CHAPTER I

INTRODUCTION

1.1 Background of the Study

For the all-round development of the country, each and every sector must be developed properly. Among various sectors, capital market plays a vital role for the development of every country. Till this report writing, the process of settlement of peace process is going on in a republic country Nepal with a congenial economic environment and the onus lies in us to utilize this opportunity for the development of country, if succeeded this will be the milestone in the page of history.

Capital market is the market meant for long-term securities issued by the government or Private Corporation. Capital market typically involves financial assets (stocks, bonds) that have life span of greater than one year. Capital market helps the economy of the country to rise up. But, Nepal's capital market is very lean in providing investment alternatives to the investors. Among possible various investment alternatives like common stocks, government bonds, corporate bonds, preference shares, rights, options, warrant and convertibles etc., only very few alternatives are available for Nepalese investors.

Equity financing is inevitable sources of financing but it may not be profitable fully depending on it as the only source of financing. There floats a belief in financial world that there lies an optimum combination of equity and debt financing which helps to reduce weighted average cost of capital ultimately helping in maximization of shareholders wealth. Thus, debt financing is another economical source of long-term financing having multiple benefits. Funds required for expanding business as well as conducting long-term project can be financed cheaply and easily by issuing corporate bond/debenture securities (Brigham, E. F. and Houston J. F. 2001).

Debt securities are the important types of financial instruments of the capital market of any nation. These are the securities which provide fixed income (interest) to the holders till maturity period and the face value at the maturity period. Debt securities involve lower risk than the securities (common stock) that yield variable income. In case of the liquidation of the company debt holders are paid first than the common stock holders. Debt holders have the first right to claim on earnings before interest and tax than the shareholders. Generally, risk averter investor want to invest in debenture. Debt securities are of many types such as-secured or unsecured, perpetual or redeemable, convertible or non-convertible. The company can enjoy the tax benefit due to the interest paid in the debt (Brealey, R. A. and Myers, S. C. 2000).

Nepalese capital market as well as debt market has not reached its maturity stage. There is not proper exercise of debt-securities till now and its history is also very short. For the growth and development of Nepalese debt market, development of government debt securities market as well as corporate bond or debenture securities markets is felt very necessary.

Like government debt instruments are issued by government, corporate bond/debenture is issued by a private firm business enterprise whether owned by private investors or by a government. Corporate bond have high default risk while government securities are considered to be risk-free instruments since no one can imagine government going bankrupt. Unsecured bond of a corporation are known as debentures. Investors look to the earning power of the corporation and their security. Debenture holders are protected by the restriction imposed in the indenture. Debenture issue is more suitable for profit oriented institutions for taking leverage effects benefit. Debenture is a tool of maximizing share holder's rate of return. Debt financing as well as equity financing is used in supply of long-term capital (Adhikari, N. K. and Shrestha, P. 2006).

In order to develop corporate bond/debenture market in Nepal, the main contributors are as follows: Security Board of Nepal (SEBON), Commercial Banks, Nepal Rastra Bank (NRB), Finance Companies, Private Organizations, Government, Nepal Stock Exchange Ltd. (NEPSE), Brokers, Investors, market-makers and concerned bodies etc. For the growth of bond market of any country requires: systematic development in industrial sector, development in share market, positive attitude of general public as well as institutional investors, adequate rules and regulation system, availability of secondary market of debentures, cooperative response of control mechanism, and adequate infrastructure facilities etc. Development and growth of corporate debenture securities market is essential for the rapid economic growth of country like Nepal. But, the pace of growth and development of Nepalese corporate bond/debenture securities market has faced many problems. Thus, these problems should be better recognized and competitive strength of Nepalese corporate debt market should be developed to cope with the existing problems and forecasted problems.

This study focuses on the issues of bonds in the past decades and also the recent issues such as bond issued by Nepal investment bank, Nabil bank, Laxmi bank and Siddhartha bank. So, higher focus has been given by this study on Nepalese corporate bond/debentures market as well as the government bond market.

1.2 Statement of the Problem

Debt securities are assumed least risky securities of investment. There is fixed regular interest income in such securities and very few chances of losing principal and interest even in liquidation of company. Funds required in the process of industrial expansion and growth can be received from issuing debt securities. Government and other local authorities also can receive fund required in development of country and local community. So, it is important types of securities, but Nepalese debt securities market is not being able to grow significantly. Even having so many opportunities, only few concerns arises on it, due to which there may be lack of information about the debt securities market to the investors and even to the issuing agencies. So it is necessary to study about debt securities market. This study is mainly related to debt securities market of Nepal.

Nepalese economy is at underdeveloped stage. There is lack of appropriate investment opportunities, due to which investor can not found suitable sector to invest their funds. On the other side, debt securities are appropriate investment sector to the potential investor. But the investors have not given much concerned towards debt securities. Most of the government securities are hold by institutional investors rather than individual investors.

The investor who invest in debt securities and the deposit holders who make deposit at commercial bank are the same group of people; both of them get fixed income (i.e. interest). While studying trend of average interest rate on deposit of commercial banks, it is gradually decreasing, but the potential savers are not so interested towards debt securities.

In corporate sector, there is only few issuance of debenture. In each issuance, there is over subscription. It may be, due to few issuances or public concern towards debt securities market is increasing. Anyway, there are too much confusion for investors and issuing agencies. Now the question may arise, there may be inadequate legal provision or absence of large business organization or limited supply of quality bonds due to which Nepalese debt securities market is in under developed stage.

The general conclusion is that the development of debt securities market is not influenced by a single factor but numbers of factors are responsible such as legal provisions, quality of bond, investors, issuing agencies government, interest rate etc.

Besides these, some specific problems are as follows:

1. What is the position of debenture market in the Nepalese securities market?
2. What is the status of trend and ownership of corporate securities?
3. Why the investors are not interested to invest in debenture securities?
4. What are the main problems of existing corporate bond market in Nepal?

1.3 Objectives of the Study

The specific objectives of the study are as follows:

1. To study the position of debt securities market in the Nepalese securities market.
2. To analyze the trend and ownership pattern of corporate securities.
3. To examine the key investors and characteristics of Nepalese debt securities.
4. To explore the problems that affect development of bond market in Nepal.

1.4 Significance of the Study

This study is concerned with the Problem & Prospects of Debt Market in Nepal. Debt securities market is the important part of capital market. Debt securities are means of maximizing value of firm. But Nepalese organization prefer bank loan instead of issuing debenture. People must be conceptually clear about capital market. In Nepal the capital market is not efficient. Most of the investors are investing without any proper knowledge and information. This study will make clear about the debt securities market and its present conditions and problems. Hence, the researcher is confident that it is helpful for the policy reforms of bond market of Nepal. To some extent this study gives information about debt market. The study is beneficial for all the persons who are directly or indirectly related to the Nepalese debt market, as well as it is hoped that it may be a matter of reference for new coming researchers, academicians, teachers, students or persons practicing in the fields of finance. It is hoped that this study highlights Problem & Prospects of Debt Market in Nepal

1.5 Limitations of the Study

Each and every research works has more or less limitations. To make this study precise, meaningful and valuable, some limitations are made so that objective of this study is achieved within limited time, resource and information. The study has the following limitations:

1. The study has covered period from FY 2057/58 to FY 2072/73.
2. The study is mainly focused in debenture issuing companies within the Kathmandu valley.
3. The study is concerned only on existing securities acts, legal rules and regulations relating to the topic.
4. The study evaluated problems and prospects of debt market in Nepal using limited statistical tools.

1.6 Organization of the Study

For the achievement of mentioned objective this study has been organized into five chapters each devoted to some aspects of the study of the debt security market in Nepal.

Chapter 1: Introduction

This chapter deals with introduction of the main topic of the study like general background, statement of the problems, objective of the study and organization of the study and other introductory framework.

Chapter 2: Review of literature

This chapter includes with the review of available relevant studies. It includes the conceptual review of the related books, journals, articles and the published and unpublished research works as well as thesis. It also includes security act.

Chapter 3: Research Methodology

This chapter describes research methodology employed in this study i.e. research carried out in this size and shape. For the purpose various financial and statistical tools and techniques are defined which is used for the analysis of the presented data.

Chapter 4: Data Presentation and Analysis

This chapter is the major part of the whole study in which all collected relevant data are analyzed and interpreted by the help of different statistical tools. Correlation coefficient, chi-square test and trend analysis is calculated as statistical tools. In these chapter major findings of the study is also included.

Chapter 5: Summary, Conclusion and Recommendation

This chapter contains the summary of the study, conclusion recommendation and suggestion on the basis of the study. Finally, bibliography and appendices have been incorporated.

CHAPTER II

REVIEW OF LITERATURE

2.1 The Conceptual Framework

2.1.1 Concept of Debt Market

One of the most important debt financing securities is bond. Bond is a special form of contract, which is written or printed evidence of debt owed by a company, local or central government. It is usually issued for borrowing money over a 10 to 30 years period. A bond bears the statement that the issuer promises to return to the bondholder the principle, or the sum borrowed, when the bond matures, or becomes due. Most bonds pay a fixed rate of interest at regular intervals or when the bond matures. Bonds are usually issued in groups. Each bond represents a fraction of the total loan. This makes it possible for many people of moderate means to invest, & enables a business to borrow vast sums.

Efficient markets help to mobilize the financial assets and provide efficient channel to productive investment. Financial markets facilitate the savings and investment process by making it more efficient (Thygerson, 1993). Efficient bond markets are characterized by a competitive market structure, low transaction costs, low level of fragmentation, safe market infrastructure and a high level of heterogeneity among market participants (The World Bank, 2001). They provide much needed information on prices and volume of transaction (Campbell et.al, 2001). Debt securities market provides a variety of securities for investment purpose.

Securities are marketable financial instruments that bestow on their owners the right to make specific claims on particular assets. An individual security provides evidence of either creditor ship or ownership –depending on whether it is a bond or a stock, respectively (Francis, 1988). Thus, security markets are mechanisms created to facilitate the exchange of financial assets. Based on securities traded, security markets can be divided into primary and secondary markets. Markets in which new securities are issued by government bodies and corporation are known as primary markets.

After the securities have been issued, they are traded among investors in the secondary markets (Bhattarai, 2005).The secondary market is the only way to turn securities into cash.

On the basis of life span of securities, security markets can be divided into money and capital market. The money market is the market for short–term (one year or less) highly liquid debt securities. Capital markets are the markets meant for long–term (more than one year) debt securities issued by the government or a corporation (Bhattarai, 2005). Capital markets exist in order to bring together buyers and sellers of long–term securities, i.e., they are mechanism created to facilitate the exchange of financial assets. Short–term and intermediate term financing sources include trade credit, bank loan, finance company loan, commercial paper, and inventory financing but long–term securities include the issuance of mortgages and bonds.

In meeting its need for long–term finance, the firm has a choice between debt and common stock source. Debt is anything owed, especially a sum of money that one person owes to another (Kohn, 1999). A legal definition is that a debt is all that is due to a man under any forms of obligation or promise. A person who owes a debt is called debtors and a person to whom he owes is the creditor. Private debt is debt taken by private business organization. Private organization may obtain debt by issuing debt instruments like debenture and bonds, which is called private debt. Loan taken from financial institutions and moneylenders also count as debt.

There are several kinds of bonds. Mortgage bonds are bonds that give the investor a claim on all or part of the company's property. Such a claim, called a lien, is given as security in case the loan is not repaid when due. Debentures are bonds that are not protected by a lien. Collateral trust bonds are bonds secured by collateral (often the shares or bonds of companies controlled by the issuing company) deposited with a trustee. Income bonds usually promise to repay the principal but to pay interest only when earned. Callable bonds may be redeemed by the issuing company under definite conditions before maturity (The World Book Encyclopedia, 1996).

The bond market is chiefly over–the–country in nature and today's bond market offers issues to suit any investor. The bond market is normally separated into two issuer segments: domestic (governments and corporate) and international (Fischer and Jordan, 2000).

