale of the study

In the light of the fact that mammoth resources both financially and non-financially are usually committed to effectively implement mergers and acquisitions, it is noteworthy to establish the actual impact of M&A on the financial performance of Commercial banks in Nepal. The submission of this fact is significant used to the Policy makers to devise new Merger Liquidity Position Profitability Position Capital Adequacy Position Financial Performance Independent Dependent standards in establishing an appropriate level of merger and acquisition. The findings be used to come up with more effective methods of managing liquidity levels of a firm. Likewise the study add knowledge on the understanding of the importance of mergers in

analyzing performance by current investors, customers of commercial banks and other banks in this competitive industry.

Similarly this study provide a base for further research especially in the areas of merger and acquisitions for researchers interested in building on the already existing knowledge base about theoretical and empirical work on the impacts of mergers and acquisition on the financial performance of commercial banks. It would be benefit to executives and managers of the commercial banks as the study would cover banks that have recently merged and their relative performance. The findings of this study make contributions to the existing paradigm on investor's behavior toward the mergers, acquisition and restructuring of banks. It would also be used to establish the research gaps and provide reference for further research under the field of merger and acquisition.

1.5 Limitation of the study

This study tries to examine the effect of merger on financial performance of commercial banks in Nepal; still it has its own restrictions which are as below.

- i. There are many variables that can be used to measure the performance of bank but in this study only ROA, ROE, EPS, profit margin, assets quality, debt to equity ratio, CAR, liquidity ratios are covered.
- ii. This study is based on the secondary data collected only from the annual report of Bank of Kathmandu, NMB Bank and Siddhartha Bank Limited, only the data of other bank and financial institutions merged with these banks are ignored in this study reliability of the result is based on the reliability of data available from the annual report.
- iii. For pre-merger information and data only Bank of Kathmandu, NMB Bank and Siddhartha Bank Limited are collected the date of other bank and financial institutions which are merge with these banks are ignored in this study.
- iv. This research is context specific; its results and analysis may be peculiar to BFIs only and do not serve the rest of sector of Nepalese corporate world.
- v. Apart from the profitability, other performance ratios like risk, cash flow has been ignored to know the financial performance of banks.

1.6 Chapter plan

The research will be organized in to five chapters which will be presented in such a way that the research objective will be easily meet and research questions will be answered properly. The results and findings of the study will depict systematic manner. Each chapter's content is further described as follows:-

Chapter 1: Introduction

This chapter includes background of the study, statement of the problems, objectives of the study, conceptual framework, and significance of the study, limitation of the study and organization of the study.

Chapter 2: Review of literature

This chapter includes the relevant previous writing and studies to find the existing gap; review of textbook, dissertation is included in this chapter.

Chapter 3: Research methodology

This chapter explains about research methodology will be used for the study. it will cover research design, population and sample, sources of data, data analysis and software used.

Chapter 4: Result and discussion

This chapter consists of systematic presentation and analysis of financial statement employing financial and statistical tools. It also includes major findings and discussion.

Chapter 5: Summary and conclusion

This chapter finally summarizes the study in few paragraphs and tries to conclude the whole study; that is result of the research. And finally depending upon the summary and conclusion has been given.

CHAPTER II

LITERATURE REVIEW

2.1 Theoretical review

Banks play a critical role in the economic development of any country. For developing countries it works as blood circular in the economy. Since the financial market of Nepal(as a developing country) is characterized by numerous glitches, the Nepal Rastra Bank issued the merger guidelines (“Merger-by-Laws-2011”) in order to bring stability in the financial sector and to regulate the banking sector. This study finds the impact of mergers on financial performance of banks in Nepal. The findings depict a positive impact towards mergers and provide bank stakeholders with insights upon which they can base their decisions concerning merger (Bipan2018).

Acquisition refers to the situation where "one firm buys a controlling, or 100 percent interest in other firm with the intent of using a core competence more efficiently by making the acquired firm a subsidiary business within its portfolio. Normally acquisitions are done in order to have time and speed of operational advantages, economies of scale and market advantages. There are mainly three types of acquisition there are horizontal, vertical and related. Whereas horizontal acquisition is related to the acquisition of a firm competing in the same industry, vertical acquisition refers to the acquiring a suppliers or distributor of one or more of its goods or services. On the other hand related acquisition refers to the acquisition of a firm in highly related industry. The main difference between mergers and acquisitions is that a merger is normally more collaborative, voluntary and mutually entered into than an acquisition, which is normally dominated by one organization taking over another. This suggests the merger of two firms agree to integrate operation on a relatively co-equal basis because they have resources and capabilities that together may create a stronger competitive advantage. (Adhikari, 2014). Several theories have been advanced towards the justification and impact of mergers and acquisition.

2.1.1 Economic motive theories

The economic motive for any merger is that shareholder wealth is increased by the transaction as the two companies are worth more combined than as separate companies

2.1.2 Theory of synergy

According to Viverita (2008), the differential efficiency theory of mergers, if the management of firm A is more efficient than the management of firm B and if after firm A acquires firm B, the efficiency of firm B is brought up to the level of firm A, then this increase in efficiency is attributed to the merger. According to this theory, some firms operate below their potential and consequently have low efficiency. Such firms are likely to be acquired by other, more efficient firms in the same industry. This is because firms with greater efficiency would be able to identify firms with good potential operating at lower efficiency. They would also have the managerial ability to improve the latter's performance.

2.1.3 Theory of economy

According to this theory, there are factors that cause the average cost of producing something to fall as the volume of its output increases. When both the target and bidder are equally efficient, simply combining their resources would lead to benefits due to economies of scale and complementary benefits. There are two types of economies of scale i.e. internal economies of scale that refers to the cost savings that accrue to a firm regardless of the industry, market or environment in which it operates and external economies of scale that refers to benefit a firm because of the way in which its industry is, (Trautwein, 1990).

2.1.4 Financial synergy theory

According to this theory, financial synergy occurs as a result of the lower costs of internal financing versus external financing. A combination of firms with different cash flow positions and investment opportunities may produce a financial synergy effect and achieve lower cost of capital. Tax saving is another considerations. When the two firms merge, their combined debt capacity may be greater than the sum of their individual capacities before the merger. The financial synergy theory also states

that when the cash flow rate of the acquirer is greater than that of the acquired firm, capital is relocated to the acquired firm and its investment opportunities improve.

2.1.5 Tax incentive hypothesis theory

Trautwein, (1990), the tax incentive hypothesis of mergers and acquisitions, tax provision is an important incentive for mergers as it not only affects the decision to merge but also the way a merger is structured. He further argues that different ways of structuring a merger have different tax consequences that includes an opportunity to carry over by the acquirer the net operating losses and unused tax credits, an opportunity to step up assets or use their new sales prices as a basis for depreciation, incentive provided by a lower income tax rate on capital gains than on dividends to retain earnings to acquire other firms and finally the opportunity for an acquiring firm to deduct from taxable income the interest payments incurred on acquisitions related in daftness.

2.1.6 Managerial motives

According to Kemal, (2011), takeovers can also arise because of the agency problem that exists between shareholders and managers, whereby managers are more concerned with satisfying their own objectives than with increasing the wealth of shareholders. From this perspective, the motives behind some acquisitions may be to increase managers' pay and power. Managers may also believe that the larger their organization, the less likely it is to be taken over by another company and hence the more secure their jobs become. Takeovers made on these grounds have no shareholder wealth justification since managers are likely to increase their own wealth at the expense of the shareholders.

2.1.7 Types of mergers and acquisitions

Trautwein, (1990), notes that businesses engage in a wide range of activities in seeking to exploit potential opportunities. Mergers, tender offers and joint ventures play an important role in the growth or expansion of firms. Growth is viewed as vital to the wellbeing of a firm. It is needed for a firm to compete for the best managerial talent by offering rapid promotions and broadened responsibilities. Without able executives, the firm is likely to decline in efficiency and value. Although the terms 'merger' and 'takeover' tend to be used synonymously, in practice there is a narrow distinction between them. A merger can be defined as a friendly reorganization of

assets into a new organization, i.e. x and y merge to become z, a new company with the agreement of both sets of shareholders. Mergers involve similar sized companies, reducing the likelihood of one company dominating the other. A takeover on the other hand is the acquisition of one company's ordinary share capital by another company financed by a cash payment, an issue of securities or a combination of both. Here the bidding company is usually larger than the target company. In practice, most acquisitions are takeovers rather than mergers since one of the two parties is dominant. The term itself is understood to connote hostility. Kumar and Bansal (2008), discusses three types of mergers: horizontal, conglomerate mergers and vertical.

Horizontal mergers

A horizontal merger involves the combination of two companies operating in the same industry and at a similar stage of productions. Forming a larger firm may have the benefit of economies of scale. Horizontal mergers are regulated by the government for their potential negative effect on competition. The number of firms in an industry is decreased by horizontal mergers and this may make it easier for the industry members to collude for monopoly profits. Horizontal mergers are also believed by many as potentially creating monopoly power on the part of the combined form enabling it to engage in anti-competitive practices.

Conglomerate mergers

This is a combination of two companies operating in different areas of business; any combination that is not vertical or horizontal. Three types of conglomerate mergers have been distinguished. Product-extension mergers broaden the product lines of firms. These are mergers between firms in related business activities and may also be called concentric mergers. A geographic market-extension merger involves two firms whose operations have been conducted in non-overlapping geographic area while a pure conglomerate merger involves unrelated business activities. Conglomerate firms differ fundamentally from investment companies in that they control the entities to which they make major financial commitments. Two important characteristics define a conglomerate firm. One, it controls a range of activities in various industries that require different skills in the specific managerial functions of research applied

engineering, production and marketing. Two, diversification is achieved mainly by external acquisitions and mergers not by internal development.

Vertical mergers

Vertical mergers occur between firms in different stages of production operation within the same industry. In the oil industry, for example, distinctions are made between exploration and production, refining, and marketing to the ultimate consumer. In the pharmaceutical industry one could distinguish between research and the development of new drugs, the production of drugs and the marketing of drug products through retail drug stores. Muia (2010) advances various reasons for vertical mergers. First, there are technological economies such as the avoidance of retreating and transportation costs in the case of an integrated iron and steel producer. Second, transactions within a firm may eliminate the cost of searching for prices, contracting, payment collecting, and advertising and may also reduce the costs of communicating and of coordination production. Three, planning for inventory and production may be improved due to more efficient information flow within a single firm. Finally, when assets of a firm are specialized to another firm, the latter may act opportunistically to expropriate the quasi-rents accruing to the specialized assets. Expropriation can be accompanied by demanding supply of a good or service produced from the specialized assets at a price below its average cost to avoid the costs of haggling, which arise from the expropriation attempt. The assets are owned by a single vertically integrated firm. Divergent interest of parties to transaction be reconciled by common ownership. A vertical takeover can involve a move forward in the production process to secure a distribution outlet, or a move backward in the production process to secure the supply of raw materials e.g. a toy manufacturer merges with a chain of toy stores (forward integration; an auto manufacturer merges with a tire company (back integration).

