

# **Chapter I**

## **Introduction**

### **1 Background**

#### **1.1 Introduction**

Kinsley defines “A bank is an establishment which makes to individuals such as advance of money as may be required and safely made, and to which individuals entrust money when not required by them for use.”

##### **1.1.1 Risk Weighted Exposures**

Risk is the term used for the uncertainty about future losses. It is an unknown consequence of future that can raise future damage or loss. The risk is defined as the variability of returns in a period. “Risk is the possibility or chance of the meeting danger or suffering loss”. (Hornby, 1996)

Risk-weighted asset (also referred to as RWA) is a bank's assets or off-balance-sheet exposures, weighted according to risk. This sort of asset calculation is used in determining the capital requirement or Capital Adequacy Ratio (CAR) for a financial institution. In the Basel I accord (1988) published by the Basel Committee on Banking Supervision, the Committee explains why using a risk-weight approach is the preferred methodology which banks should adopt for capital calculation.

Global banking supervisors based in Basel Switzerland use the concept of risk-weighted assets to determine a bank's minimum capital needs. Risk-weighted assets are computed by adjusting each asset class for risk in order to determine a bank's real world exposure to potential losses. Regulators then use the risk weighted total to calculate how much loss-absorbing capital a bank needs to sustain it through difficult markets.

### **1.1.2. Returns**

The Return is the award of the investment for present money, time and risk. Today we invest amount of money with the involvement of the risk for the certain period, hoping that in the future the money will make income. That income is the Return.

For the bank, the Return is the Net Income comes from investing the deposit money in the profitable portfolio sectors and then subtracting it from all expenses that the bank makes. The bank main income is the interest income and main expenses are the interest expenses. Beside it, the bank has operating income and expenses. Then, the bank makes provisions and pay taxes and the net incomes take place on the Profit and Loss Account.

### **1.1.3. Risks Exposure versus Returns**

Risks and Returns come in same place. If there is no risk there is no return and if more risk taken more is the return. Risks are taken for the returns.

The bank main aim is that to take more return with minimizing the risk it takes. It means that the bank has to focus on the risk diversification portfolio selection.

## **1.2 Introduction of the Studied Banks**

### **1.2.1 Introduction of NABIL Bank**

NABIL Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984 A.D. The Bank was incorporated with the objective of extending international standard modern banking services to various sectors of the society. The bank was set up in joint venture with foreign partner then Dubai Bank Ltd. and local partner institutions Nepal Industrial Development Corporation, Rastriya Beema Sansthan Ltd. and Nepal stock Exchange Ltd. pursuing its objective. The Bank provides a full range of commercial banking services through its 47 points of representation across the kingdom and over 170 reputed correspondent banks across the globe.

In FY 2016/17 the bank had make Operating Profit was NRP 5.60 billion. For financial year ending July 2017 NABIL Bank is perhaps the highest profit making private sector bank in Nepal posting a net profit of NRs. 3.65 billion. As on date the bank's asset base stand at NRs.140.70 billion and capital & reserve fund stand at NRs. 14.17 billion. The bank deposits increased by 7.83 percent, reaching NPR 118.90 billion, compared to last year's figure of NPR 110.26 billion. Similarly, lending increased by 18.09 percent, reaching NPR 89.87 billion compared to the previous year's figure of NPR 76.10 billion. The operating profits of the bank also increased by 25.78 percent reaching NPR 5.46 billion. Additionally, the net profit of the bank grew by 28.16 percent and stands at NPR 3.61 billion compared to last year's figure of NPR 2.82 billion. The Non-Performing Asset (NPA) ratio of the bank declined to 0.80 percent against 1.14 percent last year.

### **1.2.2 Nepal Investment Bank Ltd. (NIBL)**

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indoseuz bank Ltd., was established in 1986 A.D as a joint venture between Nepali and French partners. The French partner (holding 50% of the capital) was Credit Agricole Indoseuz, a subsidiary of one of the largest banking groups in the world. When Credit Agricole Indoseuz decided to divest, a group of companies comprising of bankers, professionals, industrialists and businessman acquired 50% of the holdings of Credit Agricole Indoseuz in Nepal Indoseuz Bank in April 2002. The name of the bank was changed to Nepal Investment Bank Ltd. upon approval of the Bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office.

In FY 2016/17 the bank had make Operating Profit was NRP 4.73 billion. In FY 2016/17 our deposits increased by 15.69 percent, reaching NPR 125.67 billion, compared to last year's figure of NPR 108.63 billion. Similarly, lending increased by 2242 percent, reaching NPR 104.64 billion compared to the previous year's figure of NPR 85.46 billion. The operating profit of the bank also increased, by 27.84 percent reaching NPR 4.73 billion. Additionally, the net profit of the bank grew by 22.11 percent and stands at NPR 3.11 billion compared to last year's figure of NPR 2.55

billion. The Non-Performing Asset (NPA) ratio of the bank had increased to 0.83 percent against 0.68 percent last year. They currently offer our customer base of over six hundred thousand people a broad range of smart, flexible products and services through our network of 47 branches, 84 ATMs, and 52 branchless banking outlets.

### **1.3. Statement of the Problem**

Banking sector play the vital role for the development of the country's economy. There is increasing competition among the banks. They are facing stiff competition between financial institutions, commercial banks, development banks and co-operatives. Due to stiff competition no any bank can earn smoothly without well-managed portfolio of investment Most of the government banks in Nepal running in loss though the private sector banks are somehow running in profit. The commercial banks have been adopting risk ensuring their well calculated business risks while safeguarding the Bank's capital, its financial resources and profitability. The banks accepted this critical factor with their effective risk management capabilities and risk-return trade-off for their profit. The general problem of the study is to examine risk and return of commercial bank. Based on this general problem the specific problems are raised, these specific problems are as follows:

1. What is the trend of return made by two studied Bank for past 11 years?
2. What is trend of risk weighted exposed of the two studied bank for the past 11 years?
3. Which bank has better return for past 11 years?
4. Which bank has better minimization of risk for the past 11 years?

#### **1.4 Objectives of the Study**

The competition between rival is being very tough nowadays as many banks and branches are running in the market with not enough opportunities. So the commercial banks have been adopting risk ensuring their well calculated business risks while safeguarding the Bank's capital, its financial resources and profitability. The banks accepted this critical factor with their effective risk management capabilities and risk-return trade-off for continuing their growth, profitability and stability.

In this context the main objective of the study is to examine the studied banks' performance to strike a balance between risks-taking (risk weighted expose) and return-making. To achieve this main objective the following specific objectives will be set:

- To compare returns and risk weighted exposes between the studied banks
- To assess the relationship between risk weighted exposures and returns of the studied banks

#### **1.5 Significance of the Study**

- The study is expected to compare the effectiveness of risks (weighted) of the studied banks.
- The study is expected to evaluate the effectiveness returns of the studied banks.
- The finding of the study is expected to help the studied banks to minimize the risk and maximize the return.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **2.1 Literature Review**

This chapter deals with the evidence and findings from the past related studies from various researchers. The studies and evidence was relevant for the further investigation regarding the deposit mobilization of commercial banks in Nepal.

#### **2.2 Theoretical Review**

##### **2.2.1 Provisions of BASEL II**

Prior to 1988, there was no uniform international regulatory standard for setting bank capital requirements. In 1988, the Basel Committee on Banking Supervision (BCBS) developed the Capital Accord, which is known as Basel I, to align the capital adequacy requirements applicable especially to banks in G-10 countries. Basel I introduced two key concepts. First, it defined what banks could hold as capital, as well as designating capital as Tier 1 or Tier 2 according to its loss-absorbing or creditor-protecting characteristics. The second key concept introduced in Basel I was that capital should be held by banks in relation to the risks that they face. The major risks faced by banks relate to the assets held on balance sheet. Thus, Basel I calculated banks' minimum capital requirements as a percentage of assets, which are adjusted in accordance with their riskiness and assigning risk weights to assets. Higher weights are assigned to riskier assets such as corporate loans, and lower weights are assigned to less risky assets, such as exposures to government. (Capital Adequacy Framework by Nepal Rastra Bank, 2015)

The BCBS released the "International Convergence of Capital Measurements and Capital Standards: Revised Framework", popularly known as Basel II, on June 26, 2004. This framework was updated in November 2005 and a comprehensive version of the framework was issued in June 2006. Basel II builds significantly on Basel I by increasing the sensitivity of capital to key bank

risks. In addition, Basel II recognizes that banks can face a multitude of risks, ranging from the traditional risks associated with financial intermediation to the day-to-day risks of operating a business as well as the risks associated with the ups and downs of the local and international economies. As a result, the framework more explicitly associates capital requirements with the particular categories of major risks that banks face. (Capital Adequacy Framework by Nepal Rastra Bank, 2015)

According to Capital Adequacy Framework by Nepal Rastra Bank, 2015 mentioned that the Basel II capital framework also recognizes that large, usually internationally active banks have already put in place sophisticated approaches to risk measurement and management based on statistical inference rather than judgment alone. Thus, the framework allows banks, under certain conditions, to use their own internal models and techniques to measure the key risks that they face, the probability of loss, and the capital required to meet those losses. In developing the new framework, the Basel Committee incorporated many elements that help to promote a sound and efficient financial system over and above the setting of minimum capital requirements. Keeping this in mind, the Basel II framework incorporates three complementary pillars that draw on the range of approaches to help ensure that banks are adequately capitalized in commensurate with their risk profile.

Again, the Basel Committee on Banking Supervision (BCBS) released a comprehensive reform package entitled “Basel III: A global regulatory framework for more resilient banks and banking systems” (known as Basel III capital regulations) in December 2010. Basel III reforms are the response of the Basel Committee on Banking Supervision (BCBS) to improve the banking sectors ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill over from the financial sector to the real economy. Basel III reforms strengthen the bank-level i.e. micro prudential regulation, with the intention to raise the resilience of individual banking institutions in periods of stress. (Capital Adequacy Framework by Nepal Rastra Bank, 2015)

Besides, the reforms have a macro prudential focus also, addressing system wide risks, which can build up across the banking sector, as well as the pro-cyclical amplification of these risks over time. These new global regulatory and supervisory standards mainly seek to raise the quality and level of capital (Pillar 1) to ensure that banks are better able to absorb losses on both a going concern and a gone concern basis, increase the risk coverage of the capital framework, introduce leverage ratio to serve as a backstop to the risk-based capital measure, raise the standards for the supervisory review process (Pillar 2) and public disclosures (Pillar 3) etc. The macro prudential aspects of Basel III are largely enshrined in the capital buffers. Both the buffers i.e. the capital conservation buffer and the countercyclical buffer are intended to protect the banking sector from periods of excess credit growth. (Capital Adequacy Framework by Nepal Rastra Bank, 2015)

### **2.2.2 Context of Sector of Risks**

Nepal Rastra Bank recognizes that not all risks can be measured precisely. NRB has adopted the standardized approach of Basel II in its simplified form - the Simplified Standardized Approach (SSA). However, bank should develop a process to estimate risks with reasonable certainties. In order to make a comprehensive assessment of risks, the process should, at minimum, address the following forms of risk.

#### **a) Credit Risk**

Credit risk is by far the most significant risk faced by banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risk (Gieseche, 2004). Credit risk is the likelihood that a debtor or financial instrument issuer is unwilling or unable to pay interest or repay the principal according to the terms specified in a credit agreement resulting in economic loss to the bank. Credit risk also refers the risk of negative effects on the financial result and capital of the bank caused by borrower's default on its obligations to the bank.



## **b) Operational Risk**

Risk Management Guideline issued by Nepal Rastra Bank (2010) stated that Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and system or from external events. It is associated with the problems of accurately processing, settling, and taking or making delivery on trades in exchange for cash. It also arises in record keeping, processing system failures and compliance with various regulations. It is associated with human error, system failures and inadequate procedures and controls. It is the risk of loss arising from the potential that inadequate information system; technology failures, breaches in internal controls, fraud, unforeseen catastrophes, or other operational problems may result in unexpected losses or reputation problems.

## **c) Market Risk**

Risk Management Guideline issued by Nepal Rastra Bank (2010) has defined market risk as the risk to a bank resulting from movements in market prices, in particular, changes in interest rates, foreign exchange rates, and equity and commodity prices. Market risk is defined as the risk of losses in on and off-balance sheet positions arising from movements in market prices. The risks subject to this requirement are for pertaining the interest rate related instruments and equities in the trading book and foreign exchange risk and commodities risk throughout the bank. Market risk is potential for loss resulting from adverse movement in market risk factors such as interest rates, foreign exchange rates, and equity and commodity prices. The risk arising from these factors are:

## **d) Other Risk**

**Foreign Exchange Risk:** Foreign exchange risk is the risk of negative effects in the financial result and capital of the bank caused by changes in exchange rates. It is the current or prospective risk to earnings and capital arising from adverse movements in currency exchange rates. It refers to the impact of adverse movement in currency

exchange rates on the value of open foreign currency position. As a result, banks may suffer losses due to changes in discounts of the currencies concerned (Risk Management Guideline issued by Nepal Rastra Bank, 2010).

**Interest Rate Risk:** Interest rate risk is the risk of negative effects on the financial result and capital of the bank caused by changes in interest rates. Changes in interest rates affect a bank's earnings by changing its net interest income and the level of other interest-sensitive income and operating expenses. Changes in interest rates also affect the underlying value of the bank's assets, liabilities and off-balance sheet instruments. The immediate impact of variation in interest rate is on bank's net interest income, while a long term impact is on bank's net worth since the economic value of bank's assets, liabilities and off-balance sheet exposures are affected (Risk Management Guideline issued by Nepal Rastra Bank, 2010).

Other risks includes those risks such as reputational and strategic risk, are not easily measurable, banks are expected to take these into consideration as well while deciding on the level of capital.

### **2.3.1 Determinants of Returns**

#### **a) Return on Asset (ROA)**

Return on Asset (ROA) is a financial ratio that shows the financial performance of a bank. The return on assets (ROA) is the net income for the year divided by total assets, usually the average value over the year. This ratio measures the ability of the bank management to generate income by utilizing company assets at their disposal.

In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khravish, 2011). Wen (2010), state that a higher ROA shows that the company is more efficient in using its resources.

#### **b) Return on Equity (ROE)**

Return on Equity (ROE) is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation. It is further explained by Khrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. Return on Equity (ROE) is an internal performance measure of shareholder value, and it is by far the most popular measure of performance, since: (i) it proposes a direct assessment of the financial return of a shareholder's investment; (ii) it is easily available for analysts, only relying upon public information; and (iii) it allows for comparison between different companies or different sectors of the economy.

#### **c) Returns on Investment**

Commercial banks predominantly invested in government securities like treasury bills and government bonds. The other areas of investment include inter-bank placement and investment in shares and debentures.

#### **d) Returns on Loan and Advance**

Commercial banks are mainly generating income through the loan and advance that it's let to its clients.

### **2.3 Introduction of Risk Management Systems**

Risk management is a process to manage future uncertainty which is called risk. In other words, it is a systematic way of minimizing the future loss by proper planning in handling risks. Risk management is general management functions that identify asses and address the cause and effect uncertainty and risk on an organization. (Williams & Young, 1995)

The Core Principles for Effective Banking Supervision, (October 2006) has published core Principle 7 on ‘Risk Management Processes’ which mentioned that banks and banking groups must have comprehensive risk management processes (including Board and senior management oversight) to identify, evaluate, monitor and control or mitigate all material risks and to assess their overall capital adequacy in relation to their risk profile. These processes should be commensurate with the size and complexity of the bank.

Risk Management is a discipline at the core of every bank and encompasses all activities that affect its risk profile. It involves identification, measurement, monitoring and controlling risks to ensure that:

- a) The individuals who take or manage risks clearly understand it.
- b) The organization’s Risk exposure is within the limits established by Board of Directors.
- c) Risk taking Decisions are in line with the business strategy and objectives set by Board of Directors (BOD).
- d) The expected payoffs compensate for the risks taken.
- e) Risk taking decisions are explicit and clear.
- f) Sufficient capital as a buffer is available to take risk.

#### **2.4 Review of Related Studies**

Under this heading, reviews of research papers of researchers are analyzed to find out risk and return of commercial banks.

Bank risk is conceptualized in the literature using proxies for credit risk and liquidity risk. The former is generally negatively related to profitability since financial institutions exposed to more high-risk loans accumulate more non-performing loans (Miller and Noulas 1997). With liquidity, since liquid assets have lower risk and generate lower returns, these holdings earn less than could be otherwise gained from higher risk, less liquid assets. In this way, higher level of liquid holdings reduces profits (Molyneux and Thornton 1992). Thus, we expect South Asian banks will show

a negative relationship between credit risk and bank profitability and a positive relationship between liquidity risk and bank profitability.

Mekasha (2001) has investigated credit risk management and its impact performance on Ethiopian Commercial Banks. The researcher used 10 years panel data from the selected commercial banks for the study to examine the relationship between ROA and loan provision, non-performing loans and total assets. The study revealed that there is a significant relationship between bank performance and credit risk management.