Corporate Bond or Debenture Market

A corporate bond is a security representing a long–term promise to pay a certain sum of money at a certain time over the course of the loan with the fixed rate of interest payable to the holder of the bond (Hampton, 2001). In other words, corporate bonds are similar to other kinds of fixed–income securities in that they promise to make specified payments at specified times and provide legal remedies in the event of default (Sharpe et.al, 2003). The term "corporate bond" is usually applied to longer term debt instruments, generally with a maturity date falling at least 12 months after their issue date (the term "commercial paper" being sometimes used for instruments with a shorter maturity). Sometimes, the term "corporate bonds" is used to include all bonds except those issued by governments in their own currencies, although, strictly speaking, it only applies to those issued by corporations. Restrictions are often placed on the activities of the issuing corporation to provide the additional protection for bondholders (Pinches, 1990).

Corporate bonds are the means by which private firms borrow money directly from the public. These bonds are similar in structure to Treasury issues–they typically pay semiannual coupons over their lives and return the face value to the bondholder at maturity. They differ most importantly from Treasury bonds in degree of risk. Default risk is a real consideration in the purchase of corporate bonds (Bodie et.al, 2002).

If the company goes bankrupt, the bondholders will not receive all the payments they have been promised. The actual payments on these bonds are uncertain, for they depend to some degree on the ultimate financial status of the firm. Bond default risk, usually called credit risk, is measured by Moody's Investor Services, Standard and Poor's Corporation, Duff and Phelps, and Fitch Investors Service, all of which provide financial information on firms as well as quality ratings of large corporate and municipal bond issues. Each firm assigns letter grades to the bonds of corporations to reflect their assessment of the safety of the bond issue (Bodie et.al, 2002).

The holders of a company's long–term debt, of course, are creditors. Generally they cannot exercise control over the company and do not have a voice in management. If the company violates any of the provisions of the debt contract, then these holders may be able to exert some influence on the discretion of the company. Holders of the long–term debt do not participate in the residual earnings of the company; instead, their return if fixed. In liquidation, the claim of debt holders is before that of preferred and common stockholders. Depending on the nature of the debt instrument, however, there may be differences in the priority of claim among the various creditors of a company (Van Horne, 2004).

Corporate bonds come in several different forms. The basic classification include collateralized (secured) or uncollateralized (unsecured), senior or (subordinated) junior, callable or non-callable, and convertible bonds (Thygerson, 1993).

Most corporate bonds are traded in the over–the–counter (OTC) market, so it has little transparency. One reason the bond markets are so big is that the number of bond issues far exceeds the number of stock issues. There are two reasons for this. First, a corporation would typically have only one common stock issue outstanding. However, a single large corporation could easily have a dozen or more note and bond issue outstanding (Ross et.al, 2002).

Corporate bond has high default risk. The market where bonds or debt-securities were traded known as debt market. Corporate bonds/debenture provides capital to the company and the investors get the status of lenders through the debt market (Pandey, 1979). Business firms issue many types of debt; however, only large firms issue bonds. Smaller firms deal directly with lenders such as bank and insurance companies (Schall and Haley, 1991). Firms can obtain long–term debt financing privately or through public offerings. The main difference between public–issue and private placed debt is that the latter is directly placed with a lender and not offered to the public (Ross et.al, 2002). Private sector securities help diffuse stresses on the banking system by matching long–term investments with long–term capital. There is thus a strong public interest in a viable bond market for private sector issuers (Brigham and Houston, 2001).

To be successful, private debt markets not only need a disclosure system, a credit–rating system, and bankruptcy laws but also authorities should also avoid possible crowding out and statutory restrictions that hinder the development of corporate bond market.

Government Debt Securities Market

The government issues bonds, notes and treasury bills. All Treasury obligations are of the highest quality because they are backed by the full faith and credit of the government. This feature, along with their liquidity, makes them very attractive (Fischer& Jordan, 2000). Government and semi–government institutions required funds for various development activities. When governments spend more than they currently rise in taxes, they must burrow through the debt securities (Kohn, 1999). All government securities are fixed income instruments that generally differ in terms of the time to maturity when they are initially issued. Specifically, bills are for less than a year, note are for one to ten year, and bonds are for over ten years (Reilly, 1986). The main purpose of issuing securities by the government is to finance their activities. Revenues collected by the government seldom cover expenses & the differences have been financed primarily by issuing debt instruments. New instruments are issued to repay the old debt (Bhattarai, 2005). Municipal bonds are issued by state & local governments. They are similar to treasury & corporate bonds except that their interest income is exempt from state & local income taxes (Bhattarai, 2005).

Developed government securities markets help to increase the tendency of saving and reduce the poverty. Government securities related to collect required amount to fulfill the budget deficit, helps to develop corporate debt securities market also.

Foreign Bonds

Borrowers sometimes raise long–term debt capital in the domestic capital market of a foreign country is known as foreign bonds. In issuing foreign bonds, the issuer must abide by the rules and regulations imposed by the government of the country in which the bonds are issue. Compliance may be relatively easy or difficult depending on the country involved. One of the main advantages of purchasing foreign bonds is the opportunity to diversify internationally the default risk of a bond portfolio while not having to be concerned about foreign exchange fluctuations (Sharpe et.al, 2003). For example, if Nepalese corporation issues bond with face value in US dollar, then such bond will be foreign bond.

International Bond Market

The term international bonds is often used to describe several types of bonds with a variety of characteristics relating to issuer or buyer domicile, the location of the primary trading market, and/or currency denomination (Fischer and Jordan, 2000). Any bond sold outside the country of the burrower is called an international bond, but it is necessary to distinguish further between two types of international bonds i.e., foreign bonds and Eurobonds.

Euro Bond

The second type of international bond is euro bond, which is denominated in a currency other than that of the country in which it is sold. As the Eurobond market is neither regulated nor taxed, it offers substantial advantage for many issuers and buyers of bonds (Sharpe et.al, 2003). For example, bond issued by Nepalese corporation that is denominated in US dollars and sold in India is refunded as a euro bond.

Interest Rate

Interest is the price paid to the lenders for the use of their money. It is calculated as a percentage of the amount borrowed. From a lender's viewpoint, interest is the excess money that is received over the amount that was loaned. However, borrowers are prepared to pay interest so they can make purchases that they could afford if they had to pay for them immediately (The World Book Encyclopedia, 1996).

The most common type of interest is simple, compound and discount interest. The interest rate depends on the relationship between supply and demand. If the demand for loans increases, interest rate rise and fall if the demand for loans decreases. Supply and demand, in turn, are affected by several factors, such as–government policy, inflation, economic activities, the length of loan and the degree of risk (The World Book Encyclopedia, 1996).

The bond market is driven by interest rates. In fact, the behavior of interest rates is the single most important force in the bond market. These rates determine not only the amount of current income investors will make, but also the capital gains (or losses) that bond holders will incur. So, it is not surprising that interest rates are so closely followed by market participants, and the bond market performance is generally portrayed in terms of marked interest rates (Gitman and Joehnk, 1990).

Different theories of interest are explained differently. Expectation theory deals with long–term interest rates are a geometric average of short–term interest rates while liquidity preference theory explained that, on average, long–term interest rates are higher than short–term interest rates because investors demand a liquidity premium for lending long–term funds. Similarly, markets segmentation theory say, the interest rate that is determined by supply and demand conditions in each market (Fischer and Jordan, 2000). In a free economy, interest rates will adjust until the total amount of capital demanded by producers equals the amount that owners of wealth are willing to supply.

2.1.2 Types of Debt Market

There are two kinds of debt securities prevailing in the Nepalese context according to the issuer; one issued by the government and the other by the corporate body.

a. **Government debt securities:** Government raises fund from market to conduct the regular activities, to conduct development programs, to recover the deficit budget etc. Nepal Rastra Bank has been actively issuing various government securities in the country with the main aims of tackling the deficit budget and to collect small and scattered funds from general public. These securities are as follows:

   i. **Treasury Bills:** Treasury bills are highly liquid. They are easily converted to cash and sold at low transaction cost and with not much price risk. They are the short term money market instrument of the government. It normally matures in 91 days while some mature in 364 days. Thus, treasury bills are issued to meet short term financial requirement of the government. Treasury bills are sold to the bidders in the order that one who bids with the expectation of low interest rate.

In Nepal, Government of Nepal initiated the process of selling treasury bills to banks, financial institutions and individuals since 2018 and through an auction process since 2045. Till 2068 Ashad GoN has Rs 1,203,406.83 Lakhs liability on treasury bills. (Ownership Structure of gov. securities, 2068 Ashad)

ii. **Development Bond:** It is long term government bond. It is issued to perform the development works. It is a kind of long-term government bond. It matures normally in five years or more. The holder can be used as collateral if holders need to take loan. It has fixed and minimum interest rate. The payments of the interest are paid on semiannual basis. The income from these bonds is taxable. Development bond is purchased by individuals and institutions.

In Nepal, Government of Nepal initiated the process of selling development bond since 2020. Till 2068 Ashad, GoN has Rs. 435,194 Lakhs liability on development bond (Ownership Structure of gov. securities, 2068 Ashad)

iii. **National Saving Bond:** This is also a long-term bond and it normally bears maturity period of five years. These bonds are normally tax free bonds and having high interest rates. The main holders of these bonds are general public because it is focused to the individual investors but also organizations and financial institutions etc can purchase it, as they have right to purchase national saving bonds. It has fixed interest rate payable semiannually.

GoN initiated the process of selling National Saving Bond since 2040. Till 2068 Ashad, GoN has Rs. 106,800 Lakhs liability on National Saving Bond (Ownership Structure of gov. securities, 2068 Ashad)

iv. **Special bond:** By definition, it is issued on special occasion when government falls sort of funds. The government issues special bonds to those parties to whom the government has to make payments. Instead of paying cash, the government issues special bonds as a substitute of cash repayment and extends the period of payments. The holder of this bond can use it as collateral to fulfill their funds need.

GoN initiated the process of selling special since 2023. Till 2068 Ashad, GoN has Rs. 1,580.33 Lakhs liability on special bond (Ownership Structure of gov. securities, 2068 Ashad.)

v. **Public Saving Card/ Citizen Saving Bonds:** It is also a long term debt instrument of government which normally matures in five years. The characteristic of the public saving card is same as the other long term bonds. The only difference is that it cannot be used as collateral. It can be purchased only by Nepalese Citizens. It has also fixed interest rate and payable semiannually. It is also a taxable government bond.

GoN initiated the process of selling public saving card since 2059. Till 2068 Ashad, GoN has Rs. 46228.94 Lakhs liability on citizen saving bond (Ownership Structure of gov. securities, 2068 Ashad).

vi. **Foreign Employment Saving Bonds:** It is also a long term debt instrument of government which is especially directed to the foreign employer in order to assist them saving their hard earned money as well as help in development in country by the government investing it in several long run development projects.

Till 2068 Ashad, Gov. has Rs. 73.80 Lakhs liability Foreign Employment Saving bond. (Ownership Structure of gov. securities, 2068 Ashad.)

b. Corporate debt securities: The corporate bond/debenture market in Nepal is very lean. Very few companies have issued bond in the market. The first instance of issuing bond in the Nepalese history was by Bottlers Nepal Ltd., when it issued 18% coupon rate bond worth Rs.5 million in FY 1986/87. During the period between 1993/94 to 2009/10 bond issue occupied the third largest share portion in the total issue amount approved by SEBON (5.99%). Only two companies have issued bond though the time gap between the issues of corporate bond is as high as five years. Among them, Joti Spinning Mills Ltd. issued 14% coupon rate bond worth Rs. 20 million in FY 1992/93 and Shree Ram Sugar Mills Ltd. issued 14% convertible debenture worth Rs. 93 million (with par value Rs. 1,000). However, since last year, some positive signals can be observed in the Nepalese capital market. Though the govt. bonds are not available in the stock exchange floor, corporate bonds are being made available.