2.2 Review research articles

Chesang (2002), to determine the implications of merger restructuring on performance of banks in Kenya observed that merger restructuring has not led to an improvement of financial performance of the majority of the institutions that have undergone merger and acquisition. Capital adequacy and solvency ratios indicate highly on the financial performance of the banks that have merged or acquired others.

This is because the ratios have legal implication. There was a decline in financial performance as was shown by the profitability ratios.

Murthy (2007), evaluated the M&A of five selected banks. It evaluated the case of Punjab National Bank and New Bank of India, ICICI Bank and Bank of Madura, ICICI Ltd. and ICICI Bank, Global Trust Bank and Oriental Bank of Commerce and Centurion Bank with Bank of Punjab. The researcher concluded that M&A is important for creating a stronger financial and operational structure, creates higher resources for firms, it widens branch network, create huge customer base, technological advantage, focus on priority sector, and penetration in rural market. It also examined various other determinants like human resources, how to manage clients for the above selected banks.

Mantravadi & Reddy (2008), have done the study to understand which type of mergers have been more successful in improving the performance of merging firms, among horizontal mergers, vertical mergers and conglomerate mergers. The research study has adopted the methodology of comparing pre and post-merger performance of merging companies by using operating profit margin, gross profit margin, net profit margin, return on net worth, return on capital employed and debt equity ratio. The pre-merger (for three years prior to merger) and post-merger (for five years after the merger) averages of financial ratios are compared, and tested for differences, using paired "t" test for two samples. Comparison of post vs. pre-merger operating ratio, for the different types of mergers suggested that horizontal mergers have caused the highest decline in the operating performance of the merging companies, followed by conglomerate and vertical mergers, in that order.

Adegbaju and Olokoyo (2008), conducted a study which investigated the impact of previous recapitalizations in the Nigerian banking system on the performance of banks. The study which covered all insured banks in Nigeria adopted a simple ratio analysis, using specifically profitability ratios, to evaluate the performance of banks three years before the 2001 recapitalization exercise and comparing it with the performance of the banks three years after the recapitalization exercise. The ratios used included: (a) Yield on earnings assets representing the percentage of return an institution receives on its earnings assets where earnings assets include all assets that generate explicit interest income or lease receipts and are defined as Total Assets less

Non-Earning Assets. (b) Return on equity (that is, rate of return to the shareholders) measured as net income after taxes divided by total equity capital. (c) Return on Assets (an indicator of managerial efficiency showing the capability of management to convert the assets of the bank into net earnings), defined as net income after taxes divided by total assets. The data were obtained from the Nigerian Deposit Insurance Corporation's annual reports. The data were analysed with the t-statistic to test the equality of the means of the key profitability ratios of the pre- and post-2001 key profitability ratios of banks.

Altunbas& Marques (2008), have observed the impact of strategic similarities between bidders and targets on post-merger financial performance. This article shows that on average, bank mergers in European Union have resulted in improved return on capital. They ran the empirical analysis by using an extensive sample of individual bank mergers which in turn, was linked to individual bank accounting information. They have found that there are improvements in performance after the merger has taken place particularly in the case of cross-border mergers. In terms of the impact of strategic relatedness on performance, the overall results show that broad similarities among merging partners are conducive to an improved performance, although there are important differences between domestic and cross-border mergers and across strategic dimensions.

Ndora (2010), studied the effects of mergers and acquisitions on the financial performance of insurance companies in Kenya. A sample of six insurance companies that had merged between the year 1995 and 2005 were used from a population of 42 registered insurance companies in the country as at that time. To measure financial performance, profitability ratios, solvency ratios as well as capital adequacy s were computed for the firms. The information for five years before and after the merger was compared and the results tabulated. The findings indicated an increased financial performance by the firms for the five years after the merger than it was five years before the merger. It was concluded that mergers and acquisition would result to an increase in the financial performance of an insurance company.

Okpanachi (2011), conducted a comparative analysis of the impact of mergers and acquisitions on financial efficiency of banks in Nigeria. The study whose major objective was to make a comparative analysis of the impact of mergers and

acquisitions on the financial efficiency of banks in Nigeria, made use of gross earnings, profit after tax and net assets of three selected banks namely, Access Bank Plc, First Bank of Nigeria Plc and Wema Bank Plc, extracted from their annual reports and accounts as indices to determine financial efficiency of the banks by comparing pre-mergers and acquisitions indices with the post-mergers and acquisitions indices for the period 2002 to 2008. The period 2002 to 2004 was considered as pre-merger period, 2005 as base year while year 2006 to 2008 were considered as post-merger period. This was done to determine if there were any significant difference between the efficiency of the banks in terms of gross earnings, profit after tax and net assets.

Kemal (2011), has studied the post-merger profitability of Royal Bank of Scotland where he has used accounting ratios to analyse the financial performance of Royal Bank of Scotland (RBS) in Pakistan after merger with an aim to find out the answer of “Does merger of the banks improves the profitability?” The report has analysed their financial statements for four years (2006-2009) by using vital ratios which includes the ratios from profitability, liquidity, market value etc. The results show that the financial performance of RBS in the areas of profitability, liquidity, assets management, leverage and cash flows has been quite satisfactory before the merger deal. It means that merger deal fails to improve the financial performance of the bank. This conclusion may not be the result for all the banks, as others may gain profit or increase profitability from the mergers. But in case of this report of RBS in Pakistan, merger does not work for it.

Wanguru (2011), did a study on the effects of mergers and acquisition on the profitability of commercial banks in Kenya. Researcher analysed the profitability of the banks for five years before and after the merger. A population of 33 banks that had merged between the period 1994 and 2010 were used. Profitability was measured in terms of return on asset (ROA) and return on equity (ROE). The findings were compared and the results tabulated for the years of study. It was observed that on average, the firm’s profitability increased for the five year period prior the merger than before. Researcher concluded that mergers and acquisition for commercial banks leads to increased profitability for the resultant firm.

Bakari (2011), conducted a study which examined the trend and growth implications of bank's recapitalization in Nigeria using secondary data which were analysed with the aid of t-statistic and test of equality of means for the period before and after recapitalization. The results showed that there was a significant difference between the two means and hence the two periods. The results indicated that the post-recapitalization's mean was higher than that of the pre recapitalization, implying that banks were more adequately capitalized and less risky after the program. The result also indicated that recapitalization had low but significant influence on the growth of the Nigerian economy.

Joshua (2011), analysed the impact of mergers and acquisitions on financial efficiency of banks of Nigeria. The study is based on secondary data by using various financial parameters like gross earnings, profit after tax and net assets of selected banks. Analysis has been done by using T-test through SPSS. The results further concluded an increased financial performance which leads to improved financial efficiency. The t-test result depicted an increase in their combined mean for gross earnings and net earnings but profit after tax recorded a decline.

Marembo (2012), conducted the thesis on the impact of mergers and acquisition on the financial performance of commercial banks in Kenya. The study set to establish whether the many mergers that have happened in Kenya's banking Sector had influenced financial performance based on the causal research design. This study cover 28 commercial banks mergers during the period of 1994 to 2010 as a population. Collect the data from financial statement of selected banks. This study concluded that merger/acquisition brings about higher capital and customer base which important ingredients in firm performance. With increased commercial banks' stability and ability to lend, the commercial banks in turn make higher profits.

Kivindu (2013), the objective of the study was to establish the effect of mergers and acquisitions on profitability of commercial banks in Kenya. The study adopted a descriptive research design and the population of interest comprised of all the 24 banks that merged or were acquired in Kenya during the study period of 2000 to 2010. The study revealed that institutions having weak capital base consolidate to create synergies so as to enjoy economies of scale as this improve their profitability instead

of going public by listing on the Nairobi Stock Exchange as this may be an expensive venture.

Maditinos *alt.* (2013), also carried out a study on the effect of mergers and acquisitions on the performance of companies. The study focused on two banks in Greece that had merged to form one bank. The main purpose of the study was to investigate the effects of the merger that took place in 1999 on the performance of the resultant bank. The study was carried in two parts. The first part analysed the short term effects of the merger and the second part the long term effects of the merger. The findings from the study indicate that the resultant bank after the merger was not only profitable in the banking industry but was also more competitive than the other banks. However, the study revealed that the stock performance of the resulted bank is not the decisive factor to appreciate the performance of the bank, since the stock value is many times the result of speculative actions, wrong expectations or simply a game of the fortune.

Misigah, (2013), carried out a study on the effect of mergers and acquisitions on growth of commercial banks in Kenya. The objective of this study was to examine the effects Mergers and Acquisitions (M&A) on growth of commercial banks in Kenya between the periods 2000 to 2010. The study was a survey involving commercial banks which have successfully completed merger and acquisition transactions since the year 2000-2010. The research instrument for collection of data was a questionnaire consisting of structured and unstructured questions. Secondary data was also used to obtain the required information. Documentary secondary data included reports to shareholders, administrative and public records. The study established that the variable which was significant on growth of commercial banks through mergers and acquisition was shareholders value and the growth in profitability.

Chellasamy & Ponsabariraj (2014), analyses the performance evaluation of mergers and acquisition of scheduled commercial banks in India. The paper analyses the pre and post-merger financial performance of the banks which are merged by using various financial parameters like return on assets, return on equity, profitability ratios, current ratios etc. The 24 study covers the period from 1999-2000 to 2010-2011. A paired t-test has been applied to find out the significant relationship between the profitability and liquidity performance of pre and post-merger and Acquisitions of

selected commercial banks in India. The study further concludes that there is no greater changes in the financial Performance.

Alam et al. (2014), examines the various factors which affects the performance of banks after acquisition. The study focused on 47 acquired banks and 33 acquiring banks in ASEAN from 2003 to 2011 by applying matching strategy. The data for banks is obtained from bank scope (Global database of financial Institutions). The macroeconomic and institutional data are obtained from World Bank and Heritage foundation. The study focuses on selected banks. Some specific variables have been taken due to data availability. The study selected independent variables on the basis of CAMEL model. It concluded that before financial crises, the acquired banks are found to have greater loan activities. The study shows that financial crises bring about a change in the factors which affects the banks performance after acquisition.

Adhikari (2014), a research paper published by NRB (2015), has performed an exploratory research to study the impact of merger on banks and financial institutions. NRB has used primary data from 550 respondents and secondary data for 3 years of pre- and post-merger period of 25 merged entities. The study concludes that major reason for financial institutions to go into merger is to increase their paid-up capital, expand the operational area as well as decrease the competition. Although the merger has positive changes in the employee satisfaction and work culture, it has created a delay in the process of decision making. The 6 financial indicators that NRB has used indicate a mixed result for the first two years i.e. positive changes in some BFIs and negative in some but when the 3rd year starts after merger the financial indicators show improvement for all the merged BFIs.