Medhat (2006) evaluated the financial performance of Omani Commercial banks used multiple regression analysis and correlations by employing ROA and interest income as performance proxies which represented as the dependent variables, and bank size, asset management and operational efficiency as independent variables. Found that, there is strong positive correlation between financial performance and operational efficiency and a moderate correlation between ROA and bank size, while, ANOVA analysis; results indicated that, there exists an impact of those independent variables on financial performance as the F-stat was significant and below the 5%.

Abdus et al (2006) evaluated the inter-temporal performance of commercial banks; the study was based on three categories of bank size, large, medium and small banks in the State of Utah for the period of 5 years from 2000 to 2004, by using two measures of performance – profits and quality of loans. T-tests and Kruskal-Wallis tests were applied to a variety of standard bank operations measures to determine whether there are significant differences in performance among the three categories of banks. The performance measures used were return on assets (ROA), return on equity (ROE), loan loss reserve ratio, and loans past due 30-89 days as a percentage of total loans. The study results showed that, no significant difference in performance between small and large banks between the years 2000 and 2004. However, there was a significant difference between small and medium, and medium and large banks in their ROA; the ROA of medium banks is significantly higher than that of small and large banks.

Paudel (2007) studied about Investing in Shares of Commercial Banks in Nepal: An Assessment of Return and Risk Elements showed that the shares of commercial banks in Nepal are heavily traded in the stock market and, therefore, these shares play a key role in the determination stock exchange indicators. The average mean return on market portfolio, as measured by percent changes in the NEPSE index, was 5.51 percent over the sample period. All the shares produced higher rates of return than the return on market portfolio. However, the risk-return characteristics do not seem to be the same for all the shares reviewed. The shares with larger standard deviations seem to be able to produce higher rates of return. The portion of unsystematic risk is very high with the shares having negative beta coefficient. The risk per unit of return, as measured by the coefficient of variation, is less than that of the market as a whole for all the individual shares. Most of the shares fall under the category of defensive stocks, (having beta coefficients less than 1) except the shares of Bank of Kathmandu Limited. Return on the shares of Nepal Arab Bank Limited is negatively correlated with the return on market portfolio and, therefore, it has negative beta coefficient. From the analysis, it appears that none of the shares are correctly priced.

Felix and Claudine (2008) have investigated the relationship between bank performance and credit risk management. It could be inferred from their findings that return on equity (ROE) and return on assets (ROA) both measuring profitability were inversely related to the ratio of non-performing loan to total loan of financial institutions thereby leading to a decline in profitability.

Kithinji (2010) has assessed the effect of credit risk management on the profitability of commercial banks in Kenya. Data on the amount of credit, level of non-performing loans and profits were collected for the period 2004 to 2008. The findings revealed that the bulk of the profits of commercial banks are not influenced by the amount of credit and non-performing loans, therefore suggesting that other variables other than credit and non-performing loans impact on profits.

Al-Khouri (2011) has examined the impact of bank's specific risk characteristics, and the overall banking environment on the performance of 43 commercial banks

operating in 6 of the Gulf Cooperation Council (GCC) countries over the period 1998-2008. Using fixed effect regression analysis, results showed that credit risk, liquidity risk and capital risk are the major factors that affect bank performance when profitability is measured by return on assets while the only risk that affects profitability when measured by return on equity is liquidity risk.

Kargi (2011) has evaluated the impact of credit risk on the profitability of Nigerian banks. Financial ratios as measures of bank performance and credit risk were collected from the annual reports and accounts of sampled banks from 2004-2008 and analyzed using descriptive, correlation and regression techniques. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks. It concluded that banks' profitability is inversely influenced by the levels of loans and advances, non-performing loans and deposits thereby exposing them to great risk of illiquidity and distress.

Ahmad (2011) investigated the financial performance of seven Jordanian commercial banks; the study used ROA as a measure of banks' financial performance and the bank size, asset management and operational efficiency as three independent variables affecting the financial performance. The results of the study showed a strong negative correlation between ROA and banks' size, a strong positive correlation between ROA and asset management ratio, and a negative weak correlation between ROA and operational efficiency.

Khizer et al (2011) study about banks' profitability in Pakistan, they found a significant relation between asset management ratios, capital and economic growth and with ROA, the operating efficiency, asset management and economic growth are significant with the ROE. On the other hand, domestic banks are determined to have a lesser capital adequacy ratio than foreign banks

Poudel (2012) assessed the effect of credit risk management in bank performance of Nepal during the 2001-2011 period using 31 banks. The capital adequacy ratio, cost per loan and default rates were used as credit parameters, whereas ROA was a

performance indicator. The results showed that credit risk management has a strong impact on bank financial performance.

Zawadi Ally (2013) conducted the study about Comparative Analysis of Financial Performance of Commercial Banks in Tanzania from 2006 to 2012. The study showed that the profitability result trends on ROA indicate an increasing on ROA for all banks groups from 2006 to 2007 with a slight decrease in 2007 to 2010. However all banks groups recorded an increase of ROA for 2012, in small bank was higher rate than other banks group. The general performance indicates that, all three banks groups performing better, large banks recorded higher average ROE with 22.3%, followed by medium banks with 12.82% and lastly small banks with 12.82%, however, medium banks have lower risk on ROE comparing to other two groups. The results on profitability trends indicate that, all banks groups their ROE were increased from for the first two years of study. There were down trend on ROE for all banks groups from 2007 to 2010 and then there was slightly increased on ROE for all banks groups from 2011 to 2012.

Bhattarai (2016) the estimated regression models reveal that NPLR has negative and statistically significant impact on bank profitability (ROA). However, it shows positive association between NPLR and bank profitability as measured by ROE. Bank size has positive and statistically significant impact on bank profitability (ROA, ROE).



## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Plan and Design**

Research design is an overall framework for the activities taken during formulating, implementing & controlling the study so as to obtain answers to research questions & to control variance. It encompasses the methodology and procedures employed to conduct scientific research that includes the tools & techniques for the data collection & analysis & sampling plan. The present study was based on descriptive and analytic research design in nature and used the secondary data to attain the overall objectives.

#### **3.2 Sources of Data**

The report was mainly based on secondary data with negligible information and data collected from primary sources. The data required for the analysis was directly obtain from the Balance Sheet and Profit and Loss account of concerned banks' annual reports. Supplementary data and information was collected from number of institutions and regulating authorities like NRB, Ministry of Finance, and budget speech of different fiscal years and economic survey. All the secondary data was compiled, process and tabulate in the time series as per the need and objectives of the study. Likewise various data and information was collected from the economic journals, periodicals, bulletins, magazines and other published & unpublished reports and documents from various sources.

#### **3.3 Population and Sample**

Population of the study was based with two commercial banks, from total 28 operating banks in the country till the research work date. The study banks were NABIL Bank Ltd and Nepal Investment Bank Ltd. The study banks were chosen on the basis of their almost same level of returns at FY 2016/17 and almost same time of establishment, 1984 A.D. and 1986 A.D. respectively.

### **3.4 Instruments**

The motive of this study was identified about the risk and return of two commercial banks of Nepal. Various financial ratios including Ratio of Risk to Total Assets, Ratio of Return to Equity, etc to identify the risk management of the two banks. Various statistical tools like Mean, Standard Deviation, Covariance, Trend analysis, coefficient of correlation, Regression Analysis was performed for the better analysis of the data. Statistical Package for Social Sciences (SPSS) version 14 and Microsoft Excel was used to perform calculation and for the analysis.

### **3.5 Data Collection Procedure**

The study was mainly based in secondary data which was collected in the form of published statistics such as annual reports, periodicals, newspapers, magazines etc. The relevant secondary data was collected through the annual report of selected commercial banks, from data bases of Nepal Rastriya Bank (NRB), various reports and other studies like studies in Tribhuvan University central Library, different journals, magazines, reports, Masters degree thesis papers, Website articles, Books and articles. The study was confined only to the specific areas such as deposits mobilized by these banks, loans and investments, liquidity, assets management, profitability and risk, ratios for the 11 years period from the year 2007 to 2017.

### **3.6 Analysis Plan**

To collect the information, secondary data source were used. Financial statements of the sample banks for ten fiscal years were obtained from official website and the publications. Various financial and statistical tools were used for the data analysis. Financial ratios were used for measuring investment policies of the bank and its effect on economic development. For the analysis, analytical statistical tools such as mean, coefficient of correlation between different variables were used. The tools applied were as follows:-

### **a) Risk Ratios**

Risk taking is the prime business of banks' investment management. It increases effectiveness and profitability of the bank. Risk ratio measures the level of risk. Risk always sticks with return. Higher the risk, higher will be the return. Bank has to take high risk if it expects high return on its investment. Hence, bank has to accept and manage high risk so as to achieve higher rate of return. These ratios indicate the amount of risk associated with the various banking operations, which ultimately influences the banks' investment policy.

The following ratios were taken into account under this heading.

#### ***i) Risk Weighted Exposures to Equity***

This ratio measures the level of risk associated with the equity i.e. Capital and reserves balance. That is kept in the bank for the purpose of satisfying the investor' demand for returns. Higher the ratio, higher is the risk.

Mathematically it is presented as,

$$\text{Risk Weighted Exposures to Equity} = \frac{\text{Risk weighted Exposures}}{\text{Total Equity}}$$

#### ***ii) Risk Weighted Exposures to Assets***

This ratio measures the level of risk associated with the total Assets. That is kept in the bank for the purpose of satisfying the management for risk taken level to the assets. Higher the ratio, higher is the risk.

Mathematically it is presented as,

$$\text{Risk Weighted Exposures to Equity} = \frac{\text{Risk weighted Exposures}}{\text{Total Assets}}$$

## **b) Profitability Ratios**

Profit is the difference between revenues and expenses over a period of time. A company should earn profit to survive and grow over a long period of time. Therefore, the financial manager should continuously evaluate the efficiency of its company in terms of profits. The profitability ratios are calculated to measure the operating efficiency of a company. It is the indicator of the financial performance of any institution. This implies that higher the profitability ratio, better the financial performance of the bank and vice versa.

The following ratios are taken into account under this heading.

### ***i. Return on Equity***

This ratio measures the overall profitability of the bank. A firm has to earn satisfactory return on equity for its survival. This ratio is calculated by dividing net profit by total equity. This can be expressed as,

$$\text{Return on Equity} = \frac{\text{Net Profit}}{\text{Total Equity}}$$

### ***ii. Return on Assets***

This ratio measures the overall profitability of the bank on its total assets. A firm has to earn satisfactory return on equity for its survival. This ratio is calculated by dividing net profit by total equity. This can be expressed as,

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

### 3.7 Statistical Tools

Research methodology and the various financial and statistical tools discussed above will be used in the next chapter to analyze and interpret the data regarding the NIBL and NABIL bank from 2005/2006 to 2016/2017. In this study, various statistical tools will be used to present and analyze the data for achieving the objectives. Following statistical tools will be used for the analysis of the data. Some important statistical tools will be used to achieve the objective of this study. In this study, statistical tools such as trend analysis of important variables, co-efficient of correlation between different variables as well as test of hypothesis will be used which are as follows:

#### a) Mean Analysis

This is the average of the total variables. This is given by dividing with the times of observation of variable. It can be calculate as below.

$$Mean (\bar{X}) = \frac{\sum X}{N}$$

#### b) Standard Deviation (S.D)

The standard deviation is an important and widely used measure of dispersion. The measurement of the scatterings of the mass of figure in a series about an average is known as dispersion. The greater the amount of dispersion is the greater the standard deviation.

$$Standard\ Deviation\ (S.D)(\sigma) = \sqrt{\frac{1}{(N-1)} \sum (X - \bar{X})^2}$$

#### c) Coefficient of Variation (C.V)

The coefficient of variation is the most commonly used measure of relative variation. It is used in such problems where the researcher wants to compare the variability of

more than two years. Greater the C.V, the variable or conversely less consistent, less uniform, more consistent, more uniform, more stable and homogeneous.

$$C.V. = \frac{\text{Standard Deviation } (\sigma)}{\text{Expected Return } (\bar{X})} \times 100$$

#### **d) Co-efficient of Correlation Analysis**

This analysis identifies and interprets the relationship between the two or more variables. In the case of highly correlated variables, the effect on one variable may have effect on other correlated variable under this topic. Karl Pearson's coefficient of correlation has been used to find out the relationship between the following variables.

#### **Co-efficient of correlation between Returns and Risk**

These tools analyze the relationship between these variables and help the banks to make appropriate policy regarding risk minimization and maximization of profit.

Analysis(r) is a common correlation between two variables X and Y. Pearson's correlation reflects the degree of linear relationship between two variables. It ranges from +1 to -1. A correlation of +1 means that there is a perfect positive linear relationship between variables. A correlation of -1 means that there is a perfect negative linear relationship between variables. A correlation of 0 means there is no linear relationship between the two variables. Correlations are rarely if ever 0, 1, or -1. If we get a certain outcome it could indicate whether correlations were negative or positive.

#### **Karl Pearson's Correlation coefficient (r)**

Karl Pearson's correlation coefficient has been used to find out the relationship between the following variables:

$$r = \frac{\sum dx.dy - \frac{\sum dx \sum dy}{n}}{\sqrt{\sum dx^2 - \frac{(\sum dx)^2}{n}} \sqrt{\sum dy^2 - \frac{(\sum dy)^2}{n}}}$$

**e) Trend Analysis**

This topic analyzes the trend of Return and Risk and NIBL and NABIL bank from 2005\2006 to 2016\2017 and makes the forecast for the next five years. Under this topic following sub- topic have been presented.

- i) Trend analysis of Returns.
- ii) Trend analysis of Weighted Risk Exposures.

**Regression Analysis**

Linear regression is an approach for modeling the relationship between a scalar dependent variable y and one or more explanatory variables denoted X. In linear regression, data are modeled using linear predictor functions, and unknown model parameters are estimated from the data. Such models are called linear models. Most commonly, linear regression refers to a model in which the conditional mean of y given the value of X is an affine function of X. Less commonly, linear regression could refer to a model in which the median, or some other quintile of the conditional distribution of y given X is expressed as a linear function of X. Like all forms of regression analysis, linear regression focuses on the conditional probability distribution of y given X. Simple linear regression is the least squares estimator of a linear regression model with a single explanatory variable. The following two models has been formed and tested for regression analysis.

$$y_1 = a_1 + b_1x_1 \dots\dots\dots i$$

$$y_2 = a_2 + b_2x_2 \dots\dots\dots ii$$

### **3.8. Limitations of the Study**

There are many limitations that have to encounter while preparing the report are given below;

- The study covered the Risk Weighted Exposures and Returns of the two banks for period of 11 years from July 2007 to July 2017
- In the study, how the internal sources as well as external sources affecting the risk and return the current social-economic factors like competition and competitor's strategies are not taken into account
- The Risk Weighted Exposures and returns amounts are taken from annual reports of the bank only
- The study was based only on secondary data
- The study covered only two commercial banks out of 28 commercial banks to perform comparative study
- Only limited analytical tools were used



## CHAPTER IV

### DATA ANALYSIS AND PRESENTATION

Presentation and analysis of the data is the core of each and every research work. This study requires some financial and statistical tools to accomplish the objective of the study. The various results obtained with the help of financial, accounting and statistical tools are tabulated under different headings. The main objective of the study is to examine the studied banks performance to strike a balance between risks-taking (risk weighted expose) and return-making of selected banks; the necessary financial facts and figures as well as descriptive information are gathered through the financial statement. The major variables for the study are cash and bank balance, total investment, investment on government securities and share and debenture and fixed deposit in commercial banks.