The issuance of the 8.50% Himalayan Bank Ltd. 2009 Bond and its listing in the secondary market with separate trading system became a milestone in this regard. But, before the listing of HBL's bond, SSML's convertible debenture was also listed in the exchange without following separate trading system. Very few of these debentures were traded. However, SSML bond was de-listed (and redeemed) in FY 2001/02. Out of 360,000 units of bonds issued by HBL, 100,000 units were issued to the general public and the rest were privately placed which were heavily oversubscribed. Nearly one and half year after HBL bond, Nepal Investment Bank Ltd. ($NIBL_1$) has issued Rs. 300 million Nepal Investment Bank Bond 2010 (with 7.5% coupon interest with semi-annual payment) in the FY 2003/04. Out of 300,000 units of issue, 100,000 units are issued to the general public and the rest are privately placed (Bhattarai, 2005:193-194).Likewise, Everest Bank Ltd. had issued debenture of Rs. 300 million (with 6% coupon interest paid semi-annually) in the FY 2004/05. The par value of debenture was Rs. 1,000 with maturity period of seven years. Its issue manager was CIT (Everest Bank Ltd., Debenture Prospectus, 2005). Bank of Kathmandu Ltd. had issued Rs. 200 million "Bank of Kathmandu bond, 2069" (with 6% coupon interest paid semi-annually) in the FY 2004/05. Out of 200,000 units of issue, 50,000 units were issued to the general public and 150,000 units were privately placed. The par value of debenture was Rs. 1,000, with maturity period of seven years. Its issue manager was NMB (Bank of Kathmandu Ltd., Debenture Prospectus, 2005).

Similarly till the date of preparing this topic 30,000,000 units of listed government bonds worth of Rs. 3,000 million had already matured while 299,409,000 units of listed government bond having different maturity periods with total worth of Rs. 3000 million was at play. In comparison to the corporate sector government sector is quite forward in trading the debt securities as revealed by the data above.

2.1.3 Some Terminologies Relating to Corporate Bond Market

Inflation

Inflation is a continual increase in prices throughout a nation's economy. The rate of inflation is determined by changes in the price level, an average of all prices (The

World Book Encyclopedia, 1996:229). Inflation reduces the purchasing power of consumer and as a persistent and appreciable rise in the general level of prices (Shapiro, 1995). A rapid uncontrolled inflation that destroys a nation's economy is called Hyperinflation. Economists have various theories that attempts to explain why inflation occurs. Many factors contribute to inflation. One element that is almost always present in an increase in a nation's money supply, which either causes or eases the increase in prices.

The quantity theory states that inflation results when the demand for goods & services exceeds the supply. The Keynesian theory also focuses on excess demand as the cause of inflation. According to the cost–push theory, when business raise their prices in response to cost increase, cost–push inflation results. Similarly, the expectations theory is based on the belief that prices will increase (The World Book Encyclopedia, 1996).

Weapons against Inflation are as follows

Most bonds promise a fixed nominal rate of interest. The real interest rate that you receive depends on the inflation rate (Brealey & Myers, 2000). Thus, the real interest has been obtained by subtracting the inflation rate from the one–year nominal interest rate, which is highly correlated with inflation (Kaen, 1995). The coupon interest payments & principal repayment contractually promised to bonds owners are fixed dollar quantities that do not increase with inflation. As a result, if any inflation occurs, bondholders are repaid in dollars that have less purchasing power over real (physical) goods than the dollars that were originally invested in the bonds (Francis, 1986).

Fiscal policy of a nation is reflected by the government's spending & taxing programs. Monetary policy is the program a nation follows to regulate its money supply. Wage and price controls are set by a government to limit wage and price increases during an inflationary period (The World Book Encyclopedia, 1996).

Inflation' effect on Borrowers and Lenders

When the actual rate of inflation exceeds the expected rate of inflation, those with commitments to make payments fixed in nominal terms (debtors) gain in real terms at the expense of those to whom payments are to be made (creditors), conversely, when actual inflation is less than expected inflation, creditors gain and debtors lose. This uncertainty in the real return on fixed–income securities that is due to uncertain inflation is frequently referred to as purchasing power risk (Sharpe et.al, 2003).

The rate of inflation is measured by percentage change in the Consumer Price Index (CPI) over the period. The consumer price index is calculated by collecting the prices of consumer goods. This index in Nepal is calculated by (NRB) Nepal Rastra Bank. Inflation for a single period can be measured as follows (Bhattarai, 2005):

$$q_t = \frac{CPI_t - CPI_{t-1}}{CPI_{t-1}} \times 100$$

Where,

q_t = Rate of inflation at time t

CPI_t = Consumer price index at time t

$CPI_{(t-1)}$ =Consumer price index at time (t-1)

And, the annualized inflation rate = $(1+ \text{per month } q)^{12}$

Nominal rates of return are money rates of return that are not adjusted for the effects of inflation. These nominal returns can be divided into the real rate of return (rr) and inflation (q) (Bhattarai, 2005).

$$rr = \frac{1+r}{1+q} - 1$$

Where,

rr = Real rate of return

r = Nominal rate of return

q = Rate of inflation

By simplification, we get

$r = rr + q + (q)(rr)$

The product of (q) and (rr) will often be a tiny value that can usually be ignored with little loss of accuracy.

So, the equation in simplified form is as follows:

$r = rr + q$

Also, rr = r –q

So, when the inflation rate is low provides an easy way to closely approximate the normal and real rates of return (Francis, 1986).

Underwriters/ Investments Bankers/of Securities

A number of financial institutions are needed for the efficient functioning of a financial market. One of these institutions is an investment banking firm. Investment banking is a business activity in which a company purchases newly issued securities, such as stocks and bonds, from businesses and governments. Such a company, called an investment bank, and then resells the securities to individual investors in smaller quantities (The World Book Encyclopedia, 1996).

Thus, the agent responsible for finding buyer for brand new securities is called the investment banker or underwriters (Francis, 1988). The investment banker specializes in underwriting and selling new securities and advising corporate clients (Pinches, 1990).

First, the members of the issuing firm and the investment banker hold pre-underwriting conferences, at which they discuss the amount of capital to be raised, the security to be issued, and the terms of the agreements. When the investigations are completed, an underwriting agreement is drawn up by the investment banker (Weston and Copeland, 1992). Investment bankers charge fees commonly referred to as flotation costs, for designing, underwriting and selling securities. The costs of common stocks issues are higher than bond issues. Investment banks buy securities at a slightly lower price than they expect to sell them for. The difference between the purchase and sale prices represents profit (The World Book Encyclopedia, 1996). The risk to the underwriter is that the issue may not attract buyers at a positive differential (Jordan and Fischer, 2000). Investment bankers also advise businesses in arranging mergers and acquisitions. In other countries, investment bankers also provide brokerage services, but in Nepal, the issue managers only manage initial public offering and provide financial services (Bhattarai, 2005).

Bond Duration

A bond's duration may be defined, as the weighted average number of years until the cash flows occur, with the relative present values of each cash flow used as the weights (Francis, 1988). The concept of duration initially was introduced by Frederic Macaulay in 1938; therefore, it is also called Macaulay Duration (Thapa, Bhattarai and Basent 2006). A measure of the average time prior to the receipt of payment is obtained by calculating the bond's duration. This is simply a weighted average of the lengths of time prior to the payments, using the relative present values of the payment as weights (Sharpe et.al, 2003).

Another very important observation about duration is that, it is a function of term, coupon; maturity value, and yield to maturity. Bonds with 'low' coupons and 'long' terms will have duration greater than bonds with 'high' coupons and 'short' terms. Also, as yield to maturity increases; duration will decreases. Duration is directly related to term and inversely related to coupon and yield to maturity (Cheney and Moses, 10^{th}). As the bonds with a longer duration will experience more price volatility due to interest rate change, duration is directly related to price volatility. Duration is not only an indication of systematic risk for bonds but also useful in analyzing and managing the risk of bond portfolios.

The duration is also known as sensitivity (elasticity) of bond price with respect to interest rate change. Furthermore, MD (Macaulay Duration) measures the bond interest rate risk (Thapa, Bhattarai and Basent 2006). Duration led to the development of the technique of bond portfolio management known as immunization. Specifically, this technique allegedly allows a bond portfolio manager to be relatively certain of being able to meet a given promised stream of cash outflows. Thus, once the portfolio has been formed, it is 'immunized' from any adverse effects associated with future changes in interest rates (Alexander et.al, 2002).

Macaulay's duration (MD) is defined mathematically as,

$$\text{D or MD} = \sum_{t=1}^{T} PV(C_t) \times t$$

$$= \frac{\text{Total of (Present Value * Time)}}{\text{Total Present Value}}$$

Where,

PV (C_t) = Present value of the cash flow at time t

t = Time (Year)

TPV = Total present value

Bond Immunization

The introduction of the concept of duration led to the development of the technique of bond portfolio management known as immunization (Sharpe et.al, 2002). Immunization is the strategy for protecting a bond portfolio against the risk of rising interest rates. Theoretically, this is possible because of the twin effects of rising rates. Immunization will provide a compound rate of return over the immunized period that equals the YTM, regardless of the fluctuations in market interest rates during this period (Alexander et.al, 2003).

Investors only need to immunize to lock in a desired rate of return when future market interest rates are expected to change. Investors' desires to immunize (or lock in) an interest rate increase as market interest rates approach what are perceived to be peak levels. Bond investors who expect market interest rates to fall in the future will want to buy bonds at peak interest rates for two reasons. First, bonds will enjoy capital gains if their market interest rates decline. Second, locking in a high YTM is most rewarding to investors at a time when market rates are high (Alexander et.al, 2003).

Even when corporate bonds are included in the portfolio, immunization does not attempt to reduce any risk other than interest rate risk. Immunization is said to exist if the total value of a portfolio of bonds at the end of some specified planning horizon is equal to the value of the portfolio based on the YTMs that existed when it was purchased.

Immunization is accomplished simply by calculating the duration of the promised outflows and then investing in a portfolio of bonds that has an identical duration. In doing so, this technique takes advantage of the observation that the duration of a portfolio of bonds is equal to the weighted average of the durations of the individual bonds in the portfolio (Sharpe et.al, 2002).

What does immunization accomplish? According to the theory, if yields rise, then the portfolio's losses owing to the selling of the three–year bonds at a discount after two years will be exactly offset by the gains from reinvesting the maturing one–year bonds (and first–year coupons on the three–year bonds) at the higher rate. Alternatively, if yields fall, then the loss from being able to reinvest the maturing one–year bonds (and first–year coupons on the three–year bonds) at a lower rate will be exactly offset by being able to sell the three–year bonds after two years at a premium. Thus, the portfolio is immunized from the effect of any movements in interest rates in the future (Sharpe et.al, 2002).

The main problems with immunization that can cause it to work less than perfectly are; default and call risk, multiple nonparallel shifts in a no horizontal yield curve, rebalancing, and many candidates.

Immunization strategies were introduced to eliminate the interest rate risk in a portfolio of bonds. The discussion revealed that duration was not only (i) an insightful measure of the time structure of a bond's cash flows and (ii) a measure of a bond's interest rate risk; it was also (iii) useful in the development of strategies for managing the interest rate risk in a portfolio of bonds.

Yield Curve/Term Structure of Interest Rates

The relationship between short–and long–term interest rates is known as the term structure of interest rates. The term structure of interest rates tells us what nominal interest rates are on default–free, pure discount bonds of all maturities. In other words, the term structure tells us the pure time value of money for different lengths of time (Ross et.al, 2002).

The phrase "yield curve" is a synonym for the "term structure of interest rates". Yield curves describe the yield–maturity relationship for securities of the same default risk. All factors other than maturity must be held constant if the relationship studied is to be meaningful (Van Horne, 2004).

The most common shape of the yield curve, particularly in modern times, is upward sloping, but the degree of steepness has varied quite a bit. The three basic components that determine the shape of the term structure are the real rate of interest, the rate of inflation and the interest rate risk (Ross et.al, 2002). The first component mostly influences the overall level of interest rates. But last two components very strongly influence the shape of the term structure.

To determine the shape of yield curve, three theories were developed (Francis, 1986). The liquidity premium theory asserts that, on average, the yields from long–term bonds should be a little higher than the yields from short–term bonds. This theory maintains that investors pay a price premium (resulting in lower yields) on short maturities to avoid the higher interest rate risk prevalent in the longer maturities. This causes the yield curve to have an upward slope. And, the segmentation theory suggests that the market for loans is segmented on the basis of maturity and that the supply and demand for loans within each segment determine its prevailing interest rates. The slope of the yield curve would be determined by the general relationship between the prevailing rates in each market segment. Low rates in the short– term segment and high rates in the long-term segment cause the yield curve to be sloping upward. The opposite occurs for high short-term rates and low long–term rates. Similarly, the expectations theory asserts that long–term yields are the average of the short–term yields. This implies that if all investors expect rates to rise, the yield curve will slope upward; if they expect rates to remain unchanged, the yield curve will be horizontal; if they expect rates to fall, the curve will slope downward.