Gupta (2015), evaluated the impact of mergers and acquisition by studying various ratios i.e. Profitability Indicator, Efficiency Indicator and Performance Indicator of the selected banks. The study has taken two cases one is merger of BOR and ICICI Bank and another case is the merger between CBOP and HDFC Bank. The results of the study indicates that in the first case of merger between BOR and ICICI Bank there is a significant improvement in the performance of banks in terms of net profit margin, return on assets, net interest margin, capital adequacy ratio, CASA and cost to income but there is no significant change seen in total income/capital employed, return on equity and credit deposit ratio. In the second case of merger between

Centurion Bank of Punjab and HDFC Banks, there is a significant improvement in terms of Net profit margin, return on assets, return on equity, credit deposit ratio, CASA, cost to income but no change has been seen in total income/capital employed and capital adequacy ratio which net interest margin shows negative change in post-merger period.

Joash & Njangiru (2015), examined whether the merger had any effect on the banks' performance in Kenya. The study determine the effect of the mergers and acquisitions on the shareholders' value and to examine the implication of mergers and acquisitions on profitability. 14 banks that have merged or acquired others in the period from 2000 to date were investigated. Data was collected using questionnaires with both open and closed ended questions. The collected data was analysed using SPSS where the coefficient of correlation obtained. Study found that the mergers and acquisitions raised the shareholders' value of the merged/acquiring banks. Researcher recommended that thorough feasibility studies should be carried out before the merger/acquisition process can be done. It was also recommended that effect of mergers/acquisitions in other sectors of the economy should be established with a view of drawing a parallel with the effects of the same processes in the banking sector.

Dhakal (2015), after the Nepal Rastra Bank implemented the merger bylaws policy in 2011, Nepalese market was able to observe increasing trend in merger and acquisition in banking and financial institutions (BFIs) of Nepal. This study focused on the post-merger impact to the employees, customers and shareholders of the merged bank. The research method used in this study was descriptive research which implies the results based on the survey and the analysis. The impact on employees and customers were analysed through questionnaires whereas the impact on shareholders was observed through analysis of financial data of merged bank in 2years of pre and post-merger phase. The results showed that employees were satisfied with work, wages, working conditions etc. but they were intensely worried about the HR issues like cultural clash, positions issues, socialization, favouritism etc. The customers felt the changes in value, product and service in post-merger phase but required more innovative service. The overall financial data showed that bank had improved a lot in post-merger phase hence increasing the shareholder's wealth.

Awan & Mahmood (2015), conduct the study on impact of merger and acquisition on performance of commercial bank in Pakistan. This study concluded that the firm performance can take the influence of mergers and acquisitions deals as well. As for as this study analysis is concerned out of four measurement ratios all ratios remained positive solvency, liquidity, profitability and investment showed positive impact of mergers and acquisitions on firm performance. This study used ratios of two years earlier and two years after mergers and acquisitions deals and found overall positive impact but these results are of short time period. It is analysed that mergers and acquisitions have impact on firm performance in the short time period and it is also possible this deal has impact on the firm performance in the long run. Sometimes organizations indulge in the mergers and acquisitions activities get competitive edge which proves benefitted for the organizations. It is also concluded that due to expansion in the business activities the organizations per unit cost go to decline.

Mungai (2015), conduct the study on the effect of mergers and acquisitions on the financial performance of financial institutions in Kenya. The purpose of this study was to establish the effect of mergers and acquisitions on the financial performance of financial institutions in Kenya. The study took the form of a causal research design since this was a cause effect form of relationship, population included 104 financial institutions, out of which purposive sampling was applied to select 25 financial institutions that had undergone mergers and acquisitions. Secondary data was collected from a total of 18 firms. Multivariate regression analysis and correlation were used to analyse the data. The findings reveal that before mergers and acquisitions took place, financial institutions in Kenya did not have strong liquidity and solvency. Their operating expenses also increased with increase in profitability. The portion of the financial performance that was explained by liquidity, solvency and operating expenses of the firms was very small before mergers and acquisitions. However, after mergers and acquisitions took place, the liquidity and solvency of the firms improved significantly thus enhancing their financial performance. The operating expenses of the firms after mergers and acquisitions also seem to decrease as the financial performance increases. A strong positive relationship was witnessed between the liquidity of the firms and their financial performance as well as between

the solvency and financial performance. However, a moderate inverse relationship was evident between operating expenses and the financial performance.

Singh & Gupta (2015), argue that there is significant difference in post-merger Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Net Worth, Interest Coverage, Deposit per Employee and Credit Deposit Ratio but non-significant difference with respect to Gross Profit Margin, Debt-Equity Ratio, Current Ratio, Quick Ratio, Earnings per Share. The study concludes that the banks have positive effects of merger on financial performance when distinguished between pre mergers and post-merger period.

Ghosh & Dutta (2015), states that Mergers and Acquisitions as a smart means of corporate restructuring. The study explores the overall strategic impact of mergers and acquisitions in the banking sector. The study focused on 20 M&A deals in the Indian banking sector during 2000-2010. The study is based on pre and post- merger comparison of HR and Financial parameters. For the purpose of analysis the ratios for each of the performance parameters were estimated for all the ten mergers individually followed by Shapiro-walk normality test. The findings of the study indicates a non-significant change in performance in the post- merger period.

Modebe, Isibor & Okoye (2016), conduct the research on effect of merger and acquisition banking sector performance in Nigeria. This research study shows that (i) there is no significant difference in the profit performance of the banking sector (as measured by return on assets) between the pre- and post-merger and acquisition periods (ii) there is evidence of significant increase in the pre- and post-merger and acquisition means of bank asset ratio (iii) there is a significant reduction in capital adequacy ratio between the periods. Following from the above findings, the study concludes that mergers and acquisitions have significant impact on the performance of the Nigerian banking sector. We therefore recommend that due diligence should adopted in the identification and selection of compatible partners in order to achieve synergy. In the case of policy-induced merger and acquisition, a reasonable time should be allowed for compliance and implementation should be closely monitored.

Tamragundi & Devarajjappa (2016), in the study “Impact of mergers on Indian Banking sector: A comparative study of Public and Private sector Banks” examines

the impact of mergers on Physical performance of merged banks, Financial performance of merged banks and share price performance. For the purpose of analysis 6 Indian commercial banks have been taken. Out of 6 banks three banks are merger of public sector with private sector banks and three are merger of private sector banks with private sector banks. Analysis has been done on secondary data based on Camel model by using various statistical tools like mean, standard deviation, T-test. The study reveals that merger is a useful strategy for expanding business operations and the overall growth of the business.

Shah & Dwa (2017), conduct the on a study on merger and operating performance of commercial banks of Nepal. This study aims to find the impact of mergers on operating performance of sample merged banks. To attain the research objective, this study has taken 8 independent variables; operating profit margin, net profit margin, return on assets, return on equity, debt equity ratio, return on loan loss provision, return on staff expenses and return on operating expenses. Three cases have been taken for the study as a sample to examine whether merger has led to a profitable situation or not. Research mainly focuses on quarterly secondary data which is analysed using paired sample t-test, correlation analysis, and VIF test and regression analysis. From the analysis it is deduced that merger has no significant role in case of Nepal Bangladesh Bank and NIC Asia Bank in terms of various operational ratios, since many operational ratios have been found weaker in post-merger period than pre-merger period. But merger plays a significant role in case of Machhapuchchhre Bank where almost all operational ratios have improved in post-merger. While analysing the situation of overall commercial banking sectors, with the help of sampled data, it is observed that largely the merger isn't able to produce positive results for the merged entities. The study shows the reason for negative result of merger as the poor financial position of the target banks. Further the merger somewhat act as a solution for the current problems of Nepalese BFIs. Merger a wise option to bring BFIs in strong and growing position and to meet the requirement of current paid up capital as per the latest NRB directive. But it also must be considered that merger in itself is not the ultimate solution to strengthen the financial position of BFIs.

Shah & Khan (2017), conduct the research on Impacts of Mergers and Acquisitions on Acquirer Banks' Performance. Researcher investigates the effects of mergers and

acquisitions (M & A) on the operating performance of the acquirer banks in Pakistan. For this purpose, a sample of 18 transactions, involving acquirer banks, listed on the Karachi Stock Exchange, is used. The Financial Ratio Analysis (FRA) is used to determine the effects of M & A. The significance of change in the operating performances is tested through a paired sample t-test. The results indicate deterioration in the performances of the acquirer banks in the post-merger period. Researchers concluded that most of the profitability ratios, including ROE, ROA, net markup and non-mark-up income to total assets have declined in the post-merger period. Only an insignificant improvement is observed in net interest margin and administrative expenses to profit before tax ratios in the post-merger period. Deterioration is also observed in the liquidity ratios of the acquirer banks in the post-merger period. The cash and cash equivalent to total assets has declined significantly and advances, and investment to total assets ratios are increased, but insignificantly. Similarly the performances of the acquirer banks do not reflect any worthwhile improvement in terms of capital stability in the post-merger period. The deposit to owners' equity ratio is significantly increased, but the capital adequacy ratio has declined, showing an unfavourable effect on the performances of the acquirer banks in the post-merger period.

Chalise (2017), conduct the on analysis of mergers and acquisitions on the Performance of commercial banks in Nepal. With the major objective of this study is to investigate whether the financial performance of the selected merged commercial bank (i.e. Global IME Bank) improved after the merger with CAMEL Criteria. Researcher concluded that Bank capital has bettered after the merger with negative mean and it was also was statistically significant. Increase in ROA shows that the capability of the management to converting the bank's assets into net earnings is increasing. The overall financial performance which measure by the CAMEL variable significantly change after the merger and acquisition of Global IME bank.

Shrestha, Thapa & Phuyal. (2017), carried out the study on a comparative study of merger effect on financial performance of banking and financial institutions in Nepal. This study makes an attempt to analyse the financial performance of merged banking and financial institutions relative to their pre-merger performance, and assess the perception of the stakeholders towards merger. Six banks and financial institutions are

considered as sample to undertake this study along with 120 respondents for secondary and primary data respectively. The financial ratios comparison method along with t-test of changes in performance measures has been used. This study found that merger impacts performance positively when larger and stable parties such as commercial banks act as bidders as opposed to the merger between smaller BFIs mainly other than commercial banks as bidder. The loan quality significantly deteriorates after merger in most of the cases and profitability measured in terms of ROA and ROE is adversely affected in most of the cases after the merger. Therefore, the merger should not be considered as the definite solutions to overcome the challenges faced in the market; enough evaluation is needed to select the right partners before executing the merger.

Patel (2018), conduct the research on pre & post-merger financial performance: an Indian perspective compares the before and after merger position of long term profitability with respect to selected Indian banks for a period of 2003-04 to 2013-2014. This study found a negative impact of merger on return on equity, return on assets, Net profit ratio, yield on advance and yield on investment. However, variables, namely, the Earnings per Share, Profit per employee and Business per employee have shown positive trend and grown after the merger. It has been observed that after the merger, the Assets, Equity, Investment and advances of all banks increases, but due to underutilization, their respective yield decreases. On a contrary, the business per employee and profit per employee have increased due to optimum utilization of human resources. By applying the Comparative Analysis, the paper also assesses the financial performance of acquiring bank with the banking industry. The Bank of Baroda and Oriental bank of commerce has found decreases in Yield on Advances and yield on investment as compared to average of all banks in the post-merger period. State bank of India & IDBI Bank has higher business per employee and profit per employee as compared to industry average.