**Table No 4.1**  
**Returns on Shareholders' Equity (ROE)**

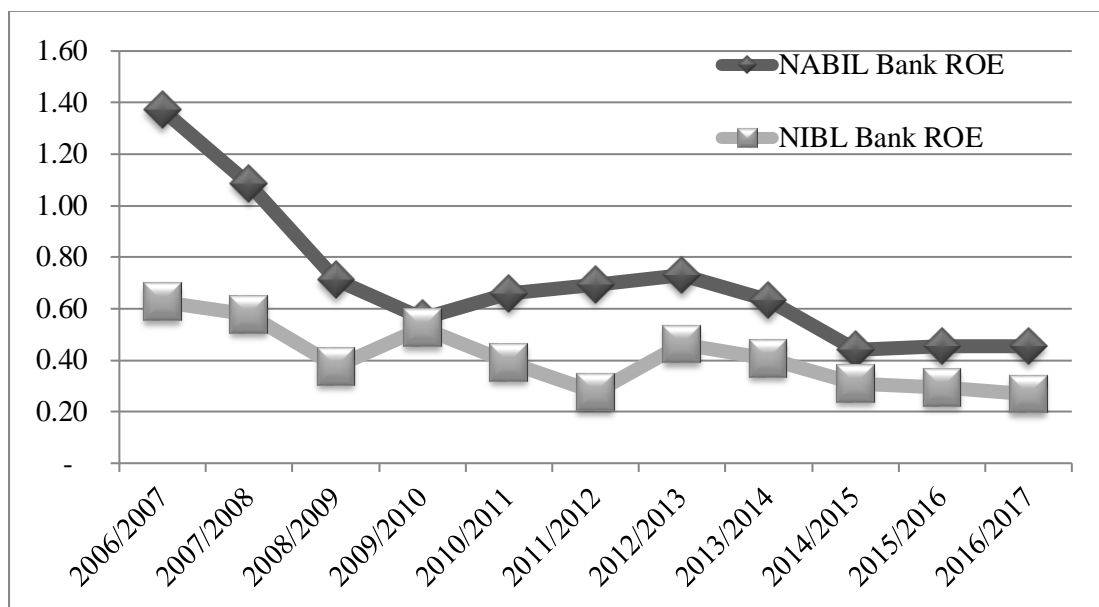
(In Percentage)

F/Y	NABIL Bank	NIBL Bank
2006/2007	137.08	62.57
2007/2008	108.31	57.87
2008/2009	71.17	37.42
2009/2010	56.24	52.55
2010/2011	65.91	39.07
2011/2012	69.36	27.60
2012/2013	72.85	46.20
2013/2014	63.43	40.67
2014/2015	44.03	30.92
2015/2016	45.65	29.30
2016/2017	45.33	26.78
<b>Mean</b>	<b>0.7085</b>	<b>0.4100</b>
<b>Standard Deviation (S.D.)</b>	<b>0.2845</b>	<b>0.1244</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.4015</b>	<b>0.3034</b>

*Note: NABIL and NIBL, Annual Reports*

Table 4.1 indicated that average Return on the Equity (ROE) of the NABIL bank was 0.7085 which higher than that of NIBL Bank 0.4100. It shows that the average ROE is better on NABIL than that on NIBL. The Standard Deviation of NABIL was 0.2845

but NIBL was 0.1244 which show that the variation of dispersion was greater on the NABIL than NIBL. Its show that the NIBL returns on equity was steadily than NABIL. Its coefficient of variance also shows that NABIL had higher degree of variance to 0.4015 where as NIBL had only 0.3034.



Note: NABIL and NIBL, Annual Reports

**Figure No 4.1**  
**Returns on Shareholders' Equity (ROE)**

The Figure 4.1 shows that the ROE had been gradually decline from FY 2006/2007 to FY 2016/2017. Figure show there was sharp decline of NABIL bank from begin FY 2006/2007 to FY 2009/2010 and then slowly little grow to FY till 2012/2013 then again decline to almost constant for three FY till 2016/2017. Where the NIBL bank had been continues decline from the begin FY 2006/2007 FY 2008/2009, then little grow in FY 2009/2010 and again decline and continuous decline from FY 2012/2013 to FY 2016/2017.

Above figure show that both bank had been gradually decline the ROE ratio from the begin FY 2006 to 2007. From FY 2014 to FY 2016/2017 both bank had almost constant on the ROE ratio.

**Table No 4.2**  
**Returns on Assets (ROA)**

(In Percentage)

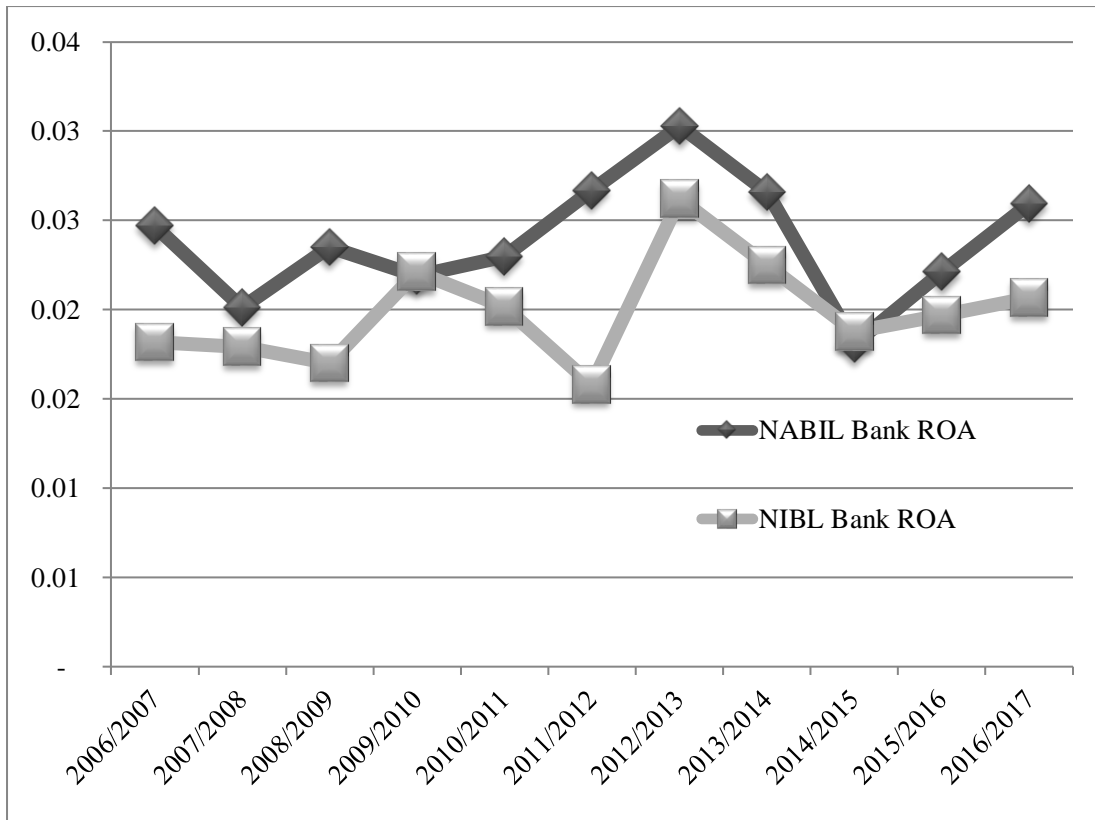
<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	2.47	1.82
2007/2008	2.01	1.79
2008/2009	2.35	1.70
2009/2010	2.19	2.21
2010/2011	2.30	2.02
2011/2012	2.67	1.58
2012/2013	3.03	2.62
2013/2014	2.66	2.25
2014/2015	1.81	1.88
2015/2016	2.21	1.97
2016/2017	2.59	2.06
<b>Mean</b>	<b>0.0239</b>	<b>0.0199</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0034</b>	<b>0.0029</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1435</b>	<b>0.1465</b>

*Note: NABIL and NIBL, Annual Reports*

Above table No 4.2 had average Return on the Assets (ROA) of the bank NABIL 0.0239 and NIBL had 0.0199. The Average is higher in NABIL, which indicates that NABIL bank is better on ROA than that of NIBL.

Its show better average on NABIL Bank but the Standard Deviation of NABIL was 0.0034 but NIBL was 0.0029. Its shows that NABIL had more frequency difference than that of NIBL ROA.

But the both banks had almost equals the coefficient of variance. It showed that NABIL had little lower degree of variance to 0.1435 where as NIBL had only 0.1465.



Note: NABIL and NIBL, Annual Reports

**Figure No 4.2**  
**Returns on Assets (ROA)**

In figure 4.2 shows that no any significant ups and downs on ROA ratio. NABIL bank gets begin FY 2006/2007 up and then down on next FY, then again up on next FY 2008/2009, then down again on FY 2009/2010.

Both banks had almost same ROA on FY 2009/2010, then NABIL bank gain grow till FY 2012/2013 but NIBL bank decline till FY 2011/2012 and then grow in FY 2012/2013. Then both banks get start decline to till FY 2014/2015 and then NABIL gets momentum of higher growth than that of NIBL till FY 2016/2017.

**Table No 4.3**  
**Returns on Investment (ROI)**

	(In Percentage)	
F/Y	NABIL Bank	NIBL Bank
2006/2007	7.53	7.71
2007/2008	7.51	10.14
2008/2009	9.52	12.17
2009/2010	8.33	14.66
2010/2011	10.23	15.85
2011/2012	12.03	9.96
2012/2013	13.59	16.75
2013/2014	12.69	12.61
2014/2015	6.76	9.14
2015/2016	7.73	8.73
2016/2017	11.14	12.16
<b>Mean</b>	<b>0.0973</b>	<b>0.1181</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0236</b>	<b>0.0299</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.2426</b>	<b>0.2533</b>

*Note: NABIL and NIBL, Annual Reports*

Regarding Average Return on Investment (ROI), NIBL had higher 0.1181 than NABIL 0.0973. Which show NIBL bank was better at investment which gives higher returns where as NABIL bank gets lower returns on average.

With lower on returns of NABIL bank, it had standard deviation 0.0236 but NIBL was 0.0299. Its show the average is higher in NIBL but also it had more variance than NABIL.

The coefficient of variance of NABIL has 0.2426 but NIBL had 0.2533. Its shows the more steady returns on NABIL bank than of NIBL bank

The NABIL bank get continuous growth from FY 2006/2007 to FY 2013/2014 then get decline for next one FY then gain grows from then till FY 2016/2017. But NIBL only grow till FY 2010/2011, and then decline next FY, but gain next two FY till 2013/2014 and again decline till FY 2015/2016. On FY 2016/2017 NIBL gain more than that of NABIL.

**Table No 4.4**  
**Returns on Loan and Advance (ROLA)**

(In Percentage)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	4.34	2.90
2007/2008	3.49	2.58
2008/2009	3.74	2.49
2009/2010	3.54	3.14
2010/2011	3.52	2.86
2011/2012	4.06	2.50
2012/2013	4.79	4.13
2013/2014	4.24	3.73
2014/2015	3.20	2.96
2015/2016	3.71	2.98
2016/2017	4.06	2.98
<b>Mean</b>	<b>0.0388</b>	<b>0.0275</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0046</b>	<b>0.0057</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1183</b>	<b>0.2086</b>

*Note: NABIL and NIBL, Annual Reports*

In regard with Average Return on the Loans and Advance (ROLA), NABIL had higher 0.0388 than NIBL 0.0275. Its show that NABIL bank had been more successfully deploys its deposits into more profitable areas than that by NIBL bank.

The Standard Deviation of NABIL was 0.0046 and NIBL was 0.0057. It shows that the variation was greater on the NIBL than NABIL.

Its coefficient of variance also shows that NABIL had lower degree of variance to 0.1183 where as NIBL had only 0.2086.

NABIL bank gets steady from FY 2007/2008 to FY 2010/2011 and then get gain till FY 2013/2014. Then get decline for next two FY and gain at last FY 2016/2017.

NIBL bank gets decline from FY 2006/2007 to FY 2008/2009 and then gain next FY and again decline till FY 2011/2012. In FY 2012/2013 NIBL bank get gain then form on start to decline till FY 2016/2017.

**Table No 4.5**  
**Indication of Returns for 11 years**

	<b>NABIL Bank</b>				<b>NIBL Bank</b>			
	ROE	ROA	ROI	ROLA	ROE	ROA	ROI	ROLA
Mean	<b>0.7085</b>	<b>0.0239</b>	<b>0.0973</b>	<b>0.0388</b>	<b>0.4100</b>	<b>0.0199</b>	<b>0.1181</b>	<b>0.0275</b>
S.D.	<b>0.2845</b>	<b>0.0034</b>	<b>0.0236</b>	<b>0.0046</b>	<b>0.1244</b>	<b>0.0029</b>	<b>0.0299</b>	<b>0.0057</b>
C.V.	<b>0.4015</b>	<b>0.1435</b>	<b>0.2426</b>	<b>0.1183</b>	<b>0.3034</b>	<b>0.1465</b>	<b>0.2533</b>	<b>0.2086</b>

*Note: NABIL and NIBL, Annual Reports*

Above table shows that NABIL had higher average on ROE, ROA and ROAL than NIBL Bank, NIBL got higher average on ROI only. NABIL bank got less Standard Deviation on ROI and ROAL where NIBL got less S.D. on ROE and ROA.

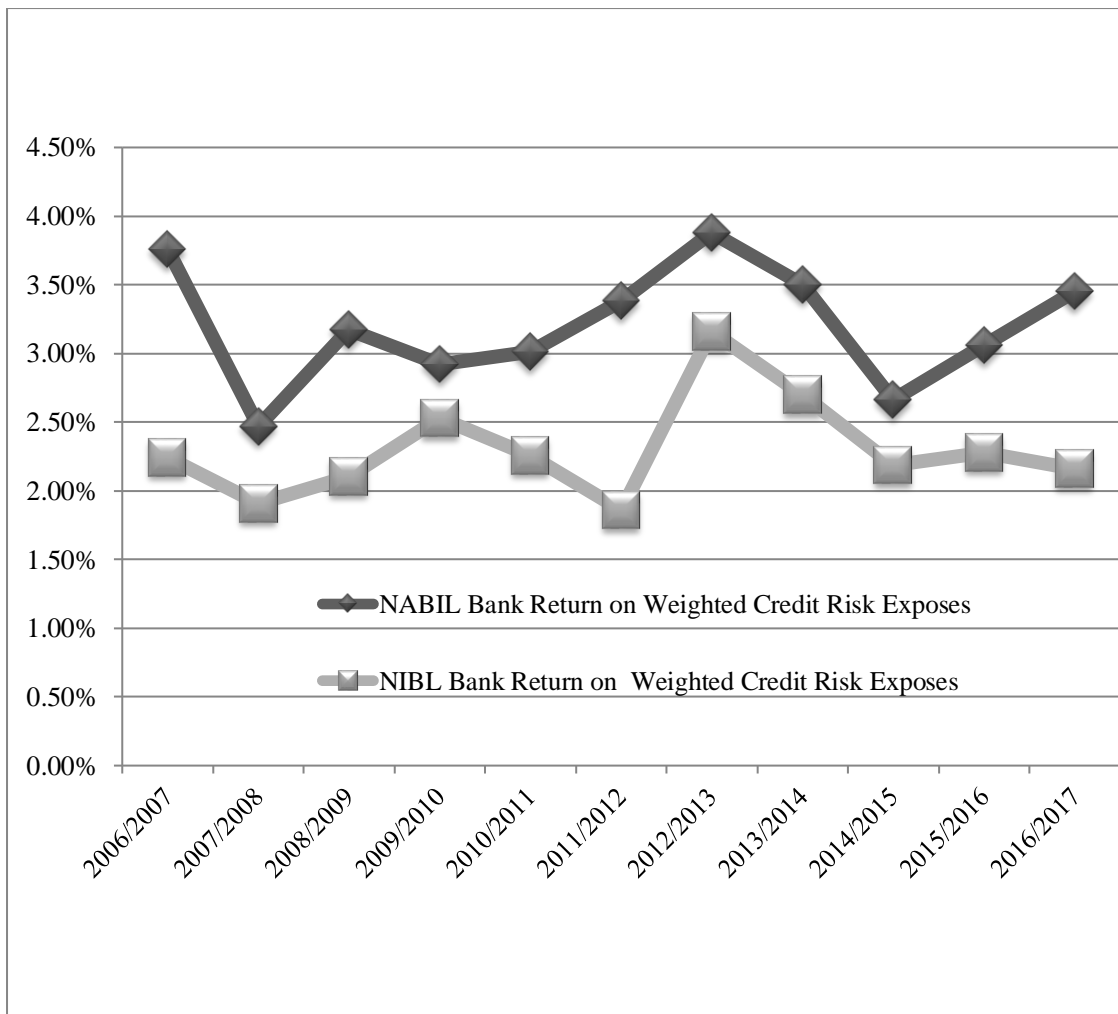
**Table No 4.6**  
**Returns on Weighted Credit Risk Exposures**

(In Percentage)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	3.76	2.24
2007/2008	2.47	1.91
2008/2009	3.17	2.10
2009/2010	2.92	2.53
2010/2011	3.01	2.26
2011/2012	3.38	1.86
2012/2013	3.88	3.16
2013/2014	3.50	2.70
2014/2015	2.66	2.19
2015/2016	3.07	2.28
2016/2017	3.45	2.16
<b>Mean</b>	<b>0.0321</b>	<b>0.0231</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0044</b>	<b>0.0037</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1366</b>	<b>0.1610</b>

*Note: NABIL and NIBL, Annual Reports*

Above table and figure indicate that average of the returns on Weighted Credit Risk Exposures was 0.0321 on NABIL and 0.0231 on NIBL. It shows average higher on NABIL. But standard deviation on NABIL bank got higher 0.0044 than that of NIBL Bank 0.0037. It shows that NABIL bank got the more variance than that of NIBL. And again the coefficient of variance has less on NABIL bank than that of NIBL bank.



Note: NABIL and NIBL, Annual Reports

**Figure No 4.3**  
**Returns on Weighted Credit Risk Exposures**

In the above figure 4.3 the returns on weighted credit risk show that NABIL bank got decline on FY 2007/2008 and then continuous growth till FY 2012/2013, then again decline for next two FY till 2014/2015, then get gain than that of NIBL bank till FY 2016/2017.

NIBL bank gets growth from FY 2007/2008 till FY 2009/2010 and then get decline till FY 2011/2012. Then get gain on FY 2012/2013, then again start to decline till FY 2016/2017.