2.1.4 Main Characteristics of Bonds

Debt is anything owed, especially a sum of money that one person owes to another. Debt securities do not have the same contractual features. Although all bonds have some common features, which are:

Face Value

The Face value, or par value, or principle, of a bond indicates the amount of money that must be repaid at maturity (Cheney and Moses, 10th). Typically, the par value is \$1,000.

Call Feature

Most corporate bonds contain a call feature, which gives the issuing corporation the right to call the bonds for redemption. The earliest call date and call price are specified when the bonds are issued. The call feature generally states that the company most pays the bondholders an amount greater than the par value if they are called.

The additional sum is termed as a call premium. The investor should always remember that the call feature is an advantage to the issuer and can be exercised at the issuer's discretion (Cheney and Moses, 10th).

Coupon

The coupon is established at the time the bond is issued and represents the nominal interest rates that will be paid. It is stated as an annual percentage rate, which can be applied to the denomination or face value of the bond to calculate the dollar interest. Since interest is generally paid semiannually, the issuer pays only one-half of the coupons each semiannual period. Traditionally, the coupon is constant over the life of the bond. Recently, however, some bonds have begun to "index" coupon to inflation or to market interest rates (Cheney and Moses, 10th). In case of zero coupon bond, a bond that pays no annual interest but it is sold at discount from face value, much like Treasury bills.

Maturity Date

Bonds generally have a specified maturity date on which the par value must be repaid. Most bonds have original maturities (the maturities at the time the bond are issued) ranging from 10 to 40 years, but any maturities are legally permissible (Madura, 2000). Of course, the effective maturity of a bond declines each year after it has been issued.

Registration

Either bonds can be registered or bearer bonds for interest and/or principal payments. The issuer maintains records on the ownership of registered bonds, but the holder is assumed to be the owner of bearer bonds. The transfer of securities will be possible only after registering the name of the new holders and canceling the name of the original holders.

Indenture

The indenture is the written agreement between the corporation (the borrower) and the lender detailing the terms of the debt issue (Ross et.al, 2002). Bond issuers always promise in their indenture contracts to pay the trustee to act as a "watch dog" for the bond investors' interests. The provisions written into a bond issue's indenture affect the bond's creditworthiness (or investment quality rating) (Francis, 1988).

The Trustee

The trustee, usually some independent bank, ensures that the firm keeps its promises and obeys the restrictions of the contract. The trustee is the third party with whom the bond contract is made, and it is the trustee's job to make sure that the issuer lives up to the provisions of the indenture. Because the individual bond holder are usually not in a position to (1) continually observed the issuing the corporation to make sure that the company does not violate its agreements and (2) take substantial legal action if the firm does violet them, the trustee is paid to assume these responsibilities (Francis, 1988).

Collateral

The type of collateral is important for bonds that have probability of default. The investors must be cautious about the assets that are pledged as collateral in the event of default of regular payment of interest and principal. Variation in collateral lead to several types of bonds (Cheney and Moses, 10^{th}).

Secured Bonds

Bonds that have specific assets pledged as collateral are secured bonds. Mortgage bond is an example.

Unsecured bonds

Bonds without specific collateral are unsecured except for the general creditworthiness of the issuer. Debentures or subordinated debentures are example of this type of security.

Sinking Fund bonds

Corporations that wish to repay a bond issue systematically by setting aside a certain amount each year issue these bonds. The payment, usually a fixed annual dollar amount is made to the sinking fund agent, who is usually the trustee named in the indenture. This third person then uses the money either to call the bonds annually at some call premium or to purchase them on the open market if they are selling at a discount below their face value (Francis, 1988). Many sinking funds begin not at the time of insurance but after a period of 5or 10 years. However, the sinking –fund provision may benefit the bondholder (Van Horne, 2004).

Other Features

Some other important features are convertible bond (a bond that can be converted at the option of the holder into common stock of the same corporation),warrant(is an option to buy common stock ,often used to “sweeten” a debt issue for the investor),income bond(a bond that pays interest only if the earnings of the firm are sufficient to meet the interest obligations),and purchasing power bond(a bond that has interest payments based on an inflation index so as to protect the holder from inflation).

2.1.5 Buying and Selling Rules of Securities

Buying security with view of generating capital profit is very important investing decision. In bear market, securities prices fall down. So, that it should buy securities. But, bull market refers to that market where security prices maximum occurs. It should sell securities in bull market.

There is also another alternative approach regarding buying and selling of securities, considering expected and required rate of return. When expected rate of return is greater than required rate of return, securities are under priced. Hence buying decision of securities is preferred. If expected rate of return is less than required rate of return, securities are overpriced hence, it should sell. When expected rate of return is equal to required rate of return, there is appropriate pricing of securities. Thus, no trading of securities is preferred.

Table 2.1

Buying and Selling Rules of Security

S. no.	Condition	Pricing	Decision
1	Required rate of return > Expected rate of return	Overpriced	Sell
2	Required rate of return < Expected rate of return	Under priced	Buy
3	Required rate of return = Expected rate of return	Exactly priced	No trading

Source: Francis, J. C. (1988) Management of Investment

2.1.6 Valuation of Bond

Bonds are long–term debt instruments used by businesses and governments to raise large sums of money, typically from a diverse group of lenders. Investing in bonds requires computation of their value to identify the mis–pricing and the construction of portfolio. The value of a bond is the sum of the present value of the periodical interest payments and the par value that is due to at the end of bond life. The bond value (V_b) is a function of several factors as presented below:

$V_b = f(F, P_m, N, I, K_b)$

Where,

F = Face value or par value

N = Maturity period

I = Coupon interest rate

P_m = Market price of bond

K_b = Market interest rate or opportunity rate

f = Function

There are three types of bonds; (i) Ordinary bonds, (ii) Callable bonds, and (iii) Perpetual bonds. Valuation of these different types of bonds is as follows:

Ordinary Bonds

An ordinary bond is the one whose life is present generally between 5 to 20 years.

The valuation formula for such bond can be expressed as follows:

$$Vd = \sum_{t=1}^{n} I \frac{1}{(1+kd)^t} + M\left(\frac{1}{1+kd}\right)^n$$

Where,

V_b = Present value of bond

I_t = Interest payments during 't' periods

kd = going rate of interest on similar risky bond

F = Maturity value or face value

t = Time periods

n = Number of time periods

Callable Bonds

A callable bond is not much different from the ordinary bond except that the issuer keeps the right to redeem it at a specified date or any time before the maturity. Its valuation model can be expressed as follows:

$$V_d = \sum_{t=1}^{m} \frac{I_t}{(1+kd)^t} + \frac{P_c}{(1+k)^m}$$

Where,

m = Number of periods to call period

P_c = Call price

(iii) Perpetual Bonds

A perpetual bond is the one, which is never redeemed by the issuer, but the issuer pays interest for an indefinite period. The issuer is never required to pay the par value to the bondholders.

2.1.7 Bond Returns Measures

An investment may be defined as the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time the funds are committed, for the expected rate of inflation, and also for the uncertainty involved in the future flow of funds (Reilly,1986). An investor may obtain two kinds of income from an investment in a bond –income from price appreciation (or losses from price depreciation), sometimes capital gains (or losses).This section assumes that the price or investment value of the bond is given and uses this value to compute a rate of return. The main bond return measures are: current yield, yield to maturity, holding period return, and expected rate of return etc.

Current Yield

A bond return measure that is popular with investors and is provided on a daily basis in the Wall Street Journal is the current or coupon yield. As the name implies, this yield is based entirely on the relationship between the coupon rate and current price (Cheney and Moses, 10^{th}).

Mathematically it can be expressed as,

$$I_c = \frac{C}{P_o}$$

Where,

I_c =Current or coupon yield

c =Annual dollar coupon

P_o =Current market price

This return measure is only a partial indication of the return. A bond currently selling at its face value will have a yield to maturity equal to the coupon rate. At any other price, however, the current yield is different from the yield to maturity.

Yield to Maturity (YTM)

Investors may also like to know the rate of return they earn on their investment. The rate of return on bond is termed as yield to maturity (YTM) and is synonymous to the effective interest rate or the internal rate of return that is commonly used in capital budgeting. The YTM can be found if the price and the value of a bond are known. The YTM is the discount rate that equates the present value of all the bond's expected future cash flows with the current market price of the bond (Alexander et. al, 2003).

In computing the yield to maturity, several important assumptions are made (Cheney and Moses, 10^{th}):

(a) The bond will be held to maturity.

(b) All cash flows (interest and principal) will occur as indicated in the indenture (i.e., the issuer will not default on the contractual obligation).

(c) The bond will not be called or redeemed by the issuer before specified maturity date.

(d) Coupon receipts will be reinvested at a rate of return equal to the yield to maturity.

Yield to Maturity can be calculated by

(i) Trial and Error Method or Interpolation Method

YTM can be calculated by using a rate that makes the value of a bond equal to the price. Mathematically it can be expressed as,

The market price of debt,

$$P_o = \sum_{t=1}^{n} \frac{\text{Interest}}{(1+\text{YTM})^t} + \frac{\text{Maturity Value}}{(1+\text{YTM})^n}$$

(ii) Approximation Formula Method

Approximate YTM can be calculated as:

$$\text{AYTM} = \frac{I + \left(\frac{F-P}{N}\right)}{\frac{F+2P}{3}} \times 100$$

Where,

F=Face value of bond

P=Price of bond

N=Number of years of bond life

I =Interest payment per year

Yield to Maturity for Callable Bonds

Bonds issued having a call feature allows the issuer to redeem the bonds prior to maturity. Thus, the issuer can take advantage of lower yields by calling outstanding bonds and refinancing at lower rates.

To reflect the impact of a possible call on the yield, the yield to first call should be calculated in addition to the yield to maturity. Using semiannual compounding, it can be expressed as:

$$V_O = \frac{C}{2}\left\{\frac{1 - \dfrac{1}{\left(1 + \dfrac{i_{call}}{2}\right)^{2T}}}{\dfrac{i_{call}}{2}}\right\} + \frac{\text{Call Price}}{\left(1 + \dfrac{i_{call}}{2}\right)^{2T}}$$

Where,

V_o =Intrinsic value of the bond

C =Annual dollar coupon

i_{call} =Yield to first call

T =Length of time to first call date, in years

Call price =Price that issuer will pay at first call date

The probability of a call increases during periods of declining yields, especially when the yield to maturity declines below the coupon yield.

Holding Period Return

A holding period or single period return is simply the total return an investor would earn during the period of holding securities (Bhattarai, 2005). Investors are often concerned about bond returns over a particular holding period. If the holding period was in the past, the return is a historical, or ex–post, measure. The investor concerned with a future holding period calculates the expected or ex–ante, return.

Recently, attention has moved from the traditional measures of bond returns to the holding period return (HPR).This shift is consistent with the idea that more active bond investment strategies may be desirable. These strategies may be for relatively short periods as opposed to long–term buy–and –hold strategies.

$$HPR_t = \frac{P_{t+1} - P_t + I_{t+1}}{P_t}$$

Where,

HPR_t =Holding period return for period ‘t’

P_t =the beginning or purchase price of the bond

P_{t+1} =the ending or selling price of the bond

I_{t+1} =the coupon or interest received for period 't'

This equation assumes that interest will be received at the end of holding period 't'. This assumption is correct for bonds because they are sold with accrued interest due to the seller.

Expected Rate of Return

In analyzing various bonds for investment, the analyst must consider the expected rate of return that each bond can provide. A more detail analysis is needed when a bond has default probabilities, will not be held to maturity, and when yields in general may change over the holding period (Cheney and Moses, 10^{th}).

The return, which we expect in the future, is the weighted average rate of return, using the probability of each rate of return as the weight.