Literature review matrix

Author	Objectives/Context	Methodology	Major Findings
Bipin (2018)	The impact of merger on financial performance	Descriptive analysis	This study findsthat depicts a positive impact of toward mergers and provides bank stakeholders with insights upon which they can their decision concerning merger.
Patel(2018)	pre and post-merger Financial performance	Descriptive analysis, Comparative analysis	It increase productive and capital of the bank but Decrease the Earning per share
Shah and Dwa (2017)	Study on merger and operatingperformance of commercial banks of Nepal	correlation analysis and regression analysis	It consider that merger in itself is not the ultimate salutation to strengthen the financial position
Shah and khan (2017)	Impacts of merger and acquirer Banks Performance.	Descriptive analysis.	It explain that the deposit to owners' equity ratio is significantly increased but the capital adequacy ratio has decline showing.
Shrestha, Thapa and Phuyal(2017)	Comparative study of merger effect on financial performance of banking and financial institution in Nepal.	Quantitative method	An unfavourable effect on the performance of acquire bank in the post-merger period.
Chalse (2018)	Merger and actuation of on the performance of commercial bank	Descriptive analysis	Bank capital has bettered after the merger with negative means, increase in ROA.
Tamragundi & Devarajjappa (2016)	Impact of merger on Indian Banking sector	Comparative Analysis	Merger is a useful strategy for expanding business operation and overall growth of the business

Modebe, Isibor&okeya (2016)	Effect of merger of merger and acquisition banking sector performance in Nigeria.	Descriptive analysis	There is a significant reduction in capital adequacy ratio between the period.
Ghosh&Dutta (2015)	Merger and Acquisitions as a smart.	Descriptive analysis	The finding of the study indicate a non significant change in performance in the post merger period
Gupta (2015)	Evaluated the impact of merger and acquisition.	Comparative study.	The finding of the study merger improvement in the performance of bank in term of net profit, ROA, net interest margin, capital adequacy ratio, but there no significant change seen in total income capital, employed, ROE etc.
Singh & Gupta (2015)	Impact of merger and acquisition on productivity and profitability	Analytical study	The finding is that the bank has positive effects of merger on financial performance when distinguished between pre-merger and post-merger period.
Dhakal(2015)	Impact and challenges of merger and acquisition	Descriptive analysis	Finding is the customers felt the change in value; product and service in post- merger phase but require more innovative service.
Joash&Njangiru (2015)	Effect of the merger and acquisitions on the performance	Comparative study	This study found that the merger and acquisition raised the shareholder value of the merged bank.

Mungai(2015)	Effective of merger and acquisition on the financial performance	Comparative study	The major finding is moderate inverse relationship was evident between operating expenses and financial performance.
Awan&mahmood (2015)	Impact of merger and acquisition on performance of commercial bank in Pakistan	Comparative study	Major finding is merger and acquisition has impact on firm performance in the short time period.
Adhakari (2014)	Impact of merger on bank and financial institutions.	Comparative study	After merger the financial indicators show improvement for all the merged bank and financial institutions.
Chellasamy&Ponsabariraj (2014)	Analyses the performance evaluation of merger and acquisition	Descriptive analysis	The study further concludes that there is no greater changes in the financial performance after merger
Alam (2014)	Merger and acquisition as an indispensable tool for strengthening	Descriptive analysis	This study shows that financial crises bring about a change in the factors which affects the banks performance after acquisition.
Kivindu (2013)	Effect of merger and acquisitions on profitability of commercial bank in kenya	Descriptive analysis	Major finding is merger and acquisition creates synergies effect.
Joshua (2011)	Impact of merger and acquisition on financial efficiency of banks of Nigeria	Descriptive analysis	The result concludes that recapitalization had low but significant influence on the growth of the Nigerian economy.

2. 3 Research gap

After review the past article and thesis, impact on merger on financial performance of commercial banks. This research study is mainly differ than the previous research study due to the following reason.

This research focus on both measuring comparative financial performance and effect of merger on Performance of bank. The ratios used ROA, ROE, EPS, Profit Margin, Assets Quality, loan and advance to total deposit, debt to equity ratio, Capital adequacy position to measure the financial performance of merged commercial banks which are different than the past researcher Past researcher cover the data up to 2016 AD only and his study cover the data form fiscal year2013/14 to 2018/19.The sample used in research study are Bank of Kathmandu Limited, NMB Bank and Siddhartha Bank Limited, which are different than the past research article and thesis.

Previous research usage dependent, independent and moderate variable but in this research used only dependent and independent variable. In other hand previous research done in merger and acquisition but this research done in only merger and its impact. Another gap is situation gap other research done in normal situation but it is the time of COVID-19.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

This research used descriptive and analytical research design in order to examine impact of merger on the financial performance of commercial banks. The methods of research utilize in descriptive research are survey method of all kinds, including comparative and co-relation methods. In analytical research, on the other hand, the researcher has to use facts or information already available, and analyses these to make critical evaluation of the material.

3.2 Population and sampling

Population:

The populations for this research are all the commercial banks which are merged after the merger and acquisition by law 2011 AD implemented. According to the monetary policy 2019/20 AD, in line with the Merger & Acquisition Policy of this Bank, a total of 171 BFIs have undergone through the merger/acquisition process as of mid-July 2019. Out of these, license of 128 institutions has been revoked thereby forming 43 institutions. Among them 12 are the commercial banks. These 12 merged commercial banks are taken as the population for the study.

Sample:

Out of 12 merged commercial banks, three commercial banks, NMB bank, Bank of Kathmandu Lumbini Limited (BOK), Siddhartha Bank Limited (SBL) which all are merged in 2016AD as same time period selected as sample by using systematic random sampling. The sample size of this study is three and sampling interval of this study is 4th, which is calculating dividing size of population by size of sample. Every 4th element in the population is chosen starting from a random point in the population frame.

3.3 Data collection and processing procedure

This research examines the impact of merger on financial performance of commercial bank. For this purpose secondary data are used, data are collected from the only the financial statement of the selected banks Bank of Kathmandu, NMB Bank and Siddhartha Bank Limited 3 year before and after the merger and acquisition. For pre-

merger financial performance analyses only the data and information are collected only from annual report of Bank of Kathmandu Limited, NMB Bank Limited and Siddhartha Bank Limited. The data and information of other financial institutions which are merged with these banks are ignored for pre-merger financial analysis. For the post-merger period, the focus of the analysis was on the combined institution.

3.4 Data analysis tools and techniques

In order to measure the impact of merger, the average performance of the Three pre-merger years (T-3,T-2,T-1) is compared with the average performance of the Three post-merger years (T+1, T+2, T+3) of the respective banks. The year of merger is indicated by T0 and is not included in the performance evaluation in order to eliminate the effect of the merger cost. Accounting ratios used to analyze the financial performance of the 3 banks under study. For the pre-merger period ratios, data and information only Bank of Kathmandu Limited, NMB Bank Limited and Siddhartha Bank Limited is collected and examined to get an indication of the relative financial performance. For the post-merger period, the focus of the analysis was on the combined institution. Pre-merger average data (m1) was compared with the post-merger average data (m2) to determine what changes occurred in financial performance following the merger or the acquisition. The researcher then conducted a multivariate regression analysis to establish the relationship between the dependent and independent variables.

Statistical tools

Mean: Mean is the value, which represents the group of values and gives an idea about the concentration of values in the central part of the distribution. An average gives us a point which is most representative of the data. It is sum of all the observations divided by the number of observations.

$$\text{Mathematically, Mean } (\bar{X}) = \frac{\sum X}{n}$$

Standard deviation

Standard deviation is a statistical measure of the variability of a distribution of return around its mean. It is the square root of the variance and measure the unsystematic risk. A small standard deviation means a high degree of uniformity of the observation. It is denoted by Greek letter called sigma (σ).

Mathematically,

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{(X - \bar{X})^2}{n-1}}$$

Correlation coefficient:

Correlation coefficient is a relative measure of co-movements between variables. It is the measurement of linear relationship between two or more variables. Its values lie between -1 and +1. Mathematically,

$$\text{Correlation coefficient (r)} = \frac{n \sum XY - \sum X \cdot \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \sqrt{n \sum Y^2 - (\sum Y)^2}}$$

Regression:

The statistical technique which studies the average relationship between two or more variables in terms of original unit of data is called regression analysis. The simple regression analysis describes the average relationship between only two variables. It measures per unit change. The multiple regressions are a logical extension of the simple linear regression analysis. Instead of single independent variable, two or more independent variables are used to estimate the unknown values of a dependent variable.

$$Y = a + bX$$

a = Constant

b = Beta coefficient

Financial tools

Return on assets: Return on Assets measures the net income on each rupee of assets. This ratio measures overall profitability from investment in assets. Return on assets is calculated as a ratio between Net Income and Average Total Assets. It indicates the efficiency of the banks by utilizing their assets in generating profits. The higher ratio is better for the firm.

Return on equity: Return on equity is net profit after taxes divided by shareholder's equity which is given by net worth. It is a measure of how well management has used

the capital invested by the shareholders. ROE is sometimes called "return on net worth.

Profit margin: Profit margin is measure of how well management has generating operating revenue. It is calculated as net income divided by total operating revenue. Higher this ratio better for the firm.

Earnings per share: Earnings per share is calculated as dividing earning available to share holder by total share outstanding.

Capital adequacy: Capital adequacy is one of the elements that indicate the measurement of financial strength of a bank. It is the capital position of the bank which somewhat assure depositors that they compensated if any failure occurs. The capital adequacy is extracted from annual report which is calculated as the ratio of regulatory capital (tier I + tier II) to total risk weighted assets.

$CAR = (\text{Tier I} + \text{Tier II}) \text{ capital} / \text{Total risk weighted assets}.$

Assets quality: To address the asset quality, non-performing loans to total loans (NPL) is used in this study. Non-performing loans (loans which are considered not to generate earnings) to total loans ratio measures the asset quality of bank. In other words, it reflected the health of bank's loan portfolio that affects performance of bank negatively. The higher the NPL ratio the poorer the quality of loan portfolio and therefore it led to lower profitability.