**Table No 4.7****Returns on Weighted Operation Risk Exposures**

(In Percentage)

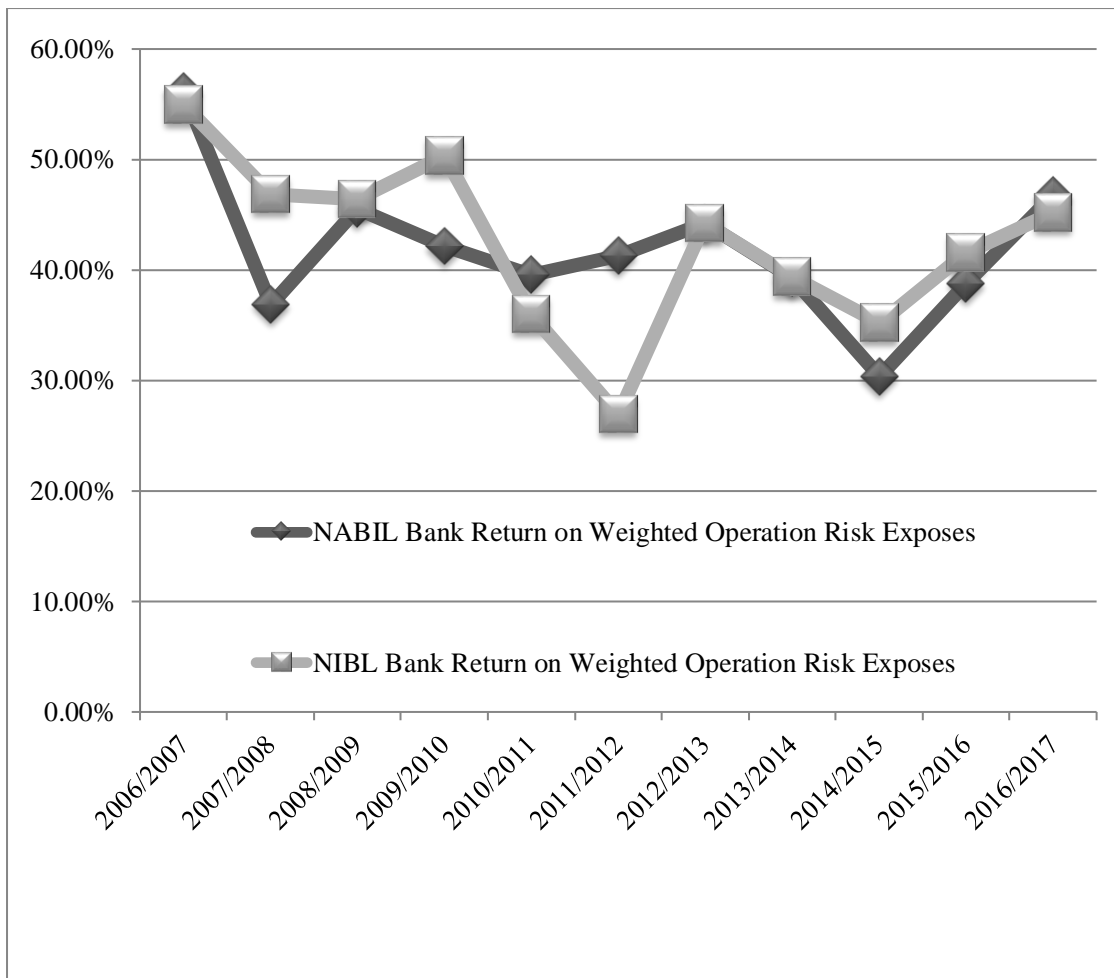
<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	56.18	54.97
2007/2008	36.89	46.82
2008/2009	45.54	46.38
2009/2010	42.16	50.29
2010/2011	39.54	35.97
2011/2012	41.32	26.92
2012/2013	44.28	44.24
2013/2014	39.30	39.34
2014/2015	30.36	35.18
2015/2016	38.86	41.54
2016/2017	46.74	45.17
<b>Mean</b>	<b>0.4192</b>	<b>0.4244</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0653</b>	<b>0.0781</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1558</b>	<b>0.1840</b>

*Note: NABIL and NIBL, Annual Reports*

Regarding average of the Returns on Weighted Operation Risk Exposures, NABIL had 41.92 percent while NIBL had 42.44 percent. It shows almost the same level of percentage but there was higher operation risk variance in NIBL than NABIL by one percent.

The Standard Deviation of NABIL was 6.53 percent and NIBL was 7.81 percent, which shows that NABIL had less frequency variance than that of NIBL. It also shows that NABIL bank has been able to use its resources on the optimal level with better management than that of NIBL bank.

The coefficient of variance on NABIL was 15.58 percent and there were 18.40 on NIBL. It shows that NABIL bank has less percentage of variance as per there operation risk to get returns.



Note: NABIL and NIBL, Annual Reports

**Figure No 4**  
**Returns on Weighted Operation Risk Exposures**

On the above figure, both bank starts with the decline on FY 2007/2008, then get both banks grow on FY 2008/2009. After that both bank decline and sharp decline was NABIL bank till FY2011/2012. And again both banks gain on FY2012/2013 and fall on FY 2014/15 both. From FY 2014/2015 both bank gets grow at almost same level till FY 2016/2017.

The figure show that both banks had been gradually declines its returns ratio on operation risk. It indicates that the both banks are facing challenges on doing better management on their operation risk.

**Table No 4.8**  
**Returns on Weighted Market Risk Exposures**

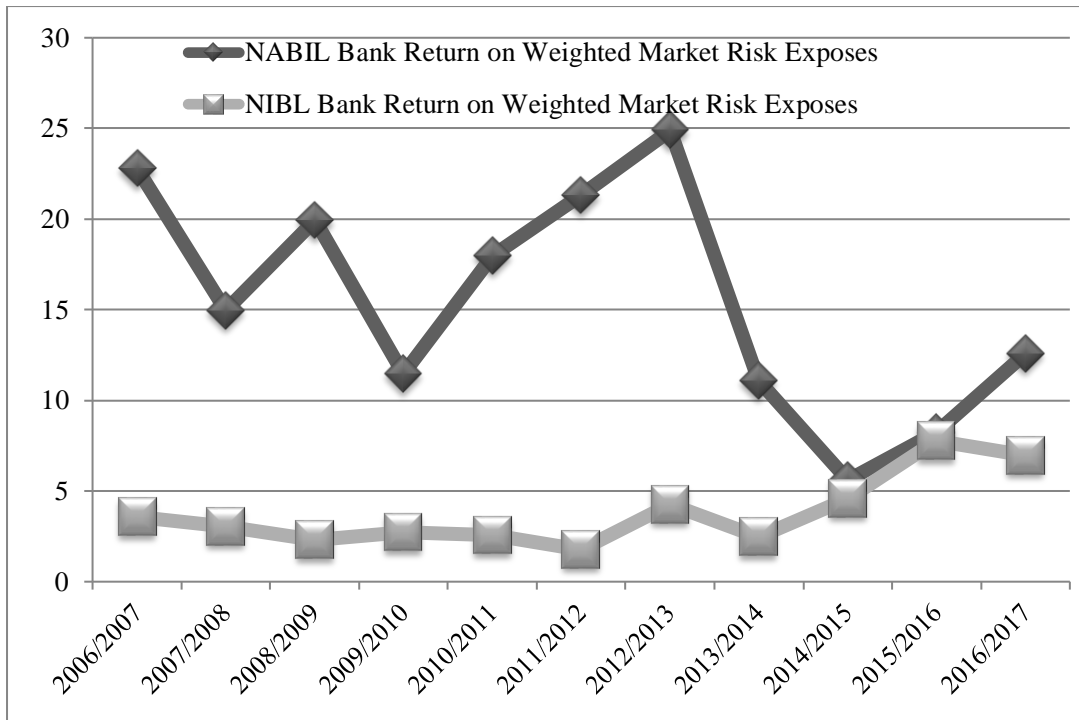
<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	22.82	3.56
2007/2008	14.98	3.03
2008/2009	19.92	2.28
2009/2010	11.44	2.72
2010/2011	17.97	2.59
2011/2012	21.34	1.76
2012/2013	24.89	4.24
2013/2014	11.11	2.44
2014/2015	5.60	4.56
2015/2016	8.21	7.77
2016/2017	12.56	6.96
<b>Mean</b>	<b>15.5303</b>	<b>3.8094</b>
<b>Standard Deviation (S.D.)</b>	<b>6.3028</b>	<b>1.9519</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.4058</b>	<b>0.5124</b>

*Note: NABIL and NIBL, Annual Report*

Above table and figure show that average of the Returns on Weighted Market Risk Exposures was 15.5303 on NABIL and 3.8094 on NIBL. It shows that there were great higher returns on market risk on NABIL bank than NIBL bank. It proves that NABIL bank had better manage its market risk than that of NIBL Bank.

The Standard Deviation of NABIL was 6.3028 and NIBL was 1.9519, which shows that NABIL bank had more variance than NIBL. NABIL bank had more average return on market risk but also got great variance, it not steady than that of NIBL bank.

The coefficient of variance on NABIL was 0.4058 and there was 0.5124 on NIBL.



*Note: NABIL and NIBL, Annual Reports*

**Figure No 4.5**  
**Return on Weighted Market Risk Exposures**

In above figure 4.5 its shows that NABIL bank has more sharp up and down than that of NIBL bank. NABIL bank decline on FY2007/2008 and then up on next FY 2008/2009 then again decline sharp on FY 2009/2010, then get momentum to grow till FY 2012/2013. After that its sharply decline till FY 2014/2015 and then get slow grow till FY 2016/2017.

NIBL bank shows the slow steady decline form FY 2006/2007 to FY 2011/2012 and then next FY gain and then decline on FY 2013/2014. Then on its grow till FY 2015/2016 and again decline on FY 2016/2017.

**Table 4.9**  
**Returns on Total Weighted Risk Exposures**

(In Percentage)

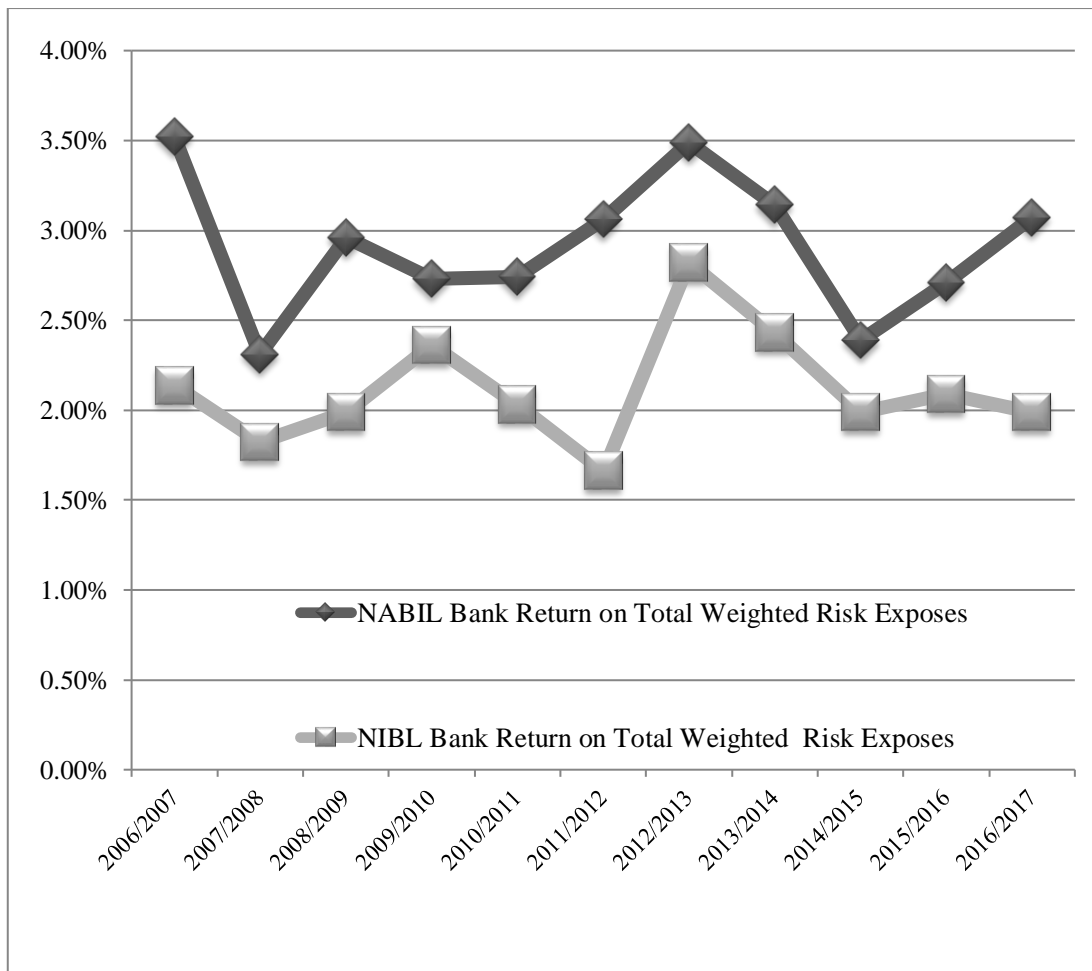
<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	3.52	2.14
2007/2008	2.31	1.82
2008/2009	2.96	1.99
2009/2010	2.73	2.36
2010/2011	2.74	2.03
2011/2012	3.06	1.66
2012/2013	3.49	2.82
2013/2014	3.14	2.43
2014/2015	2.39	1.99
2015/2016	2.71	2.09
2016/2017	3.07	1.99
<b>Mean</b>	<b>0.0292</b>	<b>0.0212</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0039</b>	<b>0.0032</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1347</b>	<b>0.1496</b>

*Note: NABIL and NIBL, Annual Reports*

In regard with average of the Returns on Total Weighted Risk Exposures, there was 2.92 percent on NABIL and 2.12 percent on NIBL bank. It shows that NABIL bank had more return ratio than that of NIBL bank.

The Standard Deviation of NABIL was 0.39 percent and NIBL was 0.32 percent, which shows that NABIL had more variance than that of NIBL. With more average return ratio on NABIL it's had also more variance affect.

The coefficient of variance on NABIL was 13.47 percent and there was 14.96 percent on NIBL.



*Note: NABIL and NIBL, Annual Report*

**Figure No 4.6**  
**Returns on Total Weighted Risk Exposures**

On the above figure 4.6 it shows that there was a sharp decline on FY 2007/2008 and then growth next FY 2008/2009, then again decline till FY 2010/2011. Then growth till FY 2012/2013, then again drop down till FY 2014/2015. From then FY 2015/2016 it grows up to FY 2016/2017.

NIBL shows a slow decline on FY 2007/2008 and then slow growth till FY 2009/2010, then decline next two FY till 2011/2012, then again up on FY 2012/2013 and then decline till FY 2015/2016.

**Table No 4.10**  
**Indication of Returns on Weighted Risk Exposures in 11 years**

	<b>NABIL Bank</b>				<b>NIBL Bank</b>			
	Return On Weighted Credit Risk	Return On Weighted Operation Risk	Return On Weighted Market Risk	Return On Weighted Total Risk	Return On Weighted Credit Risk	Return On Weighted Operation Risk	Return On Weighted Market Risk	Return On Weighted Total Risk
Mean	<b>0.0321</b>	<b>0.4192</b>	<b>15.5303</b>	<b>0.0292</b>	<b>0.0231</b>	<b>0.4244</b>	<b>3.8094</b>	<b>0.0212</b>
S.D.	<b>0.0044</b>	<b>0.0653</b>	<b>6.3028</b>	<b>0.0039</b>	<b>0.0037</b>	<b>0.0781</b>	<b>1.9519</b>	<b>0.0032</b>
C.V.	<b>0.1366</b>	<b>0.1558</b>	<b>0.4058</b>	<b>0.1347</b>	<b>0.1610</b>	<b>0.1840</b>	<b>0.5124</b>	<b>0.1496</b>

*Note: NABIL and NIBL, Annual Reports*

Above Table No. 4.10 shows that NABIL had higher average on ratio of return on credit weighted risk and market weighted risk on the other hand NIBL had higher average on ratio of return on weighted operation risk.