Mathematically it can be expressed as follows (Cheney and Moses, 10^{th}):

$$\text{Expected HPR} = \Sigma(\text{HPR}) = \sum_{i=1}^{n} (\text{Probability})_i \times (\text{HPR})_i$$

$$= P_1\,HPR_1 + P_2\,HPR_2 + \ldots + P_n\,HPR_n$$

Where,

E(HPR) = Expected rate of return or expected holding period return

Probability)$_i$ = Probability of event i

(HPR)$_i$ = Rate of return or holding period return at event 'i'

n = n_{th} event

2.1.8 Types of Bonds Financing

Fixed–rate, long–term debt instruments are of various kinds. With the exception of income bonds, all are widely employed (Van Horne, 2004).Some of them used by corporations are:

(a) Debentures

The term debentures usually apply to the unsecured bonds of a corporation. Investors look to the earning power of the corporation as their security as these bonds are not secured by specific property. Although the bonds are unsecured, debenture holders are protected by the restrictions imposed in the indenture. Because debenture holders must look to the general credit of the borrower to meet principal and interest payments, only well established and creditworthy companies are able to issue debentures.

(b) Subordinated Debentures

Subordinated debentures represent debt that ranks behind debt senior to these debentures with respect to claim on assets. In the event of liquidation or reorganization, holders of subordinated debentures cannot be paid until all senior debt, as named in the debentures' indenture, has been paid (Weston and Brigham, 1996). The existence of subordinated debentures may work to the advantage of senior holders, because senior holders are able to assume the claims of subordinated debenture holders. Because of the nature of the claim, a straight subordinated debenture issue has to provide a yield higher than a regular debenture issue in order to be attractive to investors.

(c) Mortgage Bonds

A mortgage bond issue is secured by a lien on specific assets of the corporation – usually fixed assets. The specific property securing the bonds is described in detail in the mortgage, which is the legal document giving the bondholder a lien on the property. If the corporation defaults in any of the provisions of the bond indenture, the trustee, on behalf of the bondholders, has the power to foreclose i.e. the trustee takes over the property and sells it, using the proceeds to pay the bonds. Mortgages can be first, second or subsequent, each with its respective subordinated claim to the assets of the firm in case it defaults (Francis, 1988).

(d) Income Bond

Income bonds have a stipulated coupon and interest payment schedule, but the interest is only due and payable if the company earns the interest payment by a stipulated date. If the required amount is not earned, the interest payment does not have to be made, and the firm cannot be declared bankrupt (Reilly, 1986).If the company does not generate the earning, interest may be accumulative. However, the cumulative obligation usually is limited to no more than three years. As these bonds are not popular with investors, they have been used principally in reorganizations.

(e) Equity–Linked Debt

Sometimes the investor in the debt instruments of a company is given an option on common stock. With debt +warrants, the debt holder has an option to purchase the common stock of the company and he or she continues to hold the debt instrument. Warrants are often employed as "sweeteners" to a public issue of bonds or debt that is privately placed. As a result, the company should be able to obtain a lower interest rate than it would otherwise.

A convertible bond is one that may be exchanged, at the option of the holder, into a certain number of shares of common stock of the corporation. Such bonds are considered very attractive, especially when issued by growth firms. In return for this attractive feature, a convertible bond normally requires the firm to pay less interest than would be paid for a comparable nonconvertible bond (Hampton, 2001).

With exchangeable debt, the debt can be exchanged into shares of common stock of another corporation. This method of financing is applicable to companies that have stock holdings in another company.

(f) Treasury bills:

Treasury bill is the short-term, common used by government debt securities. Treasury bills are issued on a discount basis, with maturities of up to 52 weeks. All bills are issued in book entry form, where the buyer receives a receipt all time of purchase and the bill's face value at maturity.

According to Sharpe although treasury bills are sold at discount, their rupees yield (i.e. difference between the purchase price and the face value if bill is held to maturity) is treated as interest income for tax purpose.

2.1.9 Cost of Debt Capital

Interest payable on debt capital is known as the cost of debt. Corporate bond/debenture securities may be issued at par, or at discount, or at premium.

Company should incur some expenditure for issuing such as preparation prospectus, advertising, and brokerage costs etc. Cost of debt increases due to flotation cost.

The explicit cost of debt tends to be the least expensive of the three sources we consider for, two reasons. First, from the investor's standpoint, there is a fixed legal claim; bondholders have greater security than preferred or common stockholders. On a risk-return basis, we would expect bond investors to demand less return than stockholders which they do. Second, the tax status of interest also makes debt cheaper than other sources, as long as the firm is profitable.

Mathematically, cost of debt can be calculated as follows:

$$\text{Cost of debt } (k_d) = \frac{I}{NP}$$

Where,

k_d = Cost of debt before tax

I = Interest

NP = Net processed amount actually available

Tax saves interest expenditure of issuer. So that cost of debt after tax may be :

$$\text{Cost of debt after tax } (k_{dt}) = k_d\,(1\text{-}t)$$

Where,

t = Tax rate

2.1.10 Historical Development of Debt Market in Nepal

Nepal's capital market is very lean in providing investment alternatives to the investors. Among possible various investment alternatives like common stocks, government bond, corporate bond, preference share, right, option, warrants, convertible etc, very few are available for Nepali investors. It can be said that the present capital market is almost monopolized by the equity shares. For those investors, who are risk seeker and want to invest in the variable income securities, the present capital market offers sufficient alternatives but for those investors who are risk averse and want to invest in the fixed income securities, there are very few avenues available (Bhattarai, 2005).

“Securities Marketing Center” (SMC) was established in 1976 to develop corporate securities market in Nepal. Before the establishment of SMC, there were no institutional arrangements to undertake and to manage the new issue of securities. Initial public offering had to be made on as per the provision of companies Act. 1963, was not adequate and relevant. The Act had not ever included preference share as corporate security. Only companies Act.1994 recognized it as a corporate security.

SMC started secondary trading of securities in 1981, which was restricted to government bonds till 1983, the concept of well-structured secondary market had not involved in Nepal. No separate Act existed to regulate the trading of securities. The securities exchange Act. 1983 was enacted in 1983. The Act restricted the exchange of unlisted securities. SMC was renamed as Securities Exchange Center (SEC) in 1984. SEC was the only one institution concerned in managing and operating primary and secondary markets of long-term government and corporate securities.

A need to develop different institutional mechanisms relating to securities market was strongly felt to avoid potential conflict of interest between the services provided. The first amendment of the securities exchange Act. 1983 in 1993 paved the way for the structuring of securities market in Nepal, which led to the establishment of Securities Board of Nepal (SEBON) in 1993. With a mandate to regulate and develop the securities markets, SEBON started to register securities and grant approval for issuing securities to the public in 1993. The first amendment in the Act also led to conversion of SEC into Nepal Stock Exchange Ltd. (NEPSE) in 1993 with the objective of operating and managing secondary transactions of securities. The initial efforts led to the opening of a full-fledged stock exchange in January 13, 1994.

The second amendment in securities exchange Act.1983 was made in 1997. This amendment made provision for registering securities businesspersons in SEBON. As per the provision of the second amendment, SEBON provided licenses to the securities businesspersons in 1997. The amendment made mandatory provisions for the listed companies to submit annual and semi-annual reports to SEBON. This amendment also required securities businesspersons to submit annual reports incorporating the securities transactions carried out by them to SEBON.

In the context of establishing proper identification of the investors for the development of fair and transparent securities markets, SEBON has made amendment in its Securities Registration and Issue Approval Guidelines, 2000 in 2005 and add new provision which requires the investors to submit along with the application for the buying of securities in the public offering, the photocopy of their citizenship certificate or the identification with photograph, issued by Nepal Government attested by themselves.

Presently, there are fifty-nine licensed stockbrokers, fourteen issue managers, one security dealers, one stock exchange and one hundred ninety-two listed companies in the Nepalese securities market.

Bond is the other instrument providing fixed income to the investors and involves lower risk than the securities that yield variable income. Also the bond market in Nepal is very lean. Very few companies have issued bond in the market. Just eleven private business organizations, especially banks, have issued bond or debenture till 2015/16. Though, Nepalese government is more forward in exercising debt instrument, only countable number of corporate sector are found exercising debt instrument.

2.2 Review of Journals and Articles

As there is not sufficient publication regarding corporate bond/debenture market in Nepal, journals published from abroad are reviewed to understand present debt market of Nepal. Comparing Nepalese corporate bond/debenture market with international debt market helps to identify issues (problems) and prospects on the one hand, and helps in recommending appropriate measures to overcome present problems on the other.

YanAlice Xie, Sheen Liu, and Chunchi Wu (2010) have studied on "Duration, Default Risk, and the Term Structure of Interest Rates." They have examined the interactive effect of default and interest rate risk on duration of defaultable bonds. Their results suggested that the duration measure must be adjusted for the effects of default risk and stochastic interest rates to achieve an effective bond portfolio immunization. They have examined the duration of defaultable bonds by taking into account the interactive effects of default intensity and interest rates. They found that duration estimates of A, BBB, and longer term AA bonds (refer to AA bonds with maturities from 6 to 10 years) are shorter than those of default-free bonds. However, a further analysis had shown that the relation between default intensity and interest rates was time dependent and varies with the business cycle. The study finding have suggested that in empirical application the duration measure should take into account the effect of default and the time-dependent relation between default intensity and interest rates.

The researcher developed a unified framework to show that although callability always shortens duration, the default-risk adjustment may either lengthen or shorten it, depending on the relation between changes in the issuer's credit quality and changes in the riskless term structure. Using a unique database of Canadian corporate bond indexes from 1986 to 1997, they found that the default- and call-adjusted duration was lower than the Macaulay duration over their sample period.

Dutta and Raman (2012) have studied on "Managerial Stock Ownership and the Maturity Structure of Corporate Debt." The researcher made the first study to document that managerial stock ownership plays a significant role in determining corporate debt maturity. So, by controlling previously identified determinants of debt maturity and modeling leverage and debt maturity as jointly endogenous, they document a significant and robust inverse relation between managerial stock ownership and corporate debt maturity. The researcher has also shown that managerial stock ownership influences the relation between credit quality and debt maturity and between growth opportunities and debt maturity.

The researcher analysis had shown that managers with higher stock ownership, and therefore better incentive alignment with shareholders, choose a larger proportion of short-maturity debt. The economic implication of this result was that an increase in managerial stock ownership from the median to the 95th percentile was expected to shorten the percentage of total debt maturing in 3 years or more by 4.90%. This finding have established for the first time the role of managerial stock ownership in determining corporate debt maturity structure choice beyond the basic capital structure (debt–equity choice) decision. Based on their main hypothesis, they have also examined the influence of managerial stock ownership on the relation between growth opportunities and maturity structure of debt. They have also examined whether the relation between debt maturity and growth opportunities was influenced by managerial stock ownership.

Batchelor and Manzoni (2013) have studied on "The Dynamics of Bond Yield Spreads around Rating Revision Dates." They have examined the effect of rating revisions on sterling Eurobond yields using a panel model with conditional heteroskedasticity that controls for event-induced changes in the variance of spreads. Positive rating revisions are fully anticipated by the time the upgrade occurs. Negative revisions are only partially anticipated, and spreads on downgraded bonds rise for some time after the downgrade have been announced. All ratings announcements are accompanied by a temporary fall in yield volatility. They have attributed this to the resolution of uncertainty about the true rating of the bond. Ratings may provide a mean for conveying relevant inside information to bondholders without providing full information to the entire marketplace. Supporting these arguments was the revealed preference of bond issuers and purchasers to pay for rating services.

The researcher data relate to all sterling Eurobond ratings revisions made by Standard & Poor's (S&P) from January 1992 through December 1999. From a total of 477 bonds traded in this period, 313 Eurobonds were not re-rated and 164 experienced a rating revision, of which 123 were downgrades and 41 were upgrades. The largest individual category was the highest rated AAA group (about 30% of all Eurobonds), and they are the most stable with only about 10% downgraded one class to AA+ between 1992 and 1999. A further 30% of bonds are rated AA+ to AA–, and about 40% are A+ and below. For these groups, the incidence of ratings changes is about 45%. Most changes are one class up or down, and only in 35 cases do ratings change by more than one class. Eight bonds were re-rated within 60 days from a previous revision.