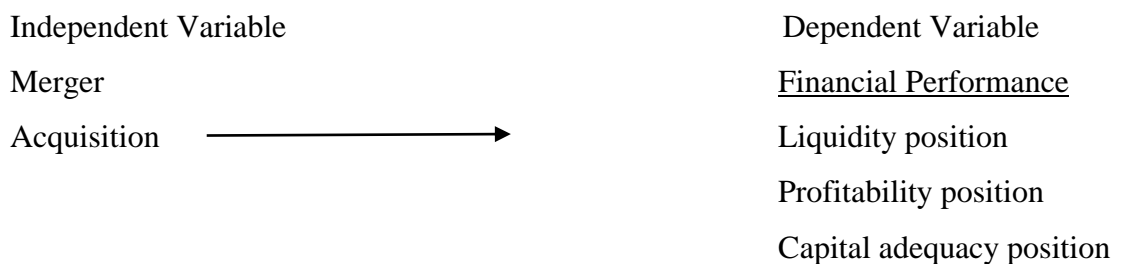
Liquidity: Liquidity is a crucial aspect which reflects bank's ability to meet its financial obligations and to maintain adequate level of liquid assets, which otherwise result in decline in the earnings. An adequate liquidity position can be obtained either by increasing liabilities or by converting its assets quickly into cash. Bank has to take proper measures to hedge the liquidity risk, at the same time securing good proportion of funds to be invested in high return generating securities. Firms with high liquidity have greater freedom to invest than the firm with low liquidity, but such firms hold on their earnings at a higher opportunity cost. Liquidity can be defined as a reserve to protect the bank from unforeseen contingencies. To address the Liquidity two ratios is used in this study: Total loan/Total deposit and total debt to shareholder equity. As loans was one of the main sources of income of a bank, the ratio total loan and

advance to total deposit show the liquidity position of bank. Similarly debt to equity ratios also shows the long term solvency position of the bank.

Variable	Measure
Profitability	$ROA = \frac{\text{Net income}}{\text{Total Assets}}$
	$ROE = \frac{\text{Net income}}{\text{Shareholder equity}}$
	Profit margin = $\frac{\text{Netprofit}}{TOR}$
Earnings per share	$EPS = \frac{\text{Earning available to shareholder}}{\text{Total share outstanding}}$
Capital adequacy	$CAR = \frac{\text{Tire I + tire II}}{\text{Total Risk weighted Assets}}$
Assets quality	$A = \frac{NPA}{TLA}$
Total loan and advance to total deposit ratio	$L = \frac{\text{Total Loan and advance}}{\text{Total deposit}}$
Debt equity ratio	Total debt = $\frac{\text{total debt}}{\text{shareholder equity}}$

3.5 Conceptual framework

The following conceptual framework is developed for the purpose of this study. It shows the relationship between the merger as independent variable and the operating performance as dependent variable. The dependent variable (financial performance) is measured by using financial ratios, grouped into three categories including profitability, liquidity position and capital structure.



Sources: Research's construct using the idea of, shah & khan (2017)

Hypothesis

H0: There is no significant difference in the Liquidity position between pre and post-merger of banks.

H1: There is significant difference in the Liquidity position between pre and post-merger of banks.

H0: There is no significant difference in the Profitability position between pre And post-merger of banks.

H1: There is significant difference in the Profitability position between pre and post-merger of banks.

H0: There is no significant difference in the Capital Adequacy position between pre and post- merger of banks.

H1: There is significant difference in the Capital Adequacy position between pre and post-merger of banks.

CHAPTER IV

RESULT

4.1 Date presentation and analysis

In order to measure the impact of merger, the average performance of the three premerger years (T-3, T-2, T-1) is compared with the average performance of the three post-merger years (T+1, T+2, T+3) of the respective banks. The year of merger is indicated by T0 and is not included in the performance evaluation in order to eliminate the effect of the merger cost.

4.1.1 Pre and post-merger comparison of performance

4.1.1.1 Return on assets

Return on Assets measures the net income on each rupee of assets. It is calculated as a ratio between Net Income and Average Total Assets, which the efficiency of the banks by utilizing their assets in generating profits. Higher this ratios show the better profitability position of banks.

Table 4.1.1

Return on assets

BANKS	Before merger					After merger				
	T-3	T-2	T-1	Mean	Std.	T+1	T+2	T+3	Mean	Std.
BOK	0.65	0.74	0.84	0.74	0.1	1.57	1.45	1.45	1.49	0.06
NMB	1.43	1.36	1.21	1.33	0.1	1.49	1.69	1.65	1.61	0.11
SBL	1.43	1.74	1.51	1.56	0.16	1.69	1.54	1.59	1.61	0.08
Mean	1.17	1.28	1.19	1.21	1.21	1.58	1.56	1.56	1.57	0.08
Std.	0.45	0.5	0.34	0.42		0.1	0.12	0.1	0.07	

Sources: Annual report of bank from 2013/14 to 2018/19 AD

Table 4.1.1 shows the return on assets of sampled merged commercial banks before and after the merger. The average ROA of BOK before and after is 0.74 and 1.49 respectively. Which shows that ROA is increased after the merger? Similarly NMB has 1.33 averages ROA before the merger and 1.61 after the merger which shows that ROA of NMB banks increase after the merger. Similarly the average ROA of SBL is 1.56 and 1.61 respectively before and after the merger and standardization is 0.16 and 0.08 respectively. It show that return on assets of NMB also increase after the merger. Average ROA of commercial banks before merger and after merger is 1.21 and 1.57

respectively. This shows that return on assets of commercial banks increase after the merger. Identifying that merger has positive effect on ROA.

4.1.1.2 Return on equity

Return on equity used to measure the profitability position of the commercial banks before and after the merger. ROE is net profit after taxes divided by shareholder's equity which is given by net worth. It is a measure of how well management has used the capital invested by the shareholders. Higher this ratios show the better profitability position of banks.

Table 4.1.2

Return on equity

BANKS	Before merger					After merger				
	T-3	T-2	T-1	Mean	Std.	T+1	T+2	T+3	Mean	Std.
BOK	0	13.23	16.44	14.84	8.72	22.18	23.74	18.74	21.55	2.56
NMB	27.27	26.75	28.7	27.57	1.01	31.95	30.11	31.82	31.29	1.03
SBL	41.72	54.19	50.78	48.90	6.44	44.85	32.37	13.90	30.37	15.57
Mean	34.50	31.39	31.97	30.44	5.39	32.99	28.74	21.49	27.74	5.82
Std.	10.22	20.87	17.40	17.40		11.39	4.48	9.27	5.38	

Sources: Annual report of banks from 2013/14 to 2018/19AD

From the table 4.1.2 return on equity of BOK before merger and after merger is 14.84 and 21.55 respectively and standard deviation is 8.72 and 2.56 respectively. Similarly the return on equity of NMB bank before merger and after merger is 27.57 and 31.29 respectively and its standard deviation is 1.01 and 1.03, similarly average ROE of SBL bank is 48.90 and 30.37 respectively before and after the merger. Mean return on equity of sampled banks is 30.44 before the merger and 27.74 after the merger and its standard deviation is 5.39 and 5.82 respectively. Identifying that merger has positive effect on ROE.

4.1.1.3 Earning per share

Earnings per share is another ratios used to measure the profitability position of commercial banks in Nepal before and after the merged. It is calculated as dividing earning available to share holder by total share outstanding. Higher these ratios indicate the better profitability position of commercial banks and vice-versa.

Table 4.1.3*Earnings per share*

BANKS	Before merger					After merger				
	T-3	T-2	T-1	Mean	Std.	T+1	T+2	T+3	Mean	Std.
BOK	13.25	15.75	14.86	14.63	1.28	20.69	19.46	20.69	20.28	0.58
NMB	18.02	20.5	25.05	21.19	3.57	27.79	26.88	28.67	27.78	0.9
SBL	29.80	38.63	37.77	35.40	4.87	41.53	18.82	26.45	28.78	11.56
Mean	20.36	24.97	25.89	23.74	3.24	30.00	21.72	25.27	25.66	4.16
Std.	8.52	12.06	11.48	10.62		10.59	4.48	4.12	4.70	

Sources: Annual report of banks from 2013/14 to 2018/19AD

Table 4.1.3 shows the earning per share of sampled commercial banks before and after the merger. The average earning per share of BOK is 14.63 before the merger and 20.28 after the merger. Standard deviation is 1.28 and 0.58 respectively. Similarly average EPS of NMB bank is 21.19 and 27.78 respectively before and after the merger and its standard deviation is 3.57 and 0.9 respectively. Likewise the average EPS of the SBL is 35.40 before merger and 28.93 after the merger, its standard deviation is 4.87 before merger and 11.56 after the merger. Average EPS of selected commercial bank before merger and after merger is 23.74 and 25.66 respectively and standard deviation is 3.24 before the merger and 4.16 after the merger. Means show that earning per share increase after the merged of the commercial banks in Nepal. Identifying that merger has positive effect on EPS.

4.1.1.4 Profit margin

Profit margin is measure of how well management has generating operating revenue. It is calculated as net income divided by total operating revenue. Higher this ratio better for the firm.

Table 4.1.4*Profit margin*

BANKS	Before Merger					After Merger				
	T-3	T-2	T-1	Mean	Std.	T+1	T+2	T+3	Mean	Std.
BOK	37.825	15.36	25.3	26.17	11.3	33.22	40.4	33.75	35.79	3.27
NMB	58.85	60.23	59.77	59.62	0.7	68.09	66.82	41.24	58.72	15.15
SBL	47.07	59.72	60.22	55.67	7.45	70.93	66.28	40.90	59.37	16.16
Mean	47.92	45.10	48.43	47.15	6.47	57.41	57.83	38.63	51.29	10.97
Std.	10.53	25.76	20.03	18.28		21.00	15.10	4.23	13.43	

Sources: Annual report of banks from 2013/14 to 2018/19 AD

Table 4.1.4 show the profit margin of selected commercial banks in Nepal. Average profit margin of BOK before the merger is 26.17 and standard deviation is 11.3 and after the merger mean profit margin is 35.79, standard deviation is 3.27, which shows that average profit margin of BOK is increase after the merger. Similarly the profit margin of NMB bank before the merger is 59.62 and after the merger is 58.72; its standard deviation is 0.7 before the merger and 15.15 after the merger. Similarly the average profit margin of SBL before and after the merger is 55.67 and 59.37 respectively and standard deviation is 7.45 and 16.16 respectively before and after the merger. Average profit margin of selected commercial banks is 47.15 before the merger and 51.29 after the merger. And its standard deviation is 6.47 and 1.97 respectively. Identifying that merger has positive effect on PM.

4.1.1.5 Assets quality

To address the asset quality, non-performing loans to total loans (NPL) is used in this study. Non-performing loans (loans which are considered not to generate earnings) to total loans ratio measures the asset quality of bank. In other words, it reflected the health of banks .Loan portfolio that affects performance of bank negatively. The higher the NPL ratio the poorer the quality of loan portfolio and therefore it led to lower profitability.

Table 4.1.5

Asset quality

BANKS	Before merge					After merger				
	T-3	T-2	T-1	Mean	Std.	T+1	T+2	T+3	Mean	Std.
BOK	1.06	3.47	1.51	2.01	1.28	1.29	3.04	1.29	1.87	0.82
NMB	1.8	0.55	0.42	0.92	0.76	1.81	1.68	0.88	1.46	0.5
SBL	2.39	2.75	1.80	2.31	0.48	1.47	1.30	1.09	1.29	0.19
Mean	1.75	2.26	1.24	1.75	0.84	1.52	2.01	1.09	1.54	0.46
Std.	0.67	1.52	0.73	0.73		0.26	0.91	0.21	0.30	

Sources: Annual report of respected banks from 2013/14 to 2018/19 AD

Table 4.1.5 show the assets quality of selected commercial banks in Nepal. Average assets quality of BOK before the merger is 2.01 and standard deviation is 1.28 and after the merger means assets quality is 1.87, standard deviation is 0.82, which shows that average assets quality which means non-performing assets of BOK is decrease after the merger. Similarly the assets quality of NMB bank before the merger is 0.92

and after the merger is 1.46, its standard deviation is 0.76 before the merger and 0.5 after the merger. Similarly the average assets quality of SBL before and after the merger is 2.31 and 1.29 respectively and standard deviation is 0.48 and 0.19 respectively before and after the merger. Average assets quality of selected commercial banks is 1.75 before the merger and 1.54 after the merger. And its standard deviation is 0.84 and 0.46 respectively. Identifying that merger has negative effect on asset quality.