**Table No 4.11**

**Tier I and Tier II Capital to Total Risk Weighted Exposures**

(In Percentage)

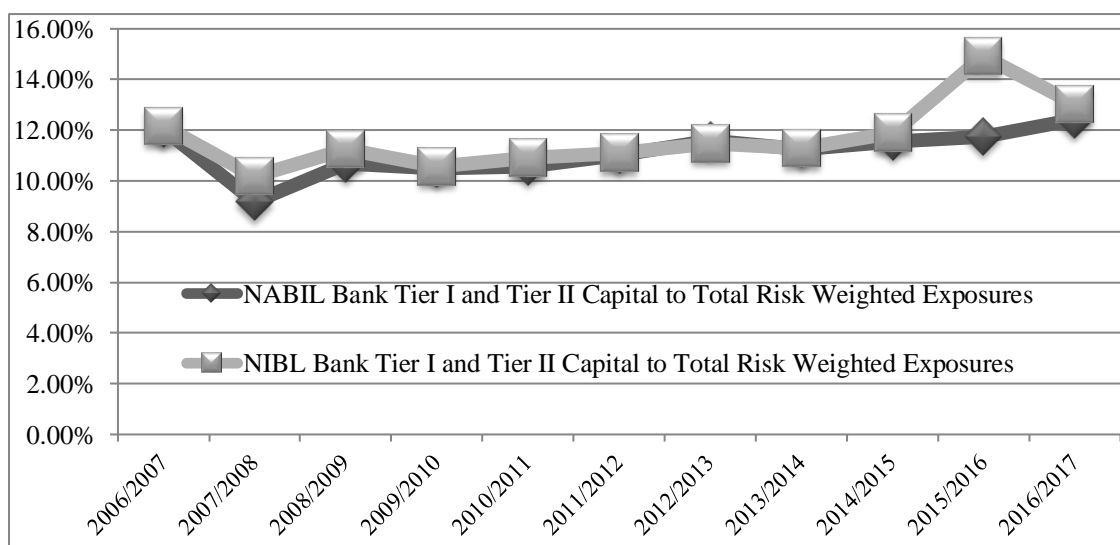
<b>F/Y</b>	<b>NABIL</b>	<b>NIBL</b>
2006/2007	12.04	12.17
2007/2008	9.18	10.18
2008/2009	10.70	11.24
2009/2010	10.50	10.55
2010/2011	10.58	10.91
2011/2012	11.01	11.10
2012/2013	11.59	11.49
2013/2014	11.24	11.27
2014/2015	11.57	11.90
2015/2016	11.73	14.92
2016/2017	12.42	13.02
<b>Mean</b>	<b>0.1114</b>	<b>0.1171</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0089</b>	<b>0.0132</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.0800</b>	<b>0.1128</b>

*Note: NABIL and NIBL, Annual Reports*

Table No 4.11 indicates that the average mean of the Tier I and Tier II Capital to Total Risk Weighted Exposures was 11.14 percent of NABIL and 11.71 percent on NIBL.

As the Tier I and Tier II Capital to Total Risk Weighted Exposures also known as Capital Adequacy Ratio (CAR) is regulated by Nepal Rastra Bank (NRB), Nepal Central Bank, both banks have the same level of ratio. The average capital adequacy ratio of the commercial banks in the year 2015/2016 was 11.01 percent.

On NABIL, standard deviation had 0.89 percent and NIBL had 1.32 percent which showed less variation pattern on the NABIL than NIBL. This means NABIL bank has well managed to put right level with more stable than NIBL bank. The coefficient of variance was 0.0800 of NABIL and NIBL had 0.1128.



Note: NABIL and NIBL, Annual Reports

**Figure No 7**

**Tier I and Tier II Capital to Total Risk Weighted Exposures**

On the above figure 4.7 it shows both bank decline from FY 2006/2007 to 2007/2008 then from which both bank had almost same constant level of CAR at 10 percent to 12 percent till FY 2014/2015, then NIBL bank goes up to 14 percent and then down to 12 percent on FY 2016/2017. Whereas NABIL bank had put it on steady through the FY 2016/2017



**Table No 4.12**  
**Interest Expenses to Interest Income Ratio**

(In Percentage)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	35.00	43.25
2007/2008	38.33	45.22
2008/2009	41.21	51.62
2009/2010	48.40	54.88
2010/2011	56.25	62.38
2011/2012	51.50	63.76
2012/2013	38.34	47.30
2013/2014	34.42	48.49
2014/2015	38.80	48.52
2015/2016	29.65	42.14
2016/2017	31.87	48.27
<b>Mean</b>	<b>0.4034</b>	<b>0.5053</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0839</b>	<b>0.0715</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.2079</b>	<b>0.1415</b>

*Note: NABIL and NIBL, Annual Reports*

Table No 4.12 showed that the mean of interest expenses to interest income was 0.4034 on NABIL and 0.5053 on NIBL. It means that on average interest expense made by NABIL is low compared to NIBL bank. It seems NIBL average interest expenses almost half of interest income. Low making expenses help on high on income. The standard deviation was 0.0839 on NABIL and 0.0715 percent on NIBL. Even low average interest expenses made by NABIL bank it makes more variable than that of NIBL. The coefficient of variance of NABIL and NIBL was 0.2079 and 0.1415 respectively.

NIBL bank shows there was continuous growth from FY 2006/2007 to FY 2010/2011, and then it's gradually down FY 2013/2014 and next FY up and again down and next FY up. So it's up and down from FY 2012 to FY 2017. So there was larger deviation than that of NIBL bank. NIBL steady grow till FY 2011/2012 and then down next FY and then go up with not much variance. So it's got coefficient of variance less than that of NABIL Bank.

**Table No 4.13**  
**Return to Net Interest Income Ratio**

	(In Percentage)	
F/Y	NABIL Bank	NIBL Bank
2006/2007	65.30	55.74
2007/2008	61.17	57.96
2008/2009	62.67	56.97
2009/2010	54.61	60.29
2010/2011	58.20	53.90
2011/2012	56.86	47.93
2012/2013	63.11	61.95
2013/2014	62.75	64.74
2014/2015	59.38	65.86
2015/2016	65.04	65.06
2016/2017	65.93	65.09
<b>Mean</b>	<b>0.6137</b>	<b>0.5959</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0370</b>	<b>0.0570</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.0602</b>	<b>0.0956</b>

*Note: NABIL and NIBL, Annual Reports*

With regard to average return on net interest income, NABIL had 61.37 percent and NIBL had 59.59 percent. Beside NIBL had low average on interest expenses to interest income ratio, it's almost same percent on the return to net interest income ratio.

The standard deviation of NABIL and NIBL was 3.70 percent and 5.70 percent respectively. The return to net interest income was steadier on NABIL than that of NIBL. The coefficient of variance was 0.0602 on NABIL and 0.0956 on NIBL.

**Table No 4.14**  
**Net Interest Income to Total Weighted Risk Exposures Ratio**

(In Percentage)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	5.38	3.84
2007/2008	3.77	3.14
2008/2009	4.73	3.49
2009/2010	5.00	3.92
2010/2011	4.70	3.76
2011/2012	5.38	3.46
2012/2013	5.53	4.55
2013/2014	5.01	3.76
2014/2015	4.02	3.02
2015/2016	4.17	3.22
2016/2017	4.65	3.06%
<b>Mean</b>	<b>0.0476</b>	<b>0.0356</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0058</b>	<b>0.0046</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1220</b>	<b>0.1289</b>

*Note: NABIL and NIBL, Annual Reports*

The average net interest income to total weighted risk exposures was 4.76 percent on NABIL and 3.56 percent on NIBL. NABIL bank got good average portion of net interest income to the total weighted risk exposures than that of NIBL bank.

The standard deviation was 0.0058 percent on NABIL and 0.0046 percent on NIBL. Beside the average higher than NIBL, NABIL got more variance on its net interest income to total weighted risk exposures.

The coefficient of variance of NABIL and NIBL was 0.1220 and 0.1289 respectively. Beside both bank got average mean and standard deviation, they got almost same level of coefficient of variance at 12 percent.

**Table No 4.15**  
**Staff Expenses & Other Operating Expenses to Net Returns Ratio**

(In Percentage)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	63.56	77.54
2007/2008	64.79	71.81
2008/2009	58.68	65.09
2009/2010	61.45	56.36
2010/2011	63.95	66.51
2011/2012	55.15	77.84
2012/2013	50.27	46.78
2013/2014	50.47	50.38
2014/2015	64.79	53.64
2015/2016	50.00	48.13
2016/2017	44.60	43.85
<b>Mean</b>	<b>0.5706</b>	<b>0.5981</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0727</b>	<b>0.1248</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1275</b>	<b>0.2086</b>

*Note: NABIL and NIBL, Annual Reports*

Regarding the mean of staff expenses and other operating expenses to net returns, NABIL had 57.06 percent while NIBL had 59.81 percent. It shows that NABIL bank got the better on doing minimizing the expenses its staff and other operating expenses in compare to the NIBL bank.

The standard deviation was 0.0727 on NABIL and 0.1248 on NIBL. As the average was higher on NIBL it's got also the higher variance deviation than that of NABIL.

The coefficient of variance was 0.1275 of NABIL and 0.2086 of NIBL.

**Table No 4.16**  
**Possible Losses Provision to Loan and Advance Ratio**

(In Thousands)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	14,206.37	129,718.92
2007/2008	64,055.19	135,989.24
2008/2009	45,722.43	166,201.38
2009/2010	355,829.12	93,056.58
2010/2011	109,470.41	267,331.49
2011/2012	413,948.68	743,723.81
2012/2013	27,450.91	958,335.97
2013/2014	237,955.21	277,278.26
2014/2015	167,070.83	573,891.91
2015/2016	5,076.14	436,464.85
2016/2017	19,228.71	510,285.47
<b>Mean</b>	<b>132,728.55</b>	<b>390,207.08</b>
<b>Standard Deviation (S.D.)</b>	<b>144,307.29</b>	<b>282,285.73</b>
<b>Coefficient of Variance (C.V.)</b>	<b>1.0872</b>	<b>0.7234</b>

*Note: NABIL and NIBL, Annual Reports*

Table No 15 indicates that NABIL had average 132.73 million of provision for possible losses to Loan and Advance where as NIBL had 390.21 million. This shows that NABIL bank management had done very less provision on its possible losses as compare to NIBL bank. Its means NABIL bank had put its loans and advance on better not default risky sectors than that of NIBL bank.

The standard deviation of NABIL and NIBL was 144.31 million and 282.29 million respectively. There was almost the double the variance between NABIL and NIBL on provision for possible losses, so NIBL got much more risk on its loans and advances.

The coefficient of variance of NABIL was 1.0872 and 0.7234 on NIBL. Beside mean and standard deviation better on NABIL bank it had worse on the coefficient of variance than that of NIBL.

**Table No 4.17**  
**Net Returns to Operating Profit Ratio**

(In Percentage)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	64.95	68.92
2007/2008	66.49	68.76
2008/2009	65.66	68.70
2009/2010	66.76	65.65
2010/2011	64.28	65.97
2011/2012	63.98	76.58
2012/2013	64.04	89.27
2013/2014	65.35	67.08
2014/2015	64.71	77.06
2015/2016	64.17	68.95
2016/2017	65.10	65.84
<b>Mean</b>	<b>0.6504</b>	<b>0.7116</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0096</b>	<b>0.0718</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.0147</b>	<b>0.1010</b>

*Note: NABIL and NIBL, Annual Reports*

Regarding average net return to operating profit for NABIL was 65.04 percent and 71.16 percent for NIBL. Here show that the net return portions are better on NIBL than that of the NABIL.

The standard deviation for NABIL and NIBL was 0.0096 and 0.0718 respectively. There are more stable returns portion on operation profit of NIBL than that of NABIL.

The coefficient of variance was 0.0147 of NABIL and 0.1010 of NIBL. Beside both mean and standard deviation are better on NIBL, NABIL got the coefficient of variance better than NIBL bank.

**Table No 4.18**  
**Operating Expenses to Net Returns Ratio**

(In Percentage)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	27.92	48.55
2007/2008	29.57	44.95
2008/2009	25.72	40.03
2009/2010	29.29	34.25
2010/2011	30.01	38.76
2011/2012	25.51	45.11
2012/2013	21.13	26.94
2013/2014	23.42	27.81
2014/2015	29.28	29.16
2015/2016	22.10	25.79
2016/2017	18.62	22.47
<b>Mean</b>	<b>0.2569</b>	<b>0.3489</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0392</b>	<b>0.0904</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1525</b>	<b>0.2591</b>

*Note: NABIL and NIBL, Annual Reports*

Table No 17 shows NABIL had 0.2569 mean of operating expenses to net returns and NIBL had 0.3489. Expenses low is always better, so here NABIL got the less average operating expenses than that of NIBL i.e. NIBL bank got larger portion of its expenses on its operation expenses. This also shows that NABIL bank had well managed its resources to get better outcomes.

The standard deviation was 0.392 of NABIL and 0.0904 of NIBL. With fewer variables it is better so NABIL bank got better and stable on operation expenses than that of NIBL bank.

The coefficient of variance was 0.1525 on NABIL and 0.2591 on NIBL. The unit level of variance also less on NABIL bank than that of NIBL bank, so NABIL had better position.

**Table No 4.19**  
**Staff Expenses to Net Returns Ratio**

(In Percentage)		
F/Y	NABIL	NIBL
2006/2007	35.63	28.99
2007/2008	35.22	26.86
2008/2009	32.97	25.06
2009/2010	32.16	22.11
2010/2011	33.94	27.75
2011/2012	29.64	32.73
2012/2013	29.15	19.84
2013/2014	27.06	22.57
2014/2015	35.51	24.47
2015/2016	27.91	22.34
2016/2017	25.98	21.38
<b>Mean</b>	<b>0.3138</b>	<b>0.2492</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0357</b>	<b>0.0385</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1138</b>	<b>0.1544</b>

*Note: NABIL and NIBL, Annual Reports*

Regarding the average staff expenses to net returns was 0.3138 on NABIL and 0.2492 on NIBL. Staffs are the most valuable assets to the organization. The work is done by staffs and it's directly affects to organization returns. Here NABIL bank makes more expenses to its staffs than that of NIBL bank. Expenses less is good for bank, so NIBL bank makes the less expenses than that of NABIL bank.

The standard deviation of NABIL and NIBL was 0.0357 and 0.0385 respectively. Both banks got almost the same level of variance but with little more stable in NABIL than NIBL.

The coefficient of variance was 0.1138 on NABIL and 0.1544 on NIBL. NIBL got better less average staff expenses but got more unstable on unit level of coefficient of variance.



**Table No 4.20**  
**Per Staff Expenses**

(Amount in Thousands)

F/Y	NABIL Bank Number of Staffs	NABIL Per Staff Expenses	NIBL Bank Number of Staffs	NIBL Per Staff Expenses
2006/2007	427	562.44	514	282.82
2007/2008	416	631.99	622	300.88
2008/2009	505	673.07	766	294.68
2009/2010	557	658.80	877	319.10
2010/2011	657	691.08	877	372.34
2011/2012	650	770.33	883	385.23
2012/2013	742	871.64	910	417.52
2013/2014	724	866.81	942	464.72
2014/2015	706	1,053.09	969	495.50
2015/2016	792	994.82	1,005	566.91
2016/2017	848	1,116.76	1,187	560.94
<b>Mean</b>	<b>639</b>	<b>808.26</b>	<b>869</b>	<b>405.51</b>
<b>Standard Deviation (S.D.)</b>	<b>145</b>	<b>185.65</b>	<b>183</b>	<b>104.51</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.2269</b>	<b>0.2297</b>	<b>0.2106</b>	<b>0.2577</b>

*Note: NABIL and NIBL, Annual Reports*

In regards with average per staff expenses of NABIL was 808.26 thousand but NIBL had 405.51 thousand. Its shows that NABIL had almost double expenses on per staff than that of NIBL. This means NIBL bank get manage to do far less expenses on its staffs than NABIL bank does. It's also means that NABIL bank staffs get far better salary and allowances than that of NIBL staffs.

The standard deviation of NABIL was 185.65 thousand and 104.51 thousand of NIBL. This means NIBL get less variance on distribution of salary and allowance to its every staffs than that of NABIL bank. On the other hand, NABIL bank got more variable on its staff expenses than NIBL.

The coefficient variance of NABIL was 0.2297 and NIBL was 0.2577. Beside NIBL got better on mean and standard deviation, NABIL bank got the per unit expenses better than that of NIBL bank.

**Table No 4.21**  
**Per Staff Net Returns**

(Amount in Thousands)

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	1,578.36	975.48
2007/2008	1,794.40	1,120.15
2008/2009	2,041.69	1,175.74
2009/2010	2,048.57	1,443.50
2010/2011	2,036.14	1,341.67
2011/2012	2,599.06	1,176.98
2012/2013	2,990.59	2,104.43
2013/2014	3,203.81	2,059.04
2014/2015	2,965.74	2,024.62
2015/2016	3,564.98	2,538.19
2016/2017	4,298.68	2,623.53
<b>Mean</b>	<b>2,647.46</b>	<b>1,689.39</b>
<b>Standard Deviation (S.D.)</b>	<b>840.79</b>	<b>596.31</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.3176</b>	<b>0.3530</b>

*Note: NABIL and NIBL, Annual Reports*

Table No 4.20 shows that NABIL had 2.65 million per staff net returns and NIBL had been 1.69 million. Its means NABIL had almost the double the per staff net returns than that of NIBL. It's also shows that NABIL bank been able to get higher returns with fewer the staff numbers, where as NIBL show there been overstaff on bank.

The standard deviation of NABIL and NIBL was 840.79 thousand and was 596.31 thousand respectively. Average mean been better at NABIL but it got the lots of instability on the variance. NIBL got more stable on per staff returns than NABIL.