The first hypothesis they have tested was whether Eurobond yields react differently to positive and negative rating revisions, a consistent finding of the U.S. studies surveyed earlier. The second hypothesis have tested was related to the effect of the ratings change on volatility. Third, they have tested for significant differences in the effect the rating event have on spread and volatility across classes of bonds.

In their article they have analyzed the effects of rating change announcements on the abnormal yield and volatility of daily returns on sterling-denominated Eurobonds. The question of the effect of rating changes on bond and stock prices in the United States have been well studied in the literature. Specifically, ratings events percolate through to yields in an asymmetric way. Positive rating news releases are fully anticipated by the market, but downgrades are accompanied by a significant increase in the yield spreads in the post-announcement period. The asymmetric effect of rating announcements on spreads implies that a strategy of shorting downgraded bonds would be profitable.

The methodological contribution of their study was that it employed a panel GARCH model to the yield spread series. That helps them to identify how ratings affect volatility, and by allowing for time-varying, event-dependent, volatility changes, it gave them more confidence in the validity of their statistical inferences. The effect of any ratings announcement was to reduce volatility during and around the time the information was released. The researcher conjectured that calming effect occurred because the re-rating announcement resolved uncertainty about the current status of the bond.

Misa Tanaka (2014) studied on “Bank Loans Versus Bond Finance: Implications for Sovereign Debtors.” The article analyzed the optimal choice between bank loans and bond finance for a sovereign debtor. It showed that if borrowers can be publicly monitored by a rating agency that disseminates the information about their creditworthiness, their choice between bank loans and bond finance was determined by the trade-off between two deadweight costs: the crisis cost of default and the cost of debtor moral hazard. She argued that one of the key differences between the two types of sovereign debt was that bank loans are based on private monitoring whereas bond finance relies on public monitoring by credit rating agencies. The public monitoring therefore made bonds more easily transferable compared to bank loans by eliminating the information asymmetry between existing creditors and third parties. Another important difference between bank lending and bond finance was that the former was financed by a few identifiable creditors, whereas the latter was held by a large number of anonymous and dispersed creditors. In addition, she also analyzed the policy implications of increased bond finance by EME sovereigns, and these issues are not considered by prior Hale.

Misa Tanaka had presented a model in which the difference between bank lending and bond finance was that of monitored and non-monitored lending. In this set-up, banks can observe the financial state of the borrower in the interim at some cost and renegotiate the repayment terms, whereas bondholders simply stop lending to all borrowers facing repayment difficulties since obtaining information and renegotiating the contract was too costly for them. The researcher developed a more realistic model, in which bank loans are provided by a single lender using private monitoring, whereas bond debts are financed by multiple lenders using public monitoring. In this modified set-up, sovereign borrowers can pay a credit rating agency to publicize information about their creditworthiness.

Misa Tanaka's article was perhaps the first to investigate the policy implications of the increased use of long-term bond finance by EME sovereigns. The analysis showed that the ease of rollover made bank loans more attractive for short-term borrowing, whereas the transferability made bonds cheaper for long-term financing. She have also shown that borrowers prefer long-term bond issuance over short-term bank loans for financing projects with an uncertain timing of cash flow, if the crisis cost of a default was large and the cost of information dissemination was small. Thus, the large crisis costs together with the reduced cost of information dissemination may explain the recent shift towards bond finance by EME sovereigns.

Misa Tanaka had highlighted two inefficiencies that arise in a world where long-term bond financing dominates: the crisis cost of an inevitable default and the ex post debtor moral hazard which delays restructuring of an unsustainable debt. State contingent debt which was linked to the debtor's GDP forecast could potentially eliminate these two inefficiencies, but such a contract may not be feasible in practice unless there are reliable forecasts which debtors are unable to manipulate.

An IMF intervention to prevent a crisis conditional on an early debt restructuring could improve welfare, but only if the IMF had accurate information about the borrower's financial state and commits not to rescue strategic defaulters. Moreover, such an IMF intervention was welfare improving if and only if the benefits of mitigating the crisis costs and the ex post debtor moral hazard outweigh the cost of intervention, including its implication for the ex ante debtor moral hazard. Furthermore, she had explained how the shift to long-term bond finance may delay debt restructuring.

2.3 Review of Unpublished Thesis

Having reviewed the research report, most of the research studies are related with public debt and very few studies are found related with overall debt securities market (i.e., government and corporate). No any study was performed particularly on corporate debt securities only.

Baral (2007) had conducted a study on ″Securities-corporate or Government, Debt or Owner Types of Securities.″ The main objective objectives of the study were to analyze the types of securities.

Specific objectives of the study were:

To analyze the issue practices of share and debenture and to examine the practices His study was based on the pure secondary data of types of securities.

Major findings of the study were:

Companies willing to issue securities had to manage their issues themselves. NIDC and RBS had legal mandate to manage issues, but they never performed these roles to that date. Furthermore, it was found that the corporate debt securities market is the least developed market in Nepal. Only one (Shree Ram Sugar Mill) listed organization issue the debt securities until that date which indicates that equity shares dominated the corporate debt securities in the Nepalese securities market.

Paudel (2012) had conducted a study on ″A Study on Government Securities Practice in Nepal.″ The main objective of the study was to examine the practices of government securities in Nepal.

Specific objectives of the study were:

The analyze the practices of government securities in Nepal and to examine the share of government securities on total issues.

Major findings of the study were:

Government securities are issued to meet short-term and long-term financial requirement. The government expenditure through public debt is quite beneficial to the nation if used productively. But a large public debt may create problems in the economy in future. Nepal has been suffering capital shortage since the first budget speech. Most people use their idle funds on government securities rather than behaving as investors. Among them majority are service holders and very few of them are retired people. The people of rural areas are less aware to the government securities. Poor as well as rich, and educated as well as uneducated people are interested towards government securities. Lastly, it was concluded that Nepalese investors are attracted towards govt. securities as most of Nepalese investors are risk averter and need less risky investment. Researcher recommended that, people pride themselves on their financial contribution to nation, if there are suitable debt securities available for investment.

Bhattarai (2014) had carried out a study on ″Problems and Prospects of Debt Market Growth in Nepal.″ The main aim of the study was to identify the problems and prospects of debt market growth in Nepal.

Specific objectives of the study were:

To analyze the existing problems of debt market in Nepal and to examine the future prospects of debt market growth in Nepal.

Major findings of the study were:

Government debt securities market is slightly at maturity stage as compared with corporate debt securities market. Mainly the problems like –lack of public awareness, limited supply of quality bonds, investors increasing attraction towards common stock/shares and also towards the banking sector's securities, difficult process of issuing debenture, insufficiency of legal provisions and the infra-structure of capital market, dominant by credit oriented transaction, feeling of non-existence of debt market, lack of large business organizations and a narrow area of government securities market etc. are hindrances for the smooth growth of Nepalese debt securities market. However, the main factors such as; investor's attraction towards liquid assets like debt securities, desire to invest on debenture of any potential issuance, attraction towards convertible debenture, declining interest rate on deposit of commercial banks, increasing trend of amount of govt. securities and the increasing trend of issuance of corporate debentures etc. indicates the growth prospects of

Nepalese debt securities market. The interest rate of deposit on commercial bank is decreased every year. But the interest rate on debt securities is higher to some extent than bank's deposit rate. Also investor's fund can be utilized in a productive way if invested in govt. securities, which helps in the upwards growth of national economy. Furthermore, he added that if any organization is going to issue debenture Nepalese investors will invest on it. So it was recommended to the govt. to bring new rules and regulations and to the Nepalese companies to use debenture as a source of financing to them.

Kafle (2014) had carried out a research on "Problem and Prospects of Debt Market growth in Nepal." The main aim of the study was to identify the problems and prospects of debt market in Nepal.

Specific objectives of the study were:

To analyze the existing problems of debt market in Nepal and to examine the prospects of debt market growth in Nepal.

Major findings of the study were:

Capital market of Nepal is in the infant stage and debt securities market of corporate bodies is limited in existence. The government debt securities market is growing but not as expected. The heavy reliance of government in foreign debt has created huge problem in the growth of Nepalese debt securities market. Investment made on impulse rather than through market study or credit ratings, in Nepalese capital market. Nepalese investors preferred national saving bond and development bond rather than other govt. bonds. Due to oversupply of deposits by customers; commercial banks do not issue debt securities. On the one hand, big corporate bodies could get loan easily from banks at lower cost so they didn't need to issue debt instruments, but on the other hand small corporate firm have been facing the problem in raising the fund by issuing debt securities as well as from bank. Tedious and lengthy process of issuing the debt securities is another problem that hinders the growth of debt securities market.

Bajracharya (2015) carried out a study on "Problem and prospect of Debenture Market growth in Nepal." The main purpose of the study was to identify the problems and prospects of debenture market in Nepal.

Specific objectives of the study were:

To analyze the existing problems of debenture market in Nepal and to examine the future growth and prospects of debenture market in Nepal.

Major findings of the study were:

Nepalese debt securities market in still at an underdeveloped stage. The analysis shows in comparison to corporate debt securities market, government debt securities market has slightly moved at maturity stage. Many factors shows that the corporate debt securities market has started to grow in comparison to the past. It was found that the numbers of issuing agencies are increasing, but on the other hand, the number of investors is decreasing.

Lamichhane (2017) conducted a study on "Problems and Prospects of Stock Market Growth in Nepa*l*". This study used primary as well as secondary data in order to achieve the objectives to assess the trend of stock market in Nepal.

Specific objectives of the study were:

To find out the stock market trend and to examine the existing problem and prospects of Nepalese stock market.

Major findings of the study were:

The development of stock market in Nepal so far cannot be considered satisfactory level the growth trend is slow and is in developing stage. This is evident from the facts and figure available in the stock market performance during the last 12 years. Small market size has made it weak to manipulation and price. Low turnover and value traded shows that stock market in Nepal is highly illiquid. Only the shares of banks, some finance companies and some insurance companies are liquid. Although, it has become late to take steps to overcome such problems of the Nepalese stock market in order to make it active and supportive, the stock market has a better prospect for the resource mobilization of the country.Most of the companies that are listed with NEPSE belong to banking, finance, and insurance sectors. While only few companies from the trading, hotel, manufacturing, and other sectors are listed with the exchange, not a single company from construction sectors and information technology has entered the organized stock exchange of the country. The brokers have problem mostly in signature verifications, and cash payment and share transaction account kept by NEPSE. All brokers agreed that there should be right code of conduct and monitoring for brokers operations. It was observed that the prescribed code of conduct is hardly enforced. Majority of brokers agree that they should be professionals and competitive.

Shrestha (2017) conducted a study on "Problem and Prospect of Stock Market Growth in Nepal". The topic of the thesis is related to this thesis. The researcher has used only five years secondary data as well as primary data

Specific objectives of the study:

To trace out the trend of Nepalese stock market, analyze the problem and prospects of Nepalese stock market and to realize the various components for the good governance of primary and secondary data.

Major findings of the study were:

In average 88.96% of the listed companies were traded in the five year period. Likewise, NEPSE converted 5.36% of total market capitalization into turnover and 35.58% of total paid up capital in turnover in average.64% of the respondents said that they are satisfied with the growth trend of NEPSE. Lack of confidences of investors is the problems for hindering stock market growth in Nepal.The major malpractices, pooling is wide spread in stock market and thus is creating uncertainty in stock price. Besides pooling wash sale is also equally practiced.41% of the investors look at the NEPSE index before making investment in the secondary market and 58% of the respondents stated that SEBON should be responsible for appropriate trading system.

2.4 Research Gap

From this research, she has concluded that there are some reasons that the public are showing poorer response to the debenture issued. The continuously decreasing interest rate of debt securities is the main reasons of poor responses. Another reason is the increasing number of finance companies, which are offering higher interest rates on deposits. Her study also found that there are a number of problems, which are restricting the growth prospects of debt securities market. Lack of public awareness is a serious problem of existing Nepalese debt market. Public is not sufficiently aware about the debt securities and its benefits such as low risk, fixed income etc.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

Research design attempts to analyze the problems and prospects of debt market in Nepal. It provides the framework "for the study" guidelines, "for the collection and analysis of data". This research study attempts to analyze the issues and prospects of debt market in Nepal. Thus, to fulfill the objective of the study, both primary as well as secondary data are used. Furthermore, descriptive as well as analytical and quantitative approaches are used to examine the problems. A descriptive approach is mainly focused on prevailing the current position and various problems associates with Nepalese debt market. Similarly, analytical approach is used to examine various related variables of debt securities. Various statistical tools such as curvilinear model, time series analysis and chi-square test for testing hypothesis are applied to interpret the result and come to conclusion.