4.1.1.6 Total loan and advance to total deposit ratio.

Total loan and advance to total deposit ratio is used to measure the liquidity position of sampled commercial banks in Nepal.

Table 4.1.6

Total loan and advance to total deposit ratio.

BANKS	Before merge					After merge				
	T-3	T-2	T-1	Mean	Std	T+1	T+2	T+3	Mean	Std.
BOK	0.84	0.85	0.85	0.84	0.01	0.86	0.84	0.88	0.86	0.02
NMB	0.74	0.76	0.75	0.75	0.01	0.82	0.84	0.89	0.85	0.04
SBL	0.83	0.79	0.83	0.82	0.02	0.87	0.87	0.90	0.88	0.02
Mean	0.80	0.80	0.81	0.80	0.01	0.85	0.85	0.89	0.86	0.02
Std.	0.06	0.05	0.06	0.05		0.03	0.02	0.01	0.02	

Sources: Annual report of banks from 2013/14 to 2018/19AD

Table 4.1.6 the average total loan and advance to total deposit ratio of BOK is 0.84 before the merger and 0.86 after the merger. This shows that loan and advance of BOK is increase as compared to deposit after the merger its standard deviation is 0.01 and 0.02 respectively before and after the merger. Similarly average total loan and advance to total deposit ratios of NMB bank is 0.75 and 0.85 respectively before and after the merger and its standard deviation is 0.01 and 0.04 respectively per-merger and post- merger. Likewise the average total loan and advance to total deposit ratios of SBL is 0.82 before the merger and 0.88 after the merger its standard deviation is 0.02 and 0.02 respectively. The average total loan and advance to total deposit of sampled commercial banks in Nepal is 0.80 and 0.86 respectively before and after the merger. Identifying that merger has positive effect on loan and advance to total deposit ratio.

4.1.1.7 Capital adequacy position

Capital adequacy is one of the elements that indicate the measurement of financial strength of a bank. It is the capital position of the bank which somewhat assure depositors that they will be compensated if any failure occurs. Higher this ratios is better.

Table 4.1.7

Capital adequacy position

BANKS	Before merger					After Merger				
	T-3	T-2	T-1	Mean	Std.	T+1	T+2	T+3	Mean	Std.
BOK	11.57	13.00	13.01	12.53	0.83	13.41	14.88	13.41	13.9	0.69
NMB	11.74	10.75	11.13	11.21	0.5	10.98	13.61	15.75	13.45	2.39
SLB	11.80	13.39	11.10	12.10	1.17	11.35	12.74	12.12	12.04	0.75
Mean	11.70	12.38	11.75	11.95	0.83	11.88	13.74	13.76	13.13	1.08
Std.	0.12	1.43	1.09	0.67		1.33	1.08	1.84	0.97	

Sources: Annual report of respected banks from 2013/14 to 2018/19 AD

Table 4.1.7 show the capital adequacy of sampled banks. The average capital adequacy position of BOK before the merger is 12.53 and 13.9 after the merger and its standard deviation is 0.83, and 0.69 respectively pre-merger and post-merger. Similarly the average capital adequacy of NMB banks is 11.21 and 13.45 respectively before and after the merger and its standard deviation pre-merger is 0.5 and post-merger is 2.39. Similarly SBL has 12.10 and 12.04 average capital adequacy position respectively before and after the merger and its standard deviation is 1.17 and 0.75 pre-merger and post-merger. Average capital adequacies of selected commercial banks are 11.95 pre- merger and 13.13 post-merger. Identifying that merger has positive effect on capital adequacy position.

4.1.1.8 Debt to equity ratio

Debt to equity ratio is used to measure the long term solvency position of commercial banks. Higher the ratio means higher the debt employed by the bank as compared to equity, which show the lower solvency position of banks.

Table 4.1.8*Debt equity ratio*

BANKS	Before merger					After merger				
	T-3	T-2	T-1	Mean	Std.	T+1	T+2	T+3	Mean	Std.
BOK	0	18.48	9.97	14.22	6.02	15.76	13.3	11.13	13.4	1.89
NMB	11.25	11.41	13.92	12.19	1.5	12.27	10.01	9.93	10.74	1.33
SBL	17.09	18.25	19.26	18.20	1.09	15.25	10.55	11.69	12.50	2.45
Mean	14.17	16.05	14.38	14.87	2.87	14.43	11.29	10.92	12.21	1.93
Std.	4.13	4.02	4.66	3.06		1.89	1.76	0.90	1.35	

Sources: Annual report of respected banks from 2013/14 to 2018/19 AD

Form the table 4.1.8 the average debt to equity ratios of BOK is 14.22 and 13.4 respectively before merger and after merger and its standard deviation is 6.02 and 1.89 respectively. Similarly the average debt to equity ratio of NMB bank is 12.19 and 10.74 respectively before and after the merger. Likewise the average debt to equity ratio of SBL is 18.20 and 12.50 respectively before and after the merger. The average debt to equity ratios of commercial banks is 14.87 before the merger and 12.21 after the merger. Identifying that merger has negative effect on debt to equity ratio.

4.2 Hypothesis testing (t-Test)

4.2.1 Paired two sample t-tests for means performance ROA.

H0: There is no significant difference in the return on assets between pre and post-merger of banks.

Table 4.2.1*T-Test: paired two sample for means ROA*

Particulars	Pre –merger	Post-merger
Mean	1.212	1.569
Variance	0.145	0.009
Observation	9.0	9.00
Personal correlation	0.408	
t-star	3.03	
P(T<=t) one- tail	0.008	
t Critical one-tail	1.860	
P(T<=t) two tail	0.016	
t critical two tail	2.306	

Sources: SPSS

Table 4.2.1 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means of respective ratios. Mean performance of return on assets is increased in the post-merger period and the difference in the pre and post-merger averages (μ_1 and μ_2) is found statistically significant at 5% level of significance, t-Stat i.e. 3.030 is greater than t-Critical value i.e. 2.306 thus, H_0 is not accepted hypothesis. Correlation analysis shows that there is significant positive correlation between pre-merger ROA and post-merger ROA i.e. it has 0.408.

4.2.2 Paired two sample t-tests for mean performance of ROE.

H_0 : There is no significant difference in the ROE between pre and post-merger of banks.

Table 4.2.2

T-test: paired two sample for means performance of ROE

Particulars	Pre- merger	Post- merger
Mean	30.440	27.740
Variance	315.736	84.204
Observations	9.00	9.000
Pearson correlation	0.273	
t Stat	0.178	
P(T<=t) one-tail	0.432	
t Critical one-tail	1.860	
P(T<=t) two-tail	0.863	
t Critical two-tail	2.306	

Source: SPSS

Table 4.2.2 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means performance of ROE. Mean performance of return on equity is decreased in the post-merger period and the difference in the pre and post-merger averages (μ_1 and μ_2) is found statistically insignificant at 5% level of significance, t-Stat i.e. 0.178 is less than t-Critical value i.e. 2.306 thus, H_0 is not accepted, i.e. there is an insignificant difference in return on equity after the merger. Correlation analysis shows that there is insignificant positive correlation.

4.2.3 Paired two sample t-tests for mean performance of EPS.

H₀: There is no significant difference in the EPS between pre and post-merger of banks.

Table 4.2.3

T-test: paired two sample for means performance of EPS

Particular	Pre-merger	Post-merger
Mean	23.740	25.664
Variance	94.058	50.274
Observations	9.000	9.000
Pearson correlation	0.252	
t Stat	-0.551	
P(T<=t) one-tail	0.298	
t Critical one-tail	1.860	
P(T<=t) two-tail	0.596	
t Critical two-tail	2.306	

Sources: SPSS

Table 4.2.3 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means performance of EPS. Mean performance of EPS is increased in the post-merger period and the difference in the pre and post-merger averages (μ_1 and μ_2) is found statistically insignificant at 5% level of significance, t-Stat i.e. -0.551 is less than t-Critical value i.e. 1.860 thus, there is a insignificant difference in EPS after the merger. Correlation analysis shows that there is insignificant positive correlation.

4.2.4 Paired two sample t-test for mean performance of profit margin

H₀: There is no significant difference in the PM between pre and post-merger of banks.

Table 4.2.4*T-test: paired two sample for means performance of PM*

	Pre-merger	Post-merger
Mean	47.152	51.292
Variance	296.324	261.947
Observation	9.00	9.00
Pearson correlation	0.548	
t Stat	-0.781	
P(T<=t) one-tail	0.229	
t Critical one-tail	1.860	
P(T<=t) two-tail	0.457	
t Critical two-tail	2.306	

Sources: SPSS

Table 4.2.4 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means performance of PM. Mean performance of PM is increased in the post-merger period and the difference in the pre and post-merger averages ($\mu_1=47.152$ and $\mu_2=51.292$) is found statistically insignificant at 5% level of significance, t-Stat i.e. -0.781 is less than t-Critical value i.e. 1.860 thus, there is an insignificant difference in PM after the merger. Correlation analysis shows that there is insignificant high degree of positive correlation i.e. it has 0.548.

4.2.5 Paired two sample t-tests for mean performance of assets quality.

H0: There is no significant difference in the AQ between pre and post-merger of banks.

Table 4.2.5*T-test: paired two sample for means performance of AQ*

Particulars	Pre- merger	Post-merger
Mean	1.750	1.539
Variance	1.014	0.396
Observations	9.000	9.000
Pearson Correlation	0.637	
t Stat	0.815	
P(T<=t) one-tail	0.219	
t Critical one-tail	1.860	
P(T<=t) two-tail	0.430	
t Critical two-tail	2.306	

Sources: SPSS

Table 4.2.5 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means performance of AQ. Mean performance of AQ is decreased in the post-merger period and the difference in the pre and post-merger averages (μ_1 and μ_2) is found statistically insignificant at 5% level of significance, t-Stat i.e. 0.815 is less than t-Critical value i.e. 1.860 thus, there is an insignificant difference in AQ after the merger. Decrease in assets quality, which is measured by the non-performing assets to total loan and advance, which shows that non-performance assets of bank is decreased after the merger. Correlation analysis shows that there is insignificant high degree of positive correlation.

4.2.6 Paired two sample t-test for mean performance of liquidity position

H₀: There is no significant difference in the Liquidity between pre and post-merger of banks.