The coefficient of variance for NABIL was 0.3176 and was 0.3530 for NIBL. NABIL had more standard deviation but it's got per units of staff returns were less variable than that of the NIBL bank.

**Table No 4.22**  
**Non-Performing Loan Ratio (NPLR)**

<b>F/Y</b>	<b>NABIL Bank</b>	<b>NIBL Bank</b>
2006/2007	1.12	2.37
2007/2008	0.74	1.12
2008/2009	0.80	0.58
2009/2010	1.48	0.62
2010/2011	1.77	0.94
2011/2012	2.33	3.32
2012/2013	2.13	1.91
2013/2014	2.23	1.77
2014/2015	1.82	1.25
2015/2016	1.14	0.68
2016/2017	0.80	0.83
<b>Mean</b>	<b>1.4873</b>	<b>1.3991</b>
<b>Standard Deviation (S.D.)</b>	<b>0.6020</b>	<b>0.8638</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.4048</b>	<b>0.6174</b>

*Note: NABIL and NIBL, Annual Reports*

Non-performing Loan is bad for the bank. It does directly affect the bank earning ability in quantity as well as quality. Its double affects the bank, the bank could not get the interest earning on its loan give to parties and even worse bank could not get back its initial investment amount as loan. So, bank must be very carefully about on allowing loans to interest pay ability parties.

Regarding the mean Non-Performing Loan Ratio of NABIL was 1.4873 and NIBL had 1.3991. Here NABIL had got the more NPL than NIBL.

The standard deviation of NABIL and NIBL was 0.6020 and 0.8638 respectively. As the average mean higher on NABIL, it's less variable than that of NIBL.

The coefficient of variance for NABIL was 0.4048 and 0.6174 for NIBL.

**Table No 4.23**  
**Total Weighted Risk Exposure of NABIL and NIBL**

(Amount in Millions)

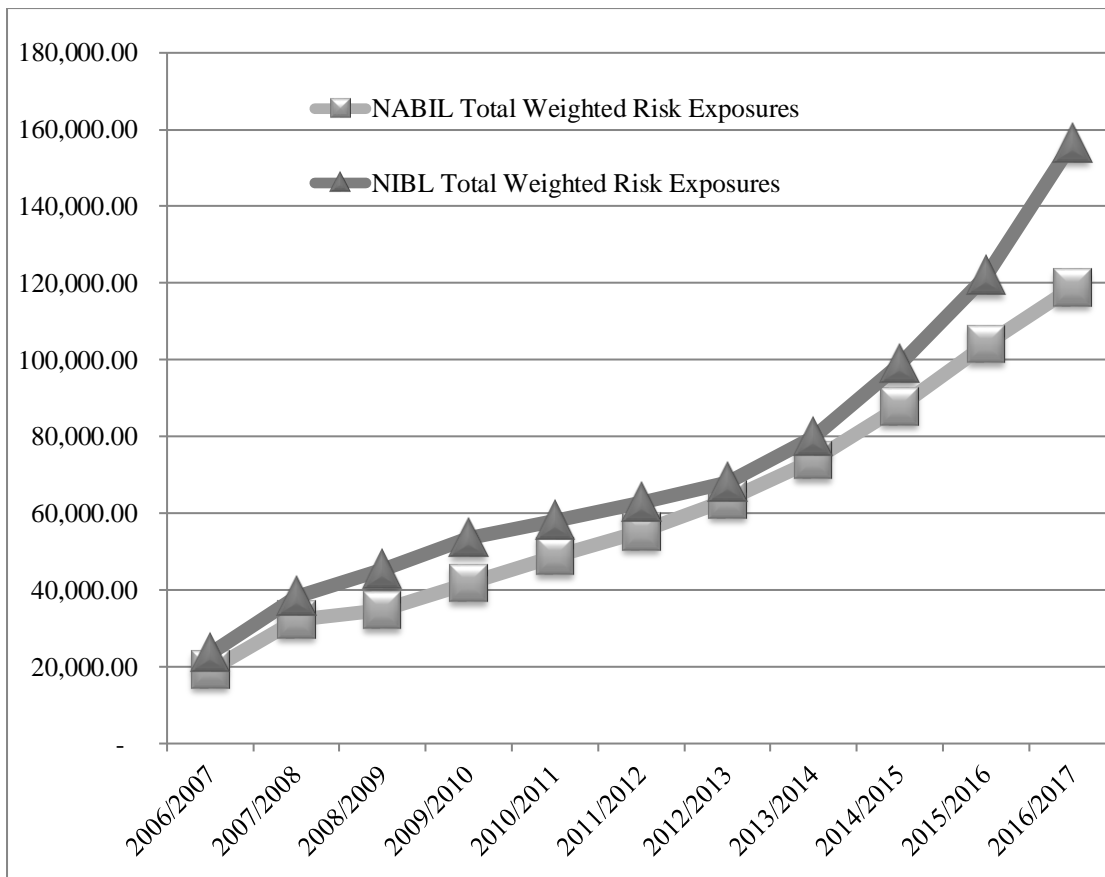
FY	Total Weighted Risk Exposures	
	NABIL	NIBL
2006/2007	19,166.77	23,435.63
2007/2008	32,329.94	38,236.77
2008/2009	34,816.40	45,312.27
2009/2010	41,822.66	53,553.87
2010/2011	48,884.97	57,993.93
2011/2012	55,273.32	62,704.17
2012/2013	63,537.64	67,995.23
2013/2014	73,854.24	79,776.91
2014/2015	87,766.26	98,745.83
2015/2016	104,039.64	121,867.35
2016/2017	118,827.90	156,448.46
<b>Mean</b>	<b>61,847.25</b>	<b>73,279.13</b>
<b>Standard Deviation (S.D.)</b>	<b>31,435.01</b>	<b>39,020.11</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.5083</b>	<b>0.5325</b>

*Note: NABIL and NIBL, Annual Reports*

Table No 4.22 shows that the average mean of total weighted risk exposures was 61.85 billion on NABIL bank and 73.28 billion on NIBL bank. This means NABIL bank got less average weighted risk than that of NIBL. The less risk is good for bank, so here NABIL bank had better position than that of the NIBL bank.

The standard Deviation of NABIL bank had 31.43 billion and NIBL bank had 39.02 billion. With the less average NABIL also got the less volatile on the weighted risk exposures than that of NIBL bank.

The Coefficient of Variance was 50.83 percent on NABIL bank and was 53.25 percent on NIBL bank.



**Figure No 4.8**

**Total Weighted Risk Exposures of NABIL and NIBL**

In the figure 4.8 shows that from start FY 2006/2007, NIBL bank got little more weighted risk exposures than that of NABIL bank, till FY 2010/2011. From the FY 2011/2012 to FY 2013/2014, both banks got almost same level of the weighted risk.

Then from FY 2014/2015, NIBL bank got the higher growth weighted risk than that of the NABIL bank till FY 2015/2016. On the FY 2016/2017 NIBL bank got straight high than that of NABIL bank.

Its shows that NIBL bank had been getting more and more weighted risk exposures by last fiscal year than that of NABIL. Its shows that NABIL bank had been able to manage to minimized the weighted risk exposures level better than NIBL bank.

**Table No 4.24**  
**Net Returns of NABIL and NIBL Bank**

(Amount in Millions)

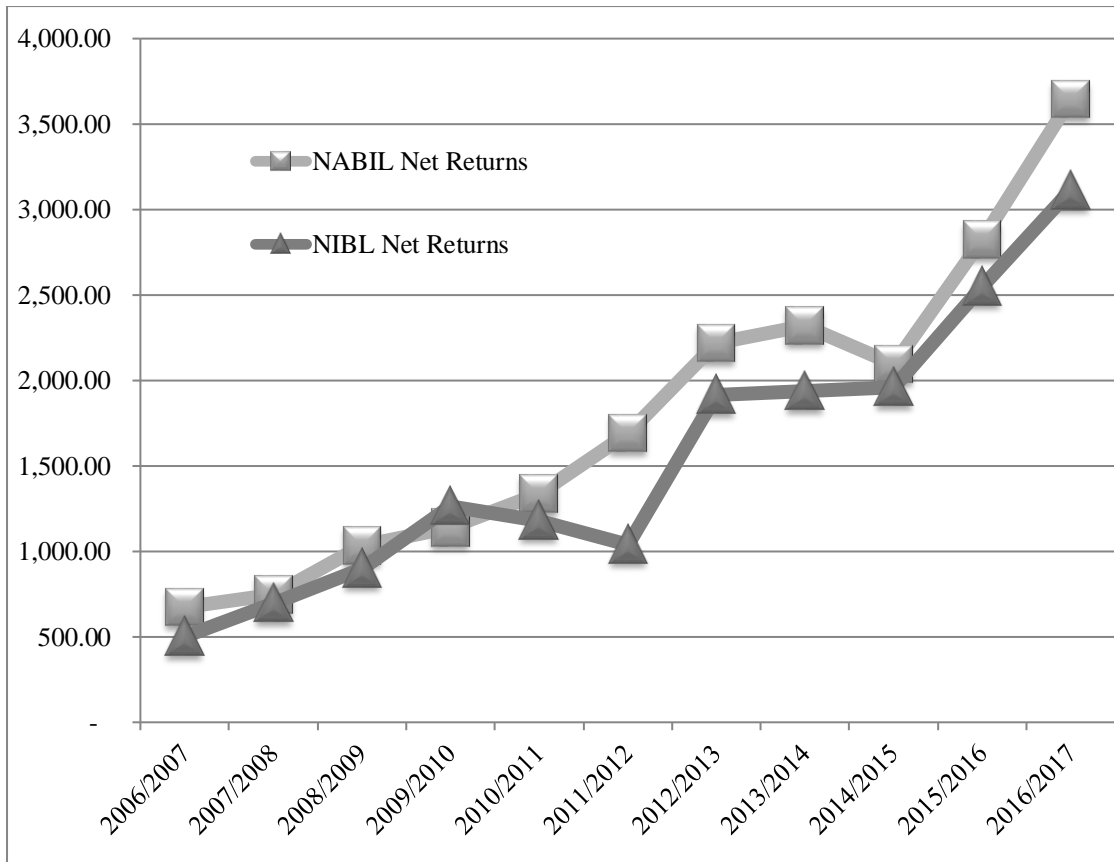
FY	Net Returns	
	NABIL	NIBL
2006/2007	673.96	501.40
2007/2008	746.47	696.73
2008/2009	1,031.05	900.62
2009/2010	1,141.05	1,265.95
2010/2011	1,337.75	1,176.64
2011/2012	1,689.39	1,039.28
2012/2013	2,219.02	1,915.03
2013/2014	2,319.56	1,939.61
2014/2015	2,093.81	1,961.85
2015/2016	2,823.46	2,550.88
2016/2017	3,645.28	3,114.13
<b>Mean</b>	<b>1,792.80</b>	<b>1,551.10</b>
<b>Standard Deviation (S.D.)</b>	<b>928.07</b>	<b>814.44</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.5177</b>	<b>0.5251</b>

*Note: NABIL and NIBL, Annual Reports*

Table No 4.23 shows that the average mean of net returns was 1.72 billion on NABIL bank and 1.55 billion on NIBL bank. This means NABIL bank got more average net returns than that of NIBL. The more returns is good for bank, so here NABIL bank had better position than that of the NIBL bank.

The standard Deviation of NABIL bank had 0.928 billion and NIBL bank had 0.814 billion. With the higher average net returns of NABIL, bank also got the more volatile on the net returns than that of NIBL bank.

The Coefficient of Variance was 51.77 percent on NABIL bank and was 52.51 percent on NIBL bank.



**Figure No 4.9**

**Net Returns of NABIL and NIBL**

In the figure 4.9 shows that from start FY 2006/2007, both NABIL and NIBL bank got growth on net returns almost at same level, till FY 2009/2010. From the FY 2010/2011 NABIL bank got straight higher growth on net income but NIBL bank got sharp decline in net profit for next two FY till 2011/2012, then NIBL also got sharp rise on net returns but less than NABIL.

Then from FY 2013/2014, both bank got steady growth till FY 2013/2014. Then on FY 2014/2015 a little drop on NABIL and almost same level of net returns at that FY both the bank.

Its shows that NIBL from FY 2014/2015, both bank got sharp growth on net return but NABIL bank, got much higher growth than that of NIBL bank.

**Table No 4.25****Correlation between Weighted Credit Risk (WCR) and Net Returns**

(Amount in thousands)

F/Y	NABIL Bank		NIBL Bank	
	WCR	Net Returns	WCR	Net Returns
2006/2007	17,937,617.97	673,959.70	22,382,495.37	501,398.85
2007/2008	30,256,652.35	746,468.39	36,518,503.00	696,731.52
2008/2009	32,500,502.29	1,031,053.10	42,975,192.00	900,619.07
2009/2010	39,016,206.02	1,141,051.43	50,041,481.00	1,265,949.59
2010/2011	44,468,804.90	1,337,745.49	52,029,461.00	1,176,641.03
2011/2012	50,021,684.14	1,689,391.85	55,874,347.00	1,039,275.61
2012/2013	57,191,503.22	2,219,017.70	60,622,076.00	1,915,027.93
2013/2014	66,294,544.69	2,319,557.47	71,708,512.00	1,939,612.34
2014/2015	78,774,890.31	2,093,813.61	89,584,665.00	1,961,852.38
2015/2016	91,993,791.22	2,823,461.04	111,780,681.00	2,550,883.56
2016/2017	105,621,541.36	3,645,279.95	144,429,063.00	3,114,131.14
<b>Mean</b>	<b>55,825,248.95</b>	<b>1,792,799.97</b>	<b>67,086,043.31</b>	<b>1,551,102.09</b>
<b>Standard Deviation (S.D.)</b>	<b>27,394,263.38</b>	<b>928,068.11</b>	<b>35,645,373.01</b>	<b>814,443.01</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.4907</b>	<b>0.5177</b>	<b>0.5313</b>	<b>0.5251</b>
<b>Correlation (r) between Weighted Credit Risk and Returns</b>	<b>0.9682</b>		<b>0.9618</b>	

*Note: NABIL and NIBL, Annual Reports*

Table No 21 shows that NABIL had 55.83 billion mean of Weighted Credit Risk (WCR) and NIBL had 67.09 billion. NABIL had less average WCR than that of NIBL. The mean of net profit for NABIL was 1.80 billion and 1.55 billion for NIBL.

The WCR standard deviation of NABIL was 27.39 billion and NIBL had 35.65 billion. There was large instability on WCR on NIBL than NABIL. The standard deviation of net profit for NABIL was 0.9280 billion and 0.8144 billion for NIBL.

The coefficient of variance of WRC for NABIL was 0.4907 and NIBL had 0.5313. The coefficient of variance of net returns for NABIL and NIBL was 0.5177 and 0.5251 percent respectively. The correlation of between WRC and Net Returns for NABIL was 0.9682 and 0.9618 for NIBL. Its shows both banks had strong positive and also same level of correlation between WCR and Net Returns.



**Table No 4.26****Correlation between Weighted Operation Risk (WOR) and Net Returns**

(Amount in thousands)

F/Y	NABIL Bank		NIBL Bank	
	WOR	Net Returns	WOR	Net Returns
2006/2007	1,199,613	673,959.70	912,125.91	501,398.85
2007/2008	2,023,471	746,468.39	1,488,193.00	696,731.52
2008/2009	2,264,234	1,031,053.10	1,941,891.00	900,619.07
2009/2010	2,706,731	1,141,051.43	2,517,313.00	1,265,949.59
2010/2011	3,383,194	1,337,745.49	3,271,148.00	1,176,641.03
2011/2012	4,088,675	1,689,391.85	3,860,762.00	1,039,275.61
2012/2013	5,011,134	2,219,017.70	4,328,860.00	1,915,027.93
2013/2014	5,902,880	2,319,557.47	4,929,887.00	1,939,612.34
2014/2015	6,896,370	2,093,813.61	5,577,086.00	1,961,852.38
2015/2016	7,265,401	2,823,461.04	6,141,048.00	2,550,883.56
2016/2017	7,798,939	3,645,279.95	6,894,047.00	3,114,131.14
<b>Mean</b>	<b>4,412,785.62</b>	<b>1,792,799.97</b>	<b>3,805,669.17</b>	<b>1,551,102.09</b>
<b>Standard Deviation</b>	<b>2,303,808.64</b>	<b>928,068.11</b>	<b>1,970,612.87</b>	<b>814,443.01</b>
<b>Coefficient of Variance</b>	<b>0.5221</b>	<b>0.5177</b>	<b>0.5178</b>	<b>0.5251</b>
<b>Correlation (r) between Weighted Operation Risk and Returns</b>	<b>0.9516</b>		<b>0.9524</b>	

Note: NABIL and NIBL, Annual Reports

With regards to the mean of Weighted Operation Risk (WOR), NABIL had 4.41 billion and NIBL had 3.80 billion. This means NABIL had the greater average WOR than that of NIBL. The mean of net profit for NABIL was 1.80 billion and NIBL had 1.55 billion.