3.2 Population and Samples

This research is conducted to find out the problems and prospects of Nepalese debt market although only few (i.e., eleven) corporate organizations have issued bond till this study performed so they along with government bonds and treasury bills are taken as the population of study. There are 226 listed companies upto to the Ashar end of 2017. A use of 22 listed companies from various sectors using Judgmental sampling, a list of individual investors included corporate debt holder as well as government securities holders are taken total 48 using random sampling. Again, 12 brokers and market makers and 18 other experts mainly staff of NRB, SEBO and NEPSE have been taken as samples. The following table clearly shows selected sector's total population, target population and percentage of population also.

3.3 Sources of Data

The Data is the ordered information from reality that can be collected and transferred into some recording system. So that it can be later examined and analyzed in order to reach to conclusion of research work. This research study is based on both primary and secondary data. The source of primary data is mainly questionnaire method. A set of questionnaires is developed for various respondents. These are allocated to them and collected after sometimes. Personal interviews are also conducted during visits. The main sources of the primary data are as follows:

1. Listed Company
2. Issue Manager/Brokers
3. Individual /Institutional Investors
4. Other Experts, mainly staffs of NRB & SEBO

To examine the trend and ownership pattern secondary data are also used. The main sources of secondary data are as follows:

1. Various quarterly Economic Bulletins published by NRB
2. Various Economic Reports of NRB
3. Annual report of security Board of Nepal
4. Various Annual Report of NEPSE and SEBO/N
5. Various Reports of Listed Companies, recorded in SEBO/N
6. Prospectus of Debenture Issuing Banks
7. Other publications, books, journals, articles, previous research studies, dissertations

3.4 Method of Analysis

"The main purpose of analyzing the data is to change it from as unprocessed form to an understandable presentation. The analysis of data consists of organizing, tabulating and performing statistical analysis and drawing inferences" (Wolf and Pant, 2004). Various possible statistical and financial tools are used where necessary in each case in order to obtain the best result and to classify, to tabulate and to analyze primary data. The empirical results have been estimated in this study by using data for the period of 2057/58 to 2072/73. Since data analysis is based on explanation and statistical analysis and interpretation. Separate techniques are utilized in order to analyze the data statistically and present them systematically.

- Hypothesis testing
- Curvilinear model etc

Above analysis has been done in order to represent the reliability of data.

3.5 Hypothesis Testing

Testing of hypothesis is one of the most important aspects of research. Hypothesis is the assumption that is made about the population parameter and then its validity is tested. The act of verification involves testing the validity of such assumption, which when undertake based on sample evidence, is called testing of hypothesis. It can also be considered as suggested solution of the research problems. Its main function is to suggest new experiments and observation. With the available data, decision makers apply the hypothesis testing and give the decision accordingly.

Here, Chi-square value is compared in order to test whether there is significant difference between expected and observed opinion regarding various matters relating to Nepalese debt securities matter. It may not be proved absolutely but in practice, it is accepted if it has with stood a critical testing. The statistical hypothesis is tested at 1%, 5% and 10% level of significance. In testing of hypothesis, Chi- square has been tested. Expected frequencies are calculated by applying the following formula:

$$E = \frac{RT \times CT}{GT}$$

Where,

RT = Row Total

CT = Column Total

GT = Grand Total

The quantity of χ^2 describes the magnitude of the discrepancy between theory and observations. It is defined as,

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

Where,

O = Observed Frequency

E = Expected Frequency

χ^2 = Chi-square

A quantitative statement about the population parameter, which may be true or false, is called a hypothesis. In order to make proper decision about the qualitative statement of the population, testing of hypothesis technique is used. But, testing of hypothesis is carried out by using sample information. According to Rumen and Balline, "A hypothesis is a statement capable of being tested and verified or rejected". After setting the hypothesis, it is necessary to test the consistency of such statistical statements. For this purpose, an experiment is conducted by using sample information and the hypothesis is rejected if the results obtained are doubtful under this hypothesis. But, if the results are not doubtful, the hypothesis is accepted. The procedure of drawing such conclusion based on sample information is known as testing of hypothesis. It has tested following few hypotheses:

Research Hypothesis

Null Hypothesis (H_o):

1. There is no significant difference between observed and expected frequencies regarding the choice of securities.
2. There is no significant difference between observed and expected opinions regarding to the reason for the slow growth of debt market.
3. There is no significant difference between observed and expected frequencies regarding to the few practices of corporate debentures.

Alternative Hypothesis (H_1):

1. There is significant difference between observed and expected frequencies regarding to the choice of securities.
2. There is significant difference between observed and expected opinions regarding to the reason for the slow growth of debt market.
3. There is significant difference between observed and expected frequencies regarding to the few practices of corporate debentures.

3.6 Curvilinear Model

To examine the trend of corporate bonds, curvilinear model has been used. With the help of this model, the forecasted amount of government securities is calculated for next six years.

The equation of curvilinear model is as below:

$$y = a + bx + cx^2 \quad \text{.. (i)}$$

$$\Sigma y = Na + b\Sigma x + c\Sigma x^2 \quad \text{... (ii)}$$

$$\Sigma xy = a\Sigma x + b\Sigma x^2 + c\Sigma x^3 \quad \text{... (iii)}$$

$$\Sigma x^2 y = a\Sigma x^2 + b\Sigma x^3 + c\Sigma x^4 \text{.. (iv)}$$

By solving the above equations the value of a, b, c are calculated. The forecasted value can be calculated by using the following equation.

$$\hat{y} = a + bx + cx^2$$

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

The study focused on the current status of corporate debenture as well as that of government bonds market of Nepal to identify the problems faced by it and find out the remedies for the growth of it which is the main aim of this thesis. In the history of Nepal corporate debenture, debenture has been issued only 16 times. Hence, maximum data has been taken for the study and analysis. In case of primary data questionnaire was developed containing 10 sets of questions and distributed to different organizations including banks, NEPSE, trading companies and individual investors as well. Apart from questionnaire, opinions from various experts have also taken in order to find out the true picture of current debt market of Nepal. Hence, analysis has been made taking help from both primary and secondary data.

4.1 Presentation and Analysis of Secondary Data

4.1.1 Corporate debt securities and common stock in Nepalese market

Table 4.1
Position of debt securities and common stock

(In Millions)

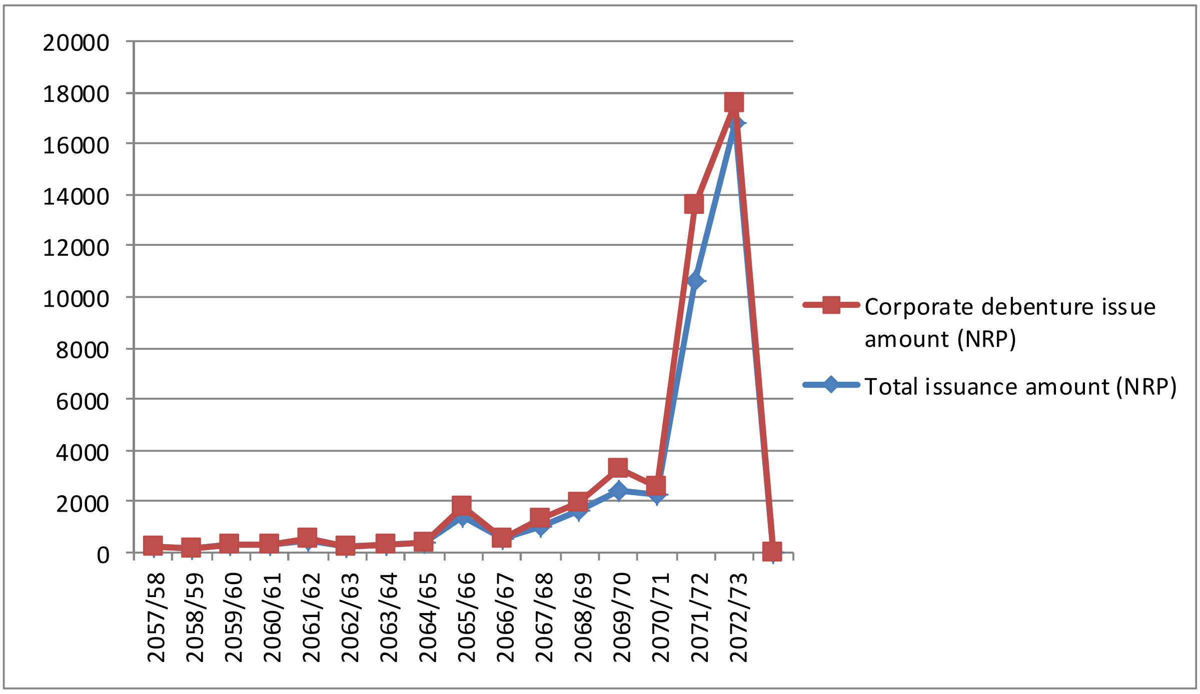
Fiscal Year	Total no. of issues of common stocks	No. of debenture issues	Total issuance amount (NRP)	Cumulative amount of total issuance	Corporate debenture issue amount (NRP)	Cumulative of corporate debenture issue amount	% of Debenture issue on total issue
2057/58	16	-	244	244	-	-	0.00%
2058/59	10	-	174	418	-	-	0.00%
2059/60	12	-	294	712	-	-	0.00%
2060/61	5	-	332	1044	-	-	0.00%
2061/62	12	1	462	1506	93	93	20.13%
2062/63	5	-	258	1764	-	93	0.00%
2063/64	6	-	327	2091	-	93	0.00%
2064/65	9	-	410	2501	-	93	0.00%
2065/66	12	1	1441	3942	360	453	24.98%
2066/67	18	-	557	4499	-	453	0.00%
2067/68	14	1	1028	5527	300	753	29.18%
2068/69	14	1	1627	7154	300	1053	18.44%
2069/70	29	4	2443	9597	850	1903	34.79%
2070/71	33	1	2296	11893	250	2153	10.89%
2071/72	64	5	10668	22561	2950	5103	29.61%
2072/73	64	2	16829	39839	750	5853	4.46%
Total	323	16	39389		5853		

Source: SEBON Annual Report from the fiscal year 2057/58 to 2072/73

From table 4.1 we can draw some of the conclusions that out of total number of securities issues of 323 till 2072/73 debenture issue contributed only 16 issue making 4.95% of the total issue. In amount debenture issue was worth NRP 6,103 million from the total of NRP 39,389 millions making 14.86% of the total issue. From the trend of 17 years of the data in table 14.1 we see the first issue of debenture at 2061/62 which was only 20.13% of the total issue and then again there was holiday of three years before another issue was made worth 360 million which made 24.98% of the total issuance in the year 2065/66. Again there was a break of one year i.e. 2066/67. From 2067/68 on wards there is regular issue of the debenture till 2072/73 which is a positive sign for the development of the debt market of Nepal. The highest issue was on 2071/72 worth Rs. 2950 million.

The comparison between total securities issued and debenture issued during the observed period is shown in the figure below.