Table 4.2.6

T-test: paired two sample for means performance of liquidity

Particulars	Pre-merger	Post-merger
Mean	0.803	0.863
Variance	0.002	0.001
Observations	9.000	9.000
Pearson Correlation	0.280	
t Stat	-3.882	
P(T<=t) one-tail	0.002	
t Critical one-tail	1.860	
P(T<=t) two-tail	0.005	
t Critical two-tail	2.306	

Sources: SPSS

Table 4.2.6 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means performance of liquidity which is measured by total loan and advance to total deposit. Mean performance of liquidity is increased in the post-merger period and the difference in the pre and post-merger averages ($\mu_1=0.803$ and $\mu_2=0.863$) is found statistically insignificant at 5% level of significance, t-Stat i.e. -3.882 and t-Critical value i.e. 2.306 thus, there is an insignificant difference in liquidity after the merger. Correlation Analysis shows that there is insignificant positive correlation between pre-merger and post-merger performance.

4.2.7 Paired two sample t-tests for mean performance of D/E ratio.

H₀: There is no significant difference in the D/E ratio between pre and post-merger of banks.

Table 4.2.7

T-test: paired two sample for means performance of D/E ratio

	Pre-merger	Post-merger
Mean	14.870	12.797
Variance	40.973	4.549
Observations	9.000	9.000
Pearson Correlation	-0.440	
t Stat	0.988	
P(T<=t) one-tail	0.176	
t Critical one-tail	1.860	
P(T<=t) two-tail	0.352	
t Critical two-tail	2.306	

Sources: SPSS

Table 4.2.7 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means performance of D/E ratio. Mean performance of D/E is decreased in the post-merger period and the difference in the pre and post-merger averages ($\mu_1 = 14.874$ and $\mu_2 = 12.797$) is found statistically insignificant at 5% level of significance, t-Stat i.e. 0.988 is less than t-Critical value i.e. 1.860 thus; there is an insignificant difference in D/E ratios after the merger. Correlation analysis shows that there is insignificant high degree of negative correlation.

4.2.8 Paired two sample t-test for mean performance of capital adequacy position

H₀: There is no significant difference in the CAR between pre and post-merger of banks.

Table 4.2.8*T-test: paired two sample for means performance of CAR*

Particulars	Pre-merger	Post-merger
Mean	11.95	13.13
Variance	9.513	2.529
Observation	9.00	9.00
Pearson correlation	-0.168	
t Stat	1.186	
P(T<=t) one-tail	0.135	
t Critical one-tail	1.860	
P(T<=t) two-tail	0.270	
t Critical two-tail	2.306	

Sources: SPSS

Table 4.2.8 shows the results of hypothesis testing applying the paired t-test statistic to measure the change between the pre and post-merger means performance of CAR. Mean performance of CAR is increased in the post-merger period and the difference in the pre and post-merger averages ($\mu_1 = 11.95$ and $\mu_2 = 13.13$) is found statistically insignificant at 5% level of significance, t-Stat i.e. 0.815 is less than t-Critical value i.e. 1.860 thus; there is an insignificant difference in CAR after the merger. Correlation analysis shows that there is insignificant low degree of negative correlation between capital adequacy pre-merger and post-merger.

4.3 Findings

The major finding of this study is as follows.

- i. From the descriptive statistics analysis mean performance of return on assets before the merger is 1.21 and after the merger is 1.57 which shows that mean performance of return on assets increase after merger. Which is also support by the hypothesis test, the t-stat is 3.030 and t Critical one-tail test is 1.860 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.008 and $(T \leq t)$ two-tail test is 0.016 and correlation analysis show that there is positive correlation pre-merger and post-merger.
- ii. On the basis of table no 4.2.2 statistics analysis mean performance of return on equity premerger is 30.44 and post-merger is 27.74, which shows that return on equity decrease after the merger, which is also support by the hypothesis test. The t-stat is 0.178 and t Critical one-tail test is 1.860 and two-tail test is 2.306 are insignificant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.432 and $(T \leq t)$ two-tail test is 0.863 and correlation analysis show that there is insignificant positive correlation pre-merger and post-merger return on equity.
- iii. On the basis of table no 4.2.3 analysis mean performance of earning per share premerger is 23.74 and post-merger is 25.66, which shows that earning per share increase after the merger, which is also support by the hypothesis test. The t-stat is 0.551 and t Critical one-tail test is 1.860 and two-tail test is 2.306 are insignificant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.298 and $(T \leq t)$ two-tail test is 0.596 and correlation analysis show that there is insignificant positive correlation i.e. 0.252 pre-merger and post-merger earning per share.
- iv. On the basis of table no 4.2.4 analysis mean performance of profit margin is 47.152 and post-merger is 51.29, which shows that profit margin increase after the merger, which is also support by the hypothesis test. The t-stat is 0.781 and t Critical one-tail test is 1.860 and two-tail test is 2.306 are insignificant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.229 and $(T \leq t)$ two-tail test is 0.457 and correlation analysis show that there is insignificant positive correlation i.e. 0.548 pre-merger and post-merger profit margin.
- v. On the basis of table no 4.2.5 statistics analysis mean performance of assets quality, premerger is 1.75 and post-merger is 1.539, which shows that assets quality decrease after the merger, which is also support by the hypothesis test. The t-stat is 0.815 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are insignificant

- at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.219 and $(T \leq t)$ two-tail test is 0.438 and correlation analysis show that there is insignificant positive correlation i.e. 0.637 pre-merger and post-merger assets quality.
- vi. On the basis of table no 4.2.6 The t-stat is 3.882 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.002 and $(T \leq t)$ two-tail test is 0.005 and correlation analysis show that there is significant positive correlation i.e. 0.280 premerger and post-merger liquidity.
 - vii. On the basis of table no 4.2.7 analysis mean performance of debt to equity ratio, pre-merger is 14.87 and post-merger is 12.21, which shows that liquidity decrease after the merger, which is also support by the hypothesis test. The t-stat is 0.988 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.176 and $(T \leq t)$ two tail test is 0.352 and correlation analysis show that there is insignificant negative correlation i.e. 0.44 pre-merger and post-merger debt to equity ratio.
 - viii. On the basis of table no 4.2.8 statistics analysis mean performance of capital adequacy position, pre-merger is 11.95 and post-merger is 13.13, which shows that capital adequacy of banks increase after the merger, which is also support by the hypothesis test. The t-stat is 1.186 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is .135 and $(T \leq t)$ two-tail test is 0.270 and correlation analysis show that there is insignificant negative correlation i.e. -0.168 pre-merger and post-merger capital adequacy position.

4.4 Discussion

In Nepal the merger and acquisition is the new concept. In many cases when BFIs faced the problematic situation they seek for merger in order to diversify the risk of failure. The main motive of merger for banks and financial institutions is to increase the capital base. Most of the banks and financial institutions have operating with limited capital base. So, banks and financial institutions merged with other institutions for increasing the base of capital as NRB has direct the BFIs of Nepal. The impact of mergers in ROE has significant impact, that ROE is significantly changed with the events of merger. And It creates the for equity holders. The CD also significant with the merger. After Merger BFIs lower down their CDs significantly. But ROA is not

significantly improved by the events of merger, NPL and CAR also not significantly changed. The degree of relationship is explained by the regression model that, ROE is determined by 80% variation is explain by ROA, NPL, CAR, CD that exists in before model and after merger it changed to 72% of variation of ROE is explained by the independent variables. The studies found that there are similarities between commercial bank merger and development bank merger. Independent t-test, shows that there is no differences between the before and after merger performance of commercial development banks, Bipin (2018).

The purpose of this research is to study the merger and its impact on the performance of commercial bank when Nepal Rastra Bank introduced a forceful merger bylaws policy in the year of 2011. From the financial statistics discussed in chapter four above, the study concluded that Returns on Assets, earning per share, profit margin, liquidity and capital adequacy position increased significantly after the merger of the banks. However return on equity, assets quality and debt to total equity are decreased after the merger. The assets quality ratios, which is measured by the total non-performing assets to total loan and advance is decreased after the merger, which show that the performing assets of merged banks. The merged banks able to maintain non-performing assets ratios as refer by Nepal Rastra bank. Similarly the sampled merged bank able to meet the capital adequacy position.

In above previous research and this research conclusion conform that merger give the synergy effect of the bank and financial institution. Merger increase ROA, ROE, EPS, and Asset quality, Debt to equity and capital adequacy. Previous research also gives the same result so that conclude the research is accurate and fine.

CHAPTER V

CONCLUSION

The chapter presents a summary of the results on the impact of mergers on the financial performance of commercial banks in Nepal. Based on the findings in chapter four, the study gives recommendations on what the banks' management can do to improve their financial performance of the banks following a merger or acquisition. The recommendations are presented also based on the objective of the study after which recommendations for further studies are drawn.

5.1 Summary

Merger means combining of two or more than two companies to raise their capital to survive in the industry. Bank mergers is claimed to be the sources of efficiency gains from the realization of economies of scale and economies of scope. The central bank planned to improve the health of the financial sector by introducing the Merger by law 2011 AD grounded on the Company Act 2006 AD article 177, BAFIA 2006 AD article 68 and 69 that pressurize all the BFIs for immediate merger as a consolidation. A merger was not a choice of the Nepal Rastra bank but it was a compulsion strategy to increase the capital and strengthen their capacity to face the competitive market.

The study aimed at establishing whether merger lead to an improved performance of commercial banks in Nepal. The objective of the study was to determine the impact of mergers on the financial performance of commercial banks in Nepal. To fulfil this research objective researcher used distractive and analytical research design. Bank of Kathmandu Lumbini limited, NMB bank Limited, and Siddhartha bank limited are selected as ample for this study which are merged during 2016 AD. Data are collected from the financial statement obtained from the annual report of the respected banks three year before-merger and three year after-merger. To analysis the data both financial and statistical tools are used. Ratio analysis is used as financial tools and mean, standard deviation, correlation and t-Test: Paired Two Sample for Means is used as statistical tools for data analysis. From the distractive statistics analysis mean performance of return on assets before the merger is 1.21 and after the merger is 1.57 which shows that mean performance of return on assets increase after merger. Which is also support by the hypothesis test, the t-stat is 3.030 and t Critical one-tail test is

1.860 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.008 and $(T \leq t)$ two-tail test is 0.016 and correlation analysis show that there is positive correlation pre-merger and post-merger.

From the above table statistics analysis mean performance of return on equity pre-merger is 30.44 and post-merger is 27.74, which shows that return on equity decrease after the merger, which is also support by the hypothesis test. The t-stat is 0.178 and t Critical one tail test is 1.860 and two-tail test is 2.306 are insignificant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.432 and $(T \leq t)$ two-tail test is 0.863 and correlation analysis show that there is insignificant positive correlation pre-merger and post-merger return on equity. Similarly from the distractive statistics analysis mean performance of earning per share pre-merger is 23.74 and post-merger is 25.664, which shows that earning per share increase after the merger, which is also support by the hypothesis test. The t-stat is 0.551 and t Critical one-tail test is 1.860 and two-tail test is 2.306 are insignificant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.298 and $(T \leq t)$ two-tail test is 0.596 and correlation analysis show that there is insignificant positive correlation i.e. 0.252 pre-merger and post-merger earning per share. Likewise form the distractive statistics analysis mean performance of earning profit margin is 47.152 and post-merger is 51.292, which shows that profit margin increase after the merger, which is also support by the hypothesis test. The t-stat is 0.781 and t Critical one-tail test is 1.860 and two-tail test is 2.306 are insignificant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.229 and $(T \leq t)$ two-tail test is 0.457 and correlation analysis show that there is insignificant positive correlation i.e. 0.548 pre-merger and post-merger profit margin.