The standard deviation of WOC for NABIL and NIBL was 2.30 billion and 1.97 billion respectively. Its shows NABIL had greater volatile on WOR than that of NIBL. The standard deviation of net profit for NABIL was 0.9280 billion and 0.8144 billion for NIBL.

The coefficient of variance of WOC for NABIL was 0.5221 and 0.5178 for NIBL. The correlation of between WOC and Net Returns for NABIL was 0.9516 but NIBL had 0.9524. Beside the variance on mean and standard deviation both bank had the strong positive and same level of correlation between WOC and Net Returns.

**Table No 4.27****Correlation between Weighted Market Risk (WMR) and Net Returns**

(Amount in thousands)

F/Y	NABIL Bank		NIBL Bank	
	WMR	Net Returns	WMR	Net Returns
2006/2007	29,536.00	673,959.70	141,013.05	501,398.85
2007/2008	49,820.00	746,468.39	230,072.00	696,731.52
2008/2009	51,765.00	1,031,053.10	395,182.00	900,619.07
2009/2010	99,723.00	1,141,051.43	464,836.00	1,265,949.59
2010/2011	74,441.00	1,337,745.49	453,961.00	1,176,641.03
2011/2012	79,167.00	1,689,391.85	590,285.00	1,039,275.61
2012/2013	89,170.00	2,219,017.70	451,258.00	1,915,027.93
2013/2014	208,693.00	2,319,557.47	796,170.00	1,939,612.34
2014/2015	374,093.00	2,093,813.61	430,390.00	1,961,852.38
2015/2016	344,106.00	2,823,461.04	328,313.00	2,550,883.56
2016/2017	290,251.00	3,645,279.95	447,659.00	3,114,131.14
<b>Mean</b>	<b>153,705.85</b>	<b>1,792,799.97</b>	<b>429,921.73</b>	<b>1,551,102.09</b>
<b>Standard Deviation</b>	<b>127,283.65</b>	<b>928,068.11</b>	<b>172,441.43</b>	<b>814,443.02</b>
<b>Coefficient of Variance</b>	<b>0.8281</b>	<b>0.5177</b>	<b>0.4041</b>	<b>0.5251</b>
<b>Correlation (r) between Weighted Market Risk and Returns</b>	<b>0.7799</b>		<b>0.3361</b>	

Note: NABIL and NIBL, Annual Reports

Table No 23 shows that NABIL had 153.71 million mean of Weighted Market Risk (WMR) where as was NIBL got 429.92 million. This means NIBL got larger average mean WMR than that of NABIL. It's almost more than twice and half greater mean of WMR on NIBL than NABIL.

NABIL had 127.28 million standard deviation of WMC but NIBL had 172.44 million. NABIL had more stability on WMC than that of NIBL.

The coefficient of variance of WMC for NABIL was 0.8281 and 0.4041 of NIBL. The correlation of between WMC and Net Returns for NABIL was 0.7799 and 0.3361 for NIBL. With the less average mean and less violence standard deviation, NABIL got the higher positive correlation between WMC and net returns. But with the higher average mean and more instability, NIBL got the lower positive correlation between WMC and net returns.

**Table No 4.28****Correlation between Weighted Total Risk (WTR) and Net Returns**

(Amount in thousands)

F/Y	NABIL Bank		NIBL Bank	
	WTR	Net Returns	WTR	Net Returns
2006/2007	19,166,766	673,959.70	23,435,634.33	501,398.85
2007/2008	32,329,944	746,468.39	38,236,768.00	696,731.52
2008/2009	34,816,401	1,031,053.10	45,312,265.00	900,619.07
2009/2010	41,822,660	1,141,051.43	53,553,866.00	1,265,949.59
2010/2011	48,884,969	1,337,745.49	57,993,926.00	1,176,641.03
2011/2012	55,273,316	1,689,391.85	62,704,174.00	1,039,275.61
2012/2013	63,537,644	2,219,017.70	67,995,228.00	1,915,027.93
2013/2014	73,854,239	2,319,557.47	79,776,912.00	1,939,612.34
2014/2015	87,766,261	2,093,813.61	98,745,831.00	1,961,852.38
2015/2016	104,039,643	2,823,461.04	121,867,349.00	2,550,883.56
2016/2017	118,827,902	3,645,279.95	156,448,460.00	3,114,131.14
<b>Mean</b>	<b>61,847,249.58</b>	<b>1,792,799.97</b>	<b>73,279,128.48</b>	<b>1,551,102.09</b>
<b>Standard Deviation</b>	<b>31,435,006.80</b>	<b>928,068.11</b>	<b>39,020,105.15</b>	<b>814,443.01</b>
<b>Coefficient of Variance</b>	<b>0.5083</b>	<b>0.5177</b>	<b>0.5325</b>	<b>0.5251</b>
<b>Correlation (r) between Weighted Total Risk and Net Returns</b>	<b>0.9692</b>		<b>0.9656</b>	

Note: NABIL and NIBL, Annual Reports

Regarding the mean of Weighted Total Risk (WTR), NABIL was 61.85 billion and NIBL had 73.28 billion. The mean of net profit for NABIL was 1.80 billion and NIBL was 1.55 billion. There are more average mean WTR and net returns on NABIL than that of NIBL.

The standard deviation of WTR for NABIL was 31.44 billion and 39.02 billion for NIBL. The standard deviation of net profit for NABIL was 0.9280 billion and 0.8144 billion for NIBL. NABIL got less violence on WTR but higher instability on net returns than that of NIBL.

Beside average mean and standard deviation differ, both bank got the higher positive correlation of between WTR and Net Returns of NABIL was 0.9692 and 0.9656 of NIBL respectively. Both bank got the almost same level correlation.

**Table No 4.29**  
**Correlation between Equity and Net Returns**

(Amount in thousands)

F/Y	NABIL Bank		NIBL Bank	
	Equity	Net Returns	Equity	Net Returns
2006/2007	491,654.40	673,959.70	801,352.60	501,398.85
2007/2008	689,216.00	746,468.39	1,203,915.40	696,731.52
2008/2009	1,448,620.50	1,031,053.10	2,407,068.90	900,619.07
2009/2010	2,028,773.60	1,141,051.43	2,409,097.70	1,265,949.59
2010/2011	2,029,769.40	1,337,745.49	3,011,372.13	1,176,641.03
2011/2012	2,435,723.28	1,689,391.85	3,766,155.25	1,039,275.61
2012/2013	3,046,051.75	2,219,017.70	4,144,808.47	1,915,027.93
2013/2014	3,656,602.08	2,319,557.47	4,768,713.63	1,939,612.34
2014/2015	4,754,950.20	2,093,813.61	6,345,700.66	1,961,852.38
2015/2016	6,185,507.00	2,823,461.04	8,706,611.76	2,550,883.56
2016/2017	8,041,159.10	3,645,279.95	11,626,435.70	3,114,131.14
<b>Mean</b>	<b>3,164,366.12</b>	<b>1,792,799.97</b>	<b>4,471,930.20</b>	<b>1,551,102.09</b>
<b>Standard Deviation</b>	<b>2,345,591.48</b>	<b>928,068.11</b>	<b>3,288,296.22</b>	<b>814,443.01</b>
<b>Coefficient of Variance</b>	<b>0.7413</b>	<b>0.5177</b>	<b>0.7353</b>	<b>0.5251</b>
<b>Correlation (r) between Equity and Net Returns</b>	<b>0.9672</b>		<b>0.9584</b>	

*Note: NABIL and NIBL, Annual Reports*

Regarding the mean of Equity, NABIL was 3.164 billion and NIBL had 4.471 billion. This shows that average mean on equity was greater on NIBL than that of NABIL. The average mean on net profit for NABIL was 1.80 billion which was greater than NIBL, which had 1.55 billion.

The standard deviation of Equity for NABIL was 2.35 billion and 3.29 billion for NIBL. It means NABIL got least variance on equity than NIBL. The standard deviation of net profit for NABIL was 0.9280 billion, which was greater than that of 0.8144 billion for NIBL.

The coefficient of variance of Equity for NABIL was 0.7413 and 0.7353 for NIBL. The coefficient of variance of net returns for NABIL and NIBL was 0.5177 and 0.5251 respectively. The correlation of between Equity and Net Returns of NABIL was 0.9672 and 0.9584 of NIBL. Both banks had strong positive correlation.

**Table No 4.30**  
**Correlation between Assets and Net Returns**

(Amount in thousands)

F/Y	NABIL Bank		NIBL Bank	
	Assets	Net Returns	Assets	Net Returns
2006/2007	27,253,393	673,959.70	27,590,845	501,398.85
2007/2008	37,132,759	746,468.39	38,873,306	696,731.52
2008/2009	43,867,398	1,031,053.10	53,010,803	900,619.07
2009/2010	52,151,687	1,141,051.43	57,305,413	1,265,949.59
2010/2011	58,141,437	1,337,745.49	58,356,828	1,176,641.03
2011/2012	63,193,414	1,689,391.85	65,756,232	1,039,275.61
2012/2013	73,241,448	2,219,017.70	73,152,155	1,915,027.93
2013/2014	87,274,546	2,319,557.47	86,173,928	1,939,612.34
2014/2015	115,986,529	2,093,813.61	104,345,436	1,961,852.38
2015/2016	127,619,659	2,823,461.04	129,782,705	2,550,883.56
2016/2017	140,697,262	3,645,279.95	150,818,034	3,114,131.14
<b>Mean</b>	<b>75,141,775.69</b>	<b>1,792,799.97</b>	<b>76,833,244.05</b>	<b>1,551,102.09</b>
<b>Standard Deviation</b>	<b>38,140,460.95</b>	<b>928,068.11</b>	<b>37,965,520.99</b>	<b>814,443.01</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.5076</b>	<b>0.5177</b>	<b>0.4711</b>	<b>0.5251</b>
<b>Correlation (r) between Assets and Net Returns</b>	<b>0.9451</b>		<b>0.9700</b>	

*Note: NABIL and NIBL, Annual Reports*

Regarding the mean of Assets, NABIL was 75.14 billion and NIBL had 76.83 billion. This means that the average mean of assets was almost same on both banks. The mean of net profit for NABIL was 1.80 billion and NIBL was 1.55 billion.

The standard deviation of Assets for NABIL was 38.14 billion and 37.97 billion for NIBL. The deviation was also almost same on the both banks. The standard deviation of net profit for NABIL was 0.9280 billion and 0.8144 billion for NIBL. The coefficient of variance of Assets for NABIL was 0.5076 and 0.4711 for NIBL. C.V. was little higher on NABIL than NIBL.

The coefficient of variance of net returns for NABIL and NIBL was 0.5177 and 0.5251 respectively. The correlation of between Assets and Net Returns of NABIL was 0.9451 and 0.9700 of NIBL. Beside both banks got the average mean and standard deviation on same level, the correlation between assets and net returns had little more highly positive on NIBL than that of NABIL.

**Table No 4.31**  
**Correlation between ROE and CAR**

F/Y	NABIL Bank		NIBL Bank	
	ROE	CAR	ROE	CAR
2006/2007	0.3276	0.1204	0.2670	0.1217
2007/2008	0.3063	0.0918	0.2593	0.1018
2008/2009	0.3294	0.1070	0.2305	0.1124
2009/2010	0.2974	0.1050	0.2761	0.1055
2010/2011	0.2929	0.1058	0.2280	0.1091
2011/2012	0.3103	0.1101	0.1718	0.1110
2012/2013	0.3316	0.1159	0.2728	0.1149
2013/2014	0.3036	0.1124	0.2447	0.1127
2014/2015	0.2207	0.1157	0.2000	0.1190
2015/2016	0.2426	0.1173	0.1566	0.1492
2016/2017	0.2572	0.1242	0.1580	0.1302
<b>Mean</b>	<b>0.2927</b>	<b>0.1114</b>	<b>0.2241</b>	<b>0.1171</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0370</b>	<b>0.0089</b>	<b>0.0457</b>	<b>0.0132</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1263</b>	<b>0.0800</b>	<b>0.2039</b>	<b>0.1128</b>
<b>Correlation (r) between ROE and CAR</b>	<b>-0.3146</b>		<b>-0.6575</b>	

*Note: NABIL and NIBL, Annual Reports*

Regarding the mean of ROE, NABIL was 0.2927 and NIBL had 0.2241. NABIL got the higher mean of ROE than that of NIBL. The mean of CAR for NABIL was 0.1114 and NIBL was 0.1171. Both banks got the CAR at same level, as it was strictly monitor by Nepal Rastra Bank (NRB), central bank of Nepal.

The standard deviation of ROE for NABIL was 0.0370 and 0.0457 for NIBL. With more average NABIL bank got more stability on ROE than that of NIBL. Beside almost same level of CAR, the standard deviation of CAR for NABIL was 0.0089 which was less than 0.0132 of NIBL. The coefficient of variance of ROE for NABIL was 0.4840 and 0.4711 for NIBL. The coefficient of variance of CAR for NABIL and NIBL was 0.0800 and 0.1128 respectively.

The correlation of between ROE and CAR of NABIL was negative 0.3146 and also negative 0.6575 of NIBL. This show that NABIL got least negative correlation comparing to NIBL which had more negative correlation between ROE and CAR.

**Table No 4.32**  
**Correlation between ROA and CAR**

F/Y	NABIL Bank		NIBL Bank	
	ROA	CAR	ROA	CAR
2006/2007	0.0247	0.1204	0.0182	0.1217
2007/2008	0.0201	0.0918	0.0179	0.1018
2008/2009	0.0235	0.1070	0.0170	0.1124
2009/2010	0.0219	0.1050	0.0221	0.1055
2010/2011	0.0230	0.1058	0.0202	0.1091
2011/2012	0.0267	0.1101	0.0158	0.1110
2012/2013	0.0303	0.1159	0.0262	0.1149
2013/2014	0.0266	0.1124	0.0225	0.1127
2014/2015	0.0181	0.1157	0.0188	0.1190
2015/2016	0.0221	0.1173	0.0197	0.1492
2016/2017	0.0259	0.1242	0.0206	0.1302
<b>Mean</b>	<b>0.0239</b>	<b>0.1114</b>	<b>0.0199</b>	<b>0.1171</b>
<b>Standard Deviation (S.D.)</b>	<b>0.0034</b>	<b>0.0089</b>	<b>0.0029</b>	<b>0.0132</b>
<b>Coefficient of Variance (C.V.)</b>	<b>0.1435</b>	<b>0.0800</b>	<b>0.1465</b>	<b>0.1128</b>
<b>Correlation (r) between ROA and CAR</b>	<b>0.3906</b>		<b>0.0205</b>	

*Note: NABIL and NIBL, Annual Reports*

Regarding the mean of ROA, NABIL was 0.0239 and NIBL had 0.0199. This means NABIL got the higher average mean on ROA than that of NIBL. The mean of CAR for NABIL was 0.1114 and NIBL was 0.1171.

The standard deviation of ROA for NABIL was 0.0034 and 0.0029 for NIBL. NABIL got the more variance than that of NIBL on ROA. The standard deviation of CAR for NABIL was 0.0089 and 0.0132 for NIBL.

The coefficient of variance of ROA got almost same level on both banks, for NABIL 0.1435 and 0.1465 for NIBL. The coefficient of variance of CAR for NABIL and NIBL was 0.0800 and 0.1128 respectively.

The correlation of between ROA and CAR of NABIL was 0.3906 and 0.0205 of NIBL. NABIL got the more positive correlation on comparison of NIBL, which got lower positive correlation.

### Trend Analysis of Returns of NABIL and NIBL Bank

Let, the trend line between dependent variable (here total Returns = Y) and independent variable or time as fiscal years (X) be represented by,

$$Y = a + bx$$

$$Y = 1,792.80 + 269.01x \text{ (NABIL Bank)}$$

$$Y = 1,551.10 + 234.09x \text{ (NIBL Bank)}$$

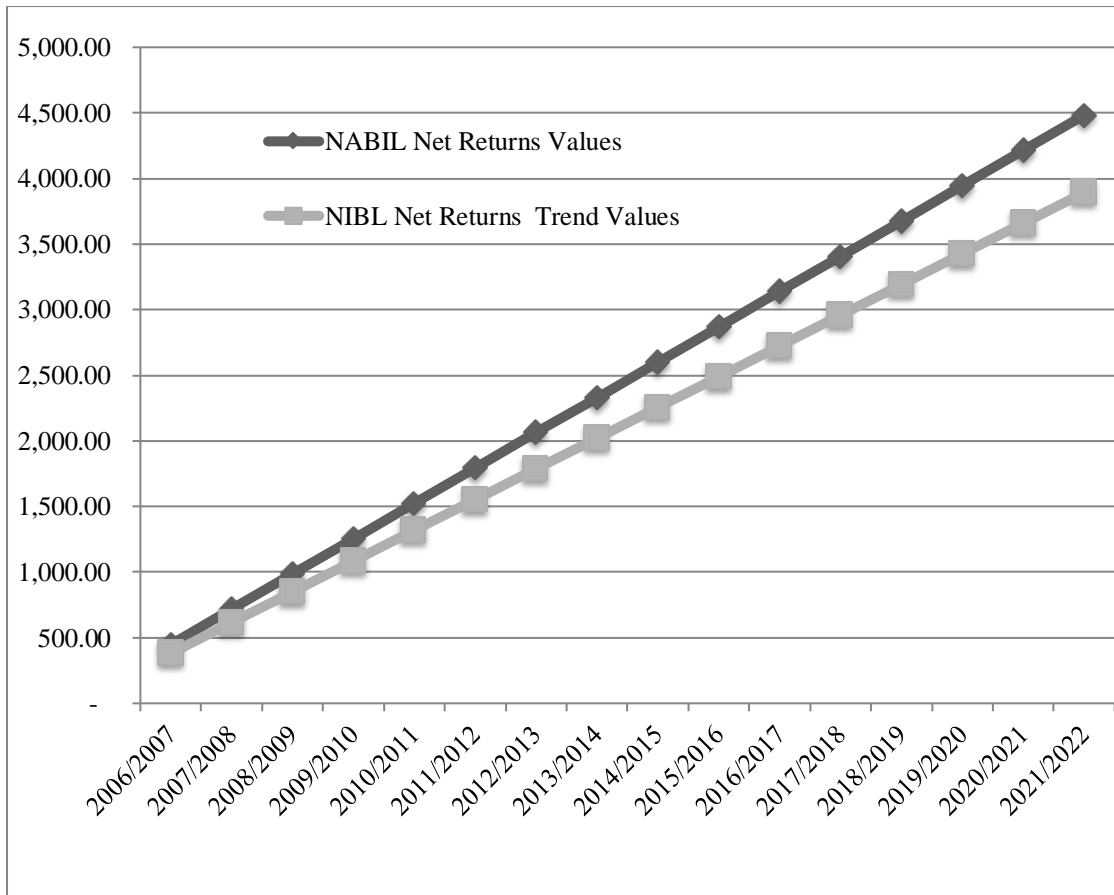
**Table No. 4.33**  
**Trend Analysis of Returns of NABIL and NIBL Bank**

(Amount in Millions)

Year	NABIL		NIBL	
	Net Returns	Trend Values	Net Returns	Trend Values
2006/2007	673.96	447.75	501.40	380.66
2007/2008	746.47	716.76	696.73	614.75
2008/2009	1,031.05	985.77	900.62	848.84
2009/2010	1,141.05	1,254.78	1,265.95	1,082.93
2010/2011	1,337.75	1,523.79	1,176.64	1,317.01
2011/2012	1,689.39	1,792.80	1,039.28	1,551.10
2012/2013	2,219.02	2,061.81	1,915.03	1,785.19
2013/2014	2,319.56	2,330.82	1,939.61	2,019.28
2014/2015	2,093.81	2,599.83	1,961.85	2,253.37
2015/2016	2,823.46	2,868.84	2,550.88	2,487.45
2016/2017	3,645.28	3,137.85	3,114.13	2,721.54
2017/2018		3,406.86		2,955.63
2018/2019		3,675.87		3,189.72
2019/2020		3,944.88		3,423.81
2020/2021		4,213.89		3,657.89
2021/2022		4,482.90		3,891.98

Table no 4.33 shows the actual and trend values of net returns of the both bank. And it's also projected for the next five years of net returns of the two banks. Its show that the net returns being increasing on both bank, but NABIL bank getting the growth at the higher level than that compare to the NIBL bank.





**Figure No 4.10**

**NABIL and NIBL Bank Net Returns and Trend Values**

Figure no. 4.10 shows that at begin of FY 2006/2007, both banks had almost same level of net returns. But as FY pass by the net return had been growth on both banks and the growth gab between these two banks had been increased continuously. Its shows that the growth on NIBL had been growing higher level than that of NABIL bank.

The trend line also shows that the forecast for next five years, from FY 2017/2018 to 2021/2022, NIBL bank got the higher net returns growth than that of NABIL. It seems that NABIL bank will be able to maximize the total the net returns as compare to NIBL bank.

### Trend Analysis of Weighted Risk Exposures of NABIL and NIBL Bank

Let, the trend line between dependent variable (here Y = total Weighted Risk Exposure) and independent variable or time as fiscal year (X) be represented by,

$$Y = a + bx$$

$$Y = 61,847.25 + 9,297.36x \text{ (NABIL Bank)}$$

$$Y = 73,279.13 + 11,112.13x \text{ (NIBL Bank)}$$

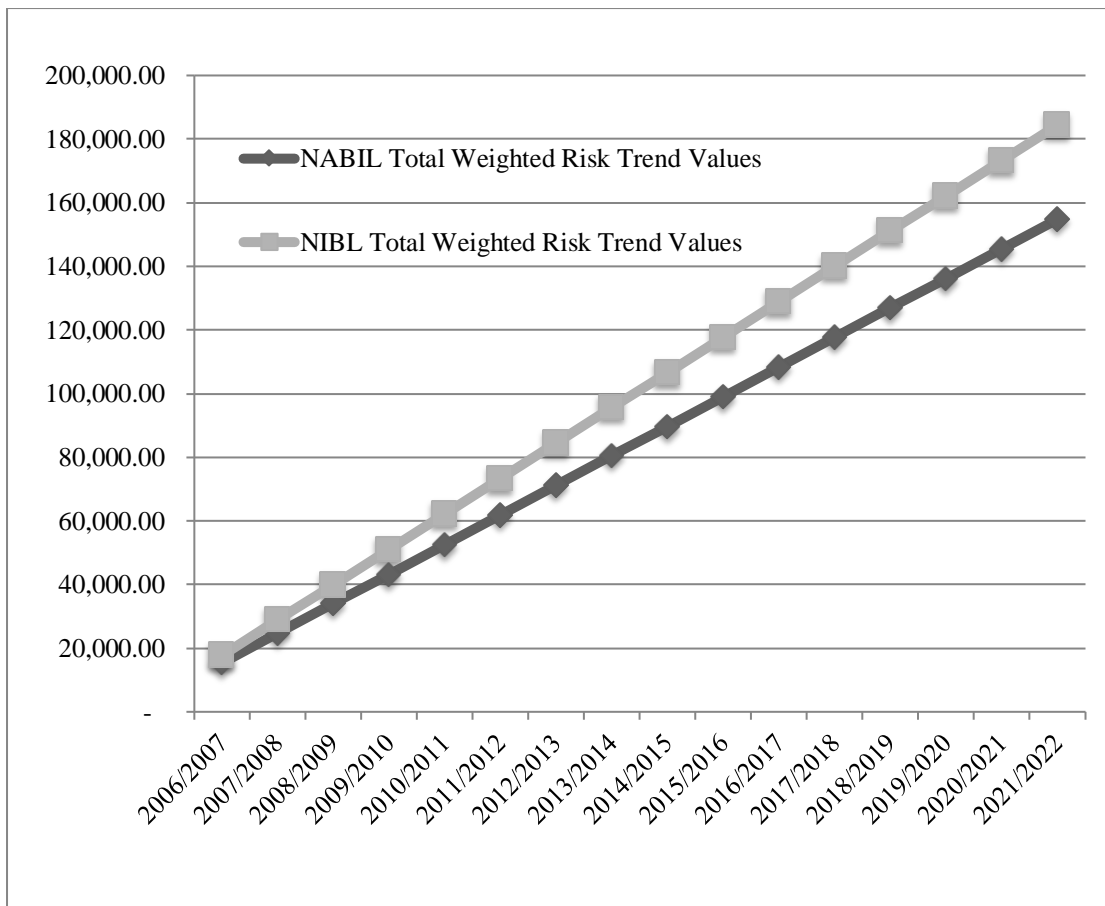
**Table No. 4.34**

### Trend Analysis of Total Weighted Risk Exposures of NABIL and NIBL Bank

(Amount in Millions)

FY	NABIL		NIBL	
	TWR	Trend Values	TWR	Trend Values
2006/2007	19,166.77	15,360.44	23,435.63	17,718.47
2007/2008	32,329.94	24,657.80	38,236.77	28,830.60
2008/2009	34,816.40	33,955.16	45,312.27	39,942.73
2009/2010	41,822.66	43,252.52	53,553.87	51,054.86
2010/2011	48,884.97	52,549.89	57,993.93	62,167.00
2011/2012	55,273.32	61,847.25	62,704.17	73,279.13
2012/2013	63,537.64	71,144.61	67,995.23	84,391.26
2013/2014	73,854.24	80,441.97	79,776.91	95,503.39
2014/2015	87,766.26	89,739.34	98,745.83	106,615.53
2015/2016	104,039.64	99,036.70	121,867.35	117,727.66
2016/2017	118,827.90	108,334.06	156,448.46	128,839.79
2017/2018		117,631.43		139,951.92
2018/2019		126,928.79		151,064.05
2019/2020		136,226.15		162,176.19
2020/2021		145,523.51		173,288.32
2021/2022		154,820.88		184,400.45

Table no 4.34 shows the actual and trend values of total weighted risk of the both bank. And it's also projected for the next five years of TWR of the two banks. Its show that the risk being increasing on both bank but NIBL bank, getting the growth at the higher level than that compare to the NABIL bank.



**Figure No 4. 11**

**NABIL and NIBL Bank Total Weighted Risk Exposures and Trend Value**

Figure no. 4.11 shows that at begin of FY 2006/2007, both banks had almost same level of total weighted risk. But as FY pass by the TWR had been growth on both banks and the growth gab between these two banks had been increased continuously. Its shows that the growth on NIBL had been growing higher level than that of NABIL bank.

The trend line also shows that the forecast for next five years, from FY 2017/2018 to 2021/2022, NIBL bank got the higher total weighted risk growth than that of NABIL. It seems that NABIL bank will be able to minimize the total weighted risk as compare to NIBL bank.

## **CHAPTER V**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This Chapter is concerned with summary of the finding, conclusion and recommendations along with implication of the study.

#### **5.1 Summary**

Bank is a business, which is established to safeguard people's money and uses it to make loans and investment. Bank plays significant role in the development of the country. A bank is an institution, which not only accepts deposits from general public but also advances loans in turn to the needed peoples. In modern economy, all the economic and monetary activities depend on banking transaction so even the country's government is trying to establish different types of bank such as Commercial Bank, Agricultural Bank, Industrial Bank, Development Bank, Merchant Bank, Saving Bank, Export / Import Bank, Co-operative Bank. Analysis of the risk and return is very important of the investment activities, which can be examined through the various ways. Current owners, potential investors, employees, creditors, government, customers are analyze the risk and return for their own interest.

The research work entitled the comparative study on returns and weighted risk exposures of commercial banks include the following banks:-

- a. NABIL Bank
- b. Nepal Investment Bank

The research works should have reached the destiny where we satisfy with the queries of research problems which were specified in the statement of the problem in the introductory chapter. To conduct the research work, the researcher consulted mainly the secondary source such as document published the Annual Financial Report in each fiscal year by concerned banks. Before presenting and analyzing the data, there was also need to review of related books, prior research on the topic. Obviously, it helped

the researcher to construct conceptual framework and to analyze and interpret the secondary data according to objective set forth previously. Then the research work analyzed and interpreted by financial tools such as returns on equity, returns on assets, as well as statistical tools such as mean, standard deviation, coefficient of variance, correlation between two variables and regression analysis. The research used software IBM SPSS Statistical 20 and Microsoft Excel to get the calculation.

In this way the researcher analyzed and presented in the 4<sup>th</sup> chapter, which was the main body of the research work. On the basis of the data analysis and presentation, research extracted some major findings. It has been explained along with the data analysis and presentation. So, on the basis of major findings the researcher reached in the conclusions keeping in the previously set objectives in mind. Ultimately, the researcher will recommend on the research problem to its stakeholders.

## **5.2 Conclusions**

The aim of the study was to compare returns and risk weighted exposures. And to assess the relationship between risks weighted exposures and returns between two studied banks in Nepal. The study sought to establish impact of weighted credit risk, weighted operational risk and weighted market risk to return on equity and return on asset. Finding from the result shows that weighted total risk exposures is a significant predictor of bank financial performance as measure by return on equity and asset hence attainment of two studied bank performance depends on how risk are managed.. The findings from the two studied bank showed that higher the weighted risks higher the returns in all fiscal years. Commercial banks are thus recommended to establish sound and competent risk management units which are run by best practices in risk management such as the institution of a clear loan policy and the adherence to underwriting authority and limits. The study also revealed that commercial banks with higher capital adequacy ratio can better advance more loans and absorb credit losses whenever they crop up and therefore record better profitability.

This study showed that average Return on the Equity (ROE) of the NABIL bank was higher than that of NIBL Bank (73.40>42.42) where as average Return on the Assets (ROA) of the NABIL had higher 2.21 percent than NIBL had 1.97 percent.

The Standard Deviation of ROE on NABIL was 8.59 percent but NIBL had 3.64 percent which show that the variation was greater on the NABIL than NIBL. This study showed that NABIL Bank had the high degree of variance than that of NIBL Bank on ROA also.

The average of the returns on Weighted Credit Risk Exposes was 3.18 percent on NABIL and 2.32 percent on NIBL.

This study showed that Average of the Returns on Weighted Market Risk Exposes was 15.83 percent on NABIL and 3.49 percent on NIBL which shows that NABIL bank had more variance than NIBL. NABIL bank (2.90 percent) had more variance on Returns on Total Weighted Risk Exposes than that of NIBL bank (2.12 percent).

Regarding the mean Non-Performing Loan Ratio of NABIL was 1.4873 and NIBL had 1.3991. NABIL had 55.83 billion mean of Weighted Credit Risk (WCR) and NIBL had 67.09 billion. The mean of net profit for NABIL was 1.80 billion and 1.55 billion for NIBL.

The WCR standard deviation of NABIL was 27.39 billion and NIBL had 35.65 billion. The coefficient of variance of WCR for NABIL was 0.4907 and NIBL had 0.5313.

The coefficient of variance of net returns for NABIL and NIBL was 0.5177 and 0.5251 percent respectively. The correlation of between WRC and Net Returns for NABIL was 0.9682 and 0.9618 for NIBL

With regards to the mean of Weighted Operation Risk (WOR), NABIL had 4.41 billion and NIBL had 3.80 billion. The standard deviation of WOC for NABIL and NIBL was 2.30 billion and 1.97 billion respectively. The correlation of between WOC and Net Returns for NABIL was 0.9516 but NIBL had 0.9524.

NABIL had 153.71 million mean of Weighted Market Risk (WMR) where as NIBL got 429.92 million. NABIL had higher standard deviation of WMC as compare to NIBL. The coefficient of variance of WMC for NABIL was 0.8281 and 0.4041 of NIBL. The correlation of between WMC and Net Returns for NABIL was 0.7799 and 0.3361 for NIBL.

Regarding the mean of Weighted Total Risk (WTR), NABIL was 61.85 billion and NIBL had 73.28 billion. The correlation of between WTR and Net Returns of NABIL was 0.9692 and 0.9656 of NIBL. The mean of Equity on NABIL was 3.164 billion and NIBL had 4.471 billion. The correlation of between Equity and Net Returns of NABIL was 0.9672 and 0.9584 of NIBL.

Regarding the mean of Assets, NABIL was 75.14 billion and NIBL had 76.83 billion. The mean of net profit for NABIL was 1.80 billion and NIBL was 1.55 billion. The standard deviation of Assets for NABIL had higher than NIBL. The correlation of between Assets and Net Returns of NABIL was 0.9451 and 0.9700 of NIBL.

The mean of CAR for NABIL was 0.114 and NIBL was 0.1171. NABIL had 0.0239 mean of ROA whereas NIBL had 0.0199. The correlation of between ROA and CAR of NABIL was 0.3906 and 0.0205 of NIBL.

Both studied banks NABIL and NIBL had negative correlation of between Assets and Net Returns. The standard deviation of Return on TWR for NABIL was 0.3928 and 0.3171 for NIBL.

### **5.3 Recommendations**

On the basis of analysis and findings of the study, the following recommendations have been made as suggestions to reduce the risk (weighted risk exposures) and maximize the net returns:

- Banks should establish credit policies and standards that conform to regulatory requirements and the bank's overall objectives to further reduce the level of their credit risk exposure.
- The study suggests that a further study should be done on the impact of credit risk management on profitability of the studied banks by taking additional variables as credit risk management is highly determine how banks can be profitable with the risk amount they took to do the business.
- There is also need for banks to adopt sound corporate governance practices, manage their risks in an integrated approach, focus on core banking activities and adhere to prudential banking practices.
- Banks have an idea of the level of risk that one needs to bear while investing its funds. The highest risk of the studied banks is in credit risk. Thus, it recommended that the studied banks should minimize the credit risk to achieve high return.
- Return on total assets and return on investment of the studied banks are not satisfactory position, so the banks should give more emphasis on better utilize assets to increase the return by reducing the portion of idle assets.



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Website of the banks

<http://www.nabil.com.np> (NABIL Bank)

<http://www.nibl.com.np> (NIBL Bank)

<http://www.nrb.org.np> (Nepal Rastra Bank)