Similarly from the distractive statistics analysis mean performance of assets quality, pre-merger is 1.75 and post-merger is 1.539, which shows that assets quality decrease after the merger, which is also support by the hypothesis test. The t-stat is 0.815 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are insignificant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.219 and $(T \leq t)$ two-tail test is 0.438 and correlation analysis show that there is insignificant positive correlation i.e. 0.637 premerger and post-merger assets quality.

Similarly from the distractive statistics analysis mean performance of liquidity, pre-merger is 0.803 and post-merger is 0.863, which shows that liquidity increase after the

merger, which is also support by the hypothesis test. The tstat is 3.882 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.002 and $(T \leq t)$ two-tail test is 0.005 and correlation analysis show that there is significant positive correlation i.e. 0.280 pre-merger and post-merger liquidity. Similarly from the distractive statistics analysis mean performance of debt to equity ratio, pre-merger is 14.87 and post-merger is 12.21, which shows that liquidity decrease after the merger, which is also support by the hypothesis test. The t-stat is 0.988 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.176 and $(T \leq t)$ two-tail test is 0.352 and correlation analysis show that there is insignificant negative correlation i.e. 0.44 pre-merger and post-merger debt to equity ratio. Similarly from the distractive statistics analysis mean performance of capital adequacy position, premerger is 11.95 and post-merger is 13.13, which shows that capital adequacy of banks increase after the merger, which is also support by the hypothesis test. The t-stat is 1.186 and t Critical one-tail test is 1.86 and two-tail test is 2.306 are significant at 1% and 5% level of significance i.e. $P(T \leq t)$ one-tail test is 0.135 and $(T \leq t)$ two-tail test is 0.270 and correlation analysis show that there is insignificant negative correlation i.e. -0.168 premerger and post-merger capital adequacy position.

5.2 Conclusion

The purpose of this research is to study the merger and its impact on the performance of commercial bank when Nepal Rastra Bank introduced a forceful merger bylaws policy in the year of 2011. From the financial statistics discussed in the study concluded that Returns on Assets, earning per share, profit margin, liquidity and capital adequacy position increased significantly after the merger of the banks. However return on equity, assets quality and debt to total equity are decreased after the merger. The assets quality ratios, which is measured by the total non-performing assets to total loan and advance is decreased after the merger, which show that the performing assets of merged banks. The merged banks able to maintain non-performing assets ratios as refers by Nepal Rastra bank. Similarly the sampled merged bank able to meet the capital adequacy position. According to the synergy theory banks performance also increase in various aspect that is ROA, ROE, EPS, like other

variable so that conclude that merger give synergy effect the bank and financial institution.

5.3 Implication

The purpose of the study is to measure the impact mergers on the financial performance of banks. It is important for firms that have weak profitability, liquidity and capital structure to consider mergers and acquisitions so as to improve their profitability, liquidity and capital adequacy since it plays a significant role in improving the financial performance of a bank. Based on the finding of the study recommendation of the study are as follow.

- i. This study mainly based on secondary data so, future studies can be based on using primary data or both primary and secondary data
- ii. They study has useful for Nepal Rastra Bank for making future policy on merger.
- iii. This study provide based information about merger and its effect and new researcher.
- iv. For social entrepreneur this research may help to find the appropriate sector of investment.
- v. The profitability of the banks was found to improve after mergers. Banks need to be encouraged if by doing so their profitability improves. Improvement in profitability is likely to have a positive effect on the financial performance of the firm.
- vi. The solvency of a firm was found to improve after mergers and acquisitions. Firms need to be encouraged if by doing so their solvency improves. Improvement in liquidity is likely to have a positive effect on the financial performance of the firm.
- vii. Capital adequacy have significant impact on profitability of commercial bank in Nepal advised to bank management to give due attention capital adequacy to improve profitability.
- viii. There are various challenges facing the formation of mergers and acquisition. A research should be carried out to figure out these challenges and the reasons why many firms are hesitant to embrace M&A s despite the many advantages that come with it.

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Appendix I

Bank wise variable

I Bank of Kathmandu

Variable	Before merger			After merger		
	3	2	1	1	2	3
ROA	0.65	0.74	0.84	1.57	1.45	1.45
ROE	0	13.23	16.44	22.18	23.74	18.74
EPS	13.25	15.75	14.86	20.69	19.46	20.69
PM	37.85	15.36	25.3	33.22	40.4	33.75
AQ	1.06	3.47	1.51	1.29	3.04	1.29
L	0.84	0.85	0.85	0.86	0.84	0.88
CAR	11.57	13	13.1	13.41	14.88	13.41
Debt to equity	0	18.48	9.97	15.76	13.3	11.13

Sources: Annual report of Bank of Kathmandu Limited

II NMB Bank

Variable	Before merger			After merger		
	3	2	1	1	2	3
ROA	1.43	1.36	1.21	1.49	1.69	1.65
ROE	27.27	26.75	28.7	31.95	30.11	31.82
EPS	18.02	20.5	25.05	27.79	26.88	28.67
PM	58.85	60.23	59.77	68.09	66.82	191.05
AQ	1.8	0.55	0.42	1.81	1.68	0.88
L	0.74	0.76	0.74	0.82	0.84	0.89
CAR	11.74	10.75	11.13	10.98	13.61	15.75
Debt to equity	11.25	11.41	13.92	12.27	10.01	9.93

Sources: Annual report of NMB bank

III Siddhartha Bank limited

Variable	Before merger			After merger		
	3	2	1	1	2	3
ROA	1.43	1.74	1.51	1.69	1.54	1.59
ROE	41.72	54.19	50.78	44.85	32.37	13.9
EPS	29.8	38.63	37.78	41.53	18.82	26.45
PM	47.07	59.72	60.22	70.93	66.28	40.9
AQ	2.39	2.75	1.8	1.47	1.3	1.09
L	0.83	0.79	0.83	0.87	0.87	0.9
CAR	11.8	13.39	11.1	11.25	12.74	12.12
Debt to equity	17.09	18.25	19.26	15.25	10.55	11.69

Sources: Annual report of Bank of Siddhartha bank Limited

Paired to sample t-test for mean performance ROA.

Particulars	Pre-merger	Post-merger
Mean	1.212	1.569
Variance	0.145	0.009
Observation	9.0	9.0
Personal correlation	0.408	
t stat	3.03	
P(T<=t) one-tail	0.008	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.016	
t critical two- tail	2.306	

Sources: SPSS

Paired to sample t-test for mean performance ROE.

Particulars	Pre-merger	Post-merger
Mean	30.440	27.740
Variance	315.736	84.204
Observation	9.0	9.000
Personal correlation	0.273	
t stat	0.178	
P(T<=t) one-tail	0.432	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.863	
t critical two- tail	2.306	

Sources: SPSS

Paired to sample t-test for mean performance EPS.

Particulars	Pre-merger	Post-merger
Mean	23.740	25.664
Variance	94.058	50.274
Observation	9.000	9.000
Personal correlation	0.252	
t stat	-0.551	
P(T<=t) one-tail	0.298	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.596	
t critical two- tail	2.306	

Sources: SPSS

Paired to sample t-test for mean performance PM.

Particulars	Pre-merger	Post-merger
Mean	47.152	51.292
Variance	296.324	261.947
Observation	9.000	9.000
Personal correlation	0.548	
t stat	-0.781	
P(T<=t) one-tail	0.229	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.457	
t critical two- tail	2.306	

Sources: SPSS

Paired to sample t-test for mean performance AQ.

Particulars	Pre-merger	Post-merger
Mean	1.750	1.539
Variance	1.014	0.396
Observation	9.000	9.000
Personal correlation	0.637	
t stat	0.815	
P(T<=t) one-tail	0.219	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.430	
t critical two- tail	2.306	

Sources: SPSS

Paired to sample t-test for mean performance Liquidity.

Particulars	Pre-merger	Post-merger
Mean	0.803	0.863
Variance	0.002	0.001
Observation	9.000	9.000
Personal correlation	0.280	
t stat	-3.882	
P(T<=t) one-tail	0.002	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.005	
t critical two- tail	2.306	

Sources: SPSS

Paired to sample t-test for mean performance debt equity ratio

Particulars	Pre-merger	Post-merger
Mean	14.870	12.797
Variance	40.973	4.549
Observation	9.000	9.000
Personal correlation	-0.440	
t stat	0.988	
P(T<=t) one-tail	0.176	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.352	
t critical two- tail	2.306	

Sources: SPSS

Paired to sample t-test for mean performance CAR

Particulars	Pre-merger	Post-merger
Mean	11.95	13.13
Variance	9.513	2.529
Observation	9.000	9.000
Personal correlation	-0.168	
t stat	1.186	
P(T<=t) one-tail	0.135	
t Critical one- tail	1.860	
P(T<=t) two -tail	0.270	
t critical two- tail	2.306	

Sources: SPSS

List of commercial banks merged up to 2019/20AD

S.N	Name of merged BFIS	Bank name after the merger
1	Rastriya Banijya Bank Limited and NIDC Development Bank Limited	Rastriya Banijya Bank Limited
2	Janata Bank Limited and Triveni Bikash Bank Limited	Janata Bank Limited
3	Grand Bank Nepal Limited and Prabhu Bank Limited	Prabhu bank limited
4	Bank of Kathmandu limited and Lumbini Bank Limited	Bank of Kathmandu limited
5	NCC Bank Limited, Infrastructure Development Ltd, Apex Development Bank Ltd, Supreme Development Bank Limited and International Development Bank Limited	Nepal Credit and Commercial Bank Limited
6	Laxmi Bank Ltd. And Hisef Finance Ltd	Laxmi Bank Limited
7	Nepal Bangladesh Ltd and Nepal Bangladesh Finance Ltd	Nepal bangladesh Limited
8	NMB Bank Ltd, pathibhara Bikash Bank Ltd, Clen Energy Development Ltd and prudential Finance co Ltd.	NMB Bank Limited
9	Global IME Bank Ltd, social Development limited and Gulmi Bikash Bank Ltd.	Global IME Bank Limited
10	Machhapurchhare Bank Ltd and Standard Finance Ltd.	Machhapurchhare Bank Limited
11	Mega Bank Nepal Ltd and paschimanchal Development Ltd	Mega Bank Nepal Limited
12	Siddhartha Bank Limited and Business Universal Development Bank Ltd	Siddhartha Bank Limited

Sources: <https://www.sharesansar.com/merger-acquisition>