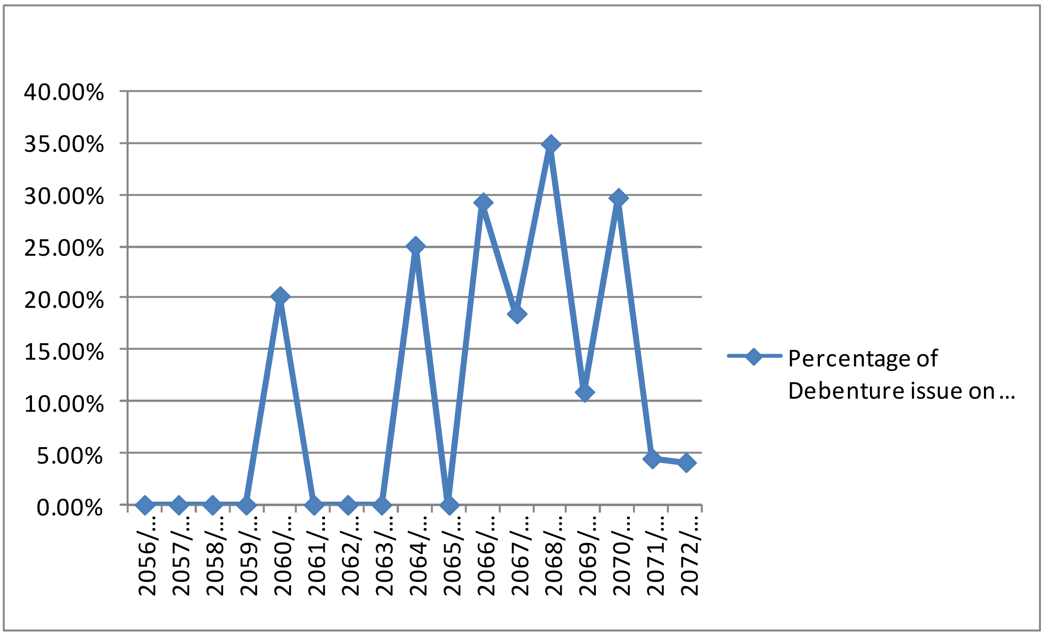
Figure 4.1
Debenture out of Total security issue



Source: Table No. 4.1

Figure no. 4.1 shows the trend of debenture issue with all securities issue till 2072/73. Till year 2070/71, trends of debenture issue and other securities issue were similar but in 2072/73 it decreased drastically as compared to year 2071/72.

Figure 4.2
Percentage of Debenture Issue on Total Issue (%)



Source: Table No. 1

Figure no. 4.2 shows the position of debenture in total issue. Debenture issue had not gone above 35% mark of the total issue so far. Debenture issue in total issue is in fluctuating trend, decreasing in last observed at 2072/73 5% below.

4.1.2 Position of Corporate Debt in Total Debt Market in Nepal

Total debt comprises of government debt securities and corporate debt. In order to fulfill its fund requirement, both government and private corporate sector borrows fund from public through debt securities. Debt securities issued by government are government debt which includes treasury bills, national saving bonds etc. and debt securities issued by the private sector are corporate debt which includes bonds or debentures.

Nepalese government issues treasury bills in order to fulfill its short term fund requirement while National Saving Bonds are Citizen Investment Certificate in order to fulfill its long term fund requirement. These securities being issued by government are very popular in Nepalese debt market. These debt securities have interest rate higher than the prevailing market interest rate and with maturity period of up to 15 years from the date of issuance. These instruments are issued with the intention to cap the unutilized funds of general public and utilize the same in development if the country. Corporate debt on the other hand has very small history and is not much popular to public too. Corporate debt includes debentures issued by the private sector in order to fulfill its fund requirement. In Nepal, very few corporate debentures have been issued. The corporate debenture issued have maturity period ranging from 3 to 10 years and with coupon interest higher than prevailing market interest rate. The position of both corporate and government debt in Nepalese debt market is shown in the table below.

Table 4.2
Position of Corporate and Government Debt in Total Market

(NRR in Millions)

Fiscal Year	Government Debt	Corporate Debt	Total Debt	Percentage of Govt. Debt to Total Debt	Percentage of Corporate Debt to Total Debt
2063/64	60,044.00	93.00	60137.00	99.85	0.15
2064/65	73627.00	453.00	74080.00	99.39	0.61
2065/66	84645.00	453.00	85098.00	99.47	0.53
2066/67	86134.00	753.00	86887.00	99.13	0.87
2067/68	87564.00	1053.00	88617.00	98.81	1.19
2068/69	89955.00	1903.00	91858.00	97.93	2.07
2069/70	99304.00	2153.00	101457.00	97.88	2.12
2070/71	111239.00	5103.00	116342.00	95.61	4.39
2071/72	120873.00	5853.00	126726.00	95.00	4.62
2072/73	530976.5	58450.00	589426.50	90.08	9.91

Source: Annual Report of SEBON from the fiscal year 2063/64 to 2072/73

The Table No. 4.2 clearly shows that the corporate debt is far behind the government debt. The total debt market of Nepal is heavily dominated by the government debt. One of the reasons is non issuance of corporate debt in Nepalese debt market. Another reason being government debts are regarded as less risky than corporate debt. The maximum contribution of corporate debt market is 9.91% in fiscal year 2072/73 against 90.08% contribution of government debt in same year.

4.1.3 Position of corporate Debenture in Nepalese Capital Market

In Nepalese capital market, ordinary share is highly preferable security. Till the observed period security issue is NRP 1.5 billion and there is increase in debenture issue from bank as well. Preference share amounted to NRP 0.63 billion where as right share amounted to NRP 11.04 billion. The following table (table 4.3) shows the position of corporate debenture, ordinary share and preference share with percentage.

Table 4.3
Position of corporate debenture, ordinary share and preference share with percentage

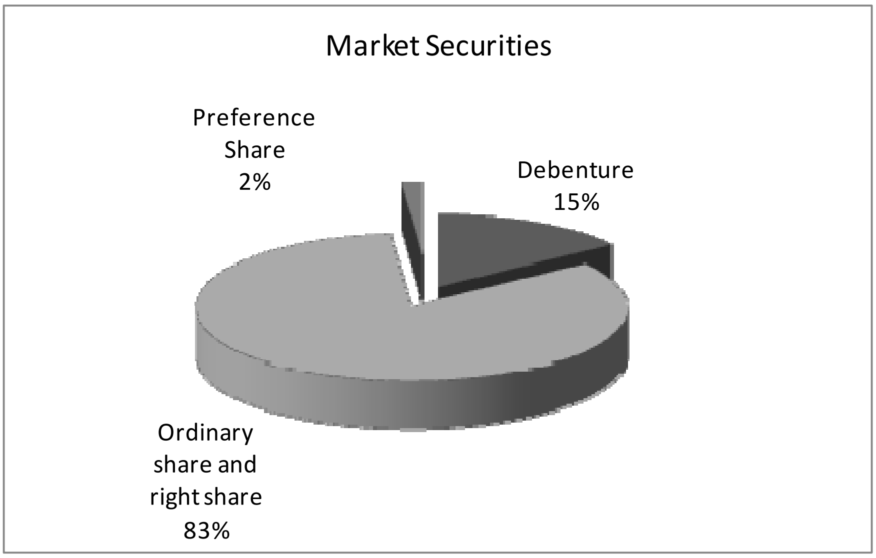
(NRP in millions)

Fiscal Year	Debenture	Per. (%)	Cum. of Debenture issue	Ordinary share & right share	Per. (%)	Cum. Of ordinary share	Preference shares	Per (%)	Cum. Of preference share issue
2056/57	-	0	-	228	7.08	228	17	2.67	17
2057/58	-	0	-	174	5.41	402	-	0	17
2058/59	-	0	-	294	9.13	696	-	0	17
2059/60	-	0	-	332	1.03	1028	-	0	17
2060/61	93	1.58	93	369	1.15	1397	-	0	17
2061/62	-	0	93	178	5.53	1575	80	12.56	97
2062/63	-	0	93	327	1.06	1902	-	0	97
2063/64	-	0	93	411	1.28	2313	-	0	97
2064/65	360	6.15	453	941	2.92	3254	140	21.98	237
2065/66	-	0	453	556	1.73	3810	-	0	237
2066/67	300	5.12	753	728	2.26	4538	-	0	237
2067/68	300	5.12	1053	1326	4.12	5864	-	0	237
2068/69	850	14.52	1903	1593	4.95	7457	-	0	237
2069/70	250	4.27	2153	1645	5.11	9102	400	62.79	637
2070/71	2950	50.40	5103	7012	21.78	16114	-	0	637
2071/72	750	12.81	5853	16078	49.95	32192	-	0	637
2072/73	250	4.09	6103	1550	4.81	33742	-	0	637
Total	6103			33742			637		

Source: Annual Report of SEBON from the fiscal year 2056/57 to 2072/73

While looking at trend of the security issue, ordinary share and right share were being issued regularly whereas initially debenture issue was sluggish but from 2066/67, it was being issued regularly and issued amount had also increased over the time period. Preference share was not being issued regularly. From this we can say that preference share is less preferred while ordinary share and right share is highly preferred. In recent years, debenture issue also has increased when we look at instrument wise concentration of securities in current capital market. (fig. 4.3)

Figure 4.3
Market share of different security instrument



Source: Table 4.3

From the above figure 4.3 it is crystal clear that the security market in Nepal is highly dominated by ordinary share and right share which holds 83% of the total market share while debenture holds the second position making 15% in its share and the minimal position is held by the preference share counting 2% in its part.

4.1.4 Position of Government debt securities

Government of Nepal has started to borrow from the internal sources to fulfill the resource gap in the budget since 1961. In the initial year 1961, the government issued only T-Bills for internal borrowings. Now the government issues various kind of securities such as T-Bills, Development bonds, special bonds, national saving bonds and public saving cards.

The following table (Table no. 4.4) shows the total internal debt liability of Nepal government as of Bhadra, 2073

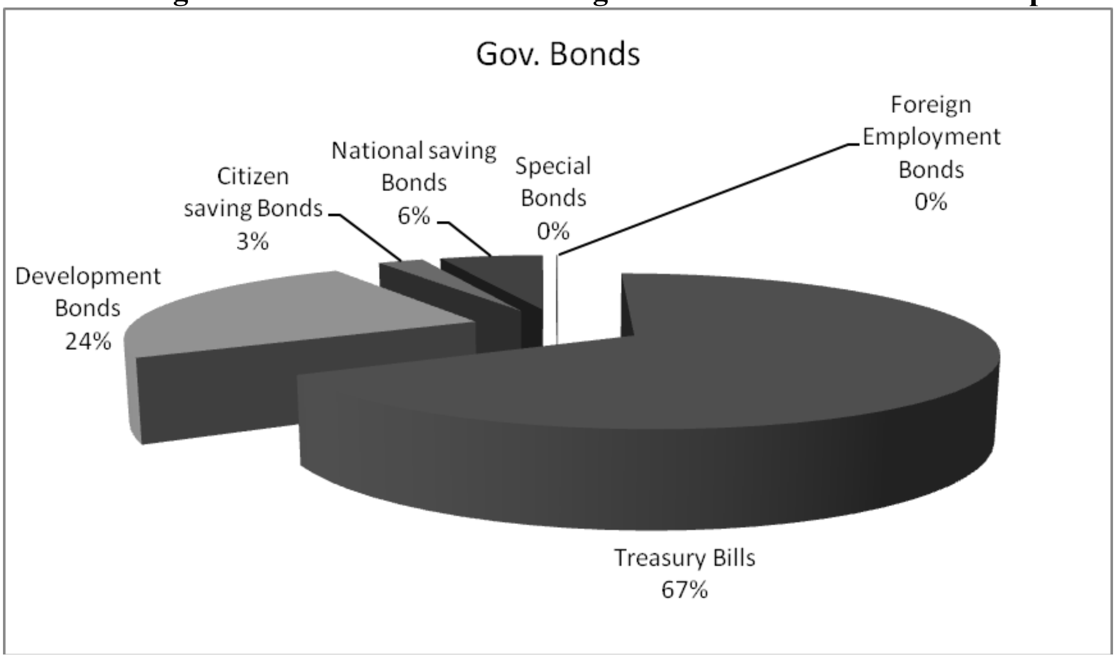
Table No. 4.4
Total Internal Debt Liability of Nepal Government
As of Bhadra, 2073 (Mid August, 2016)

Rs. In Lakhs

S.N	Bonds	Amount	Percentage (%)	Ownership Of NRB	Ownership of other organization
1	Treasury Bills	1,203,406.83	67	275,289.33	928,117.5
2	Development Bonds	435,194.00	24	3,681.50	431,512.5
3	Citizen saving Bonds	46,288.94	3	31,977.65	14,311.29
4	National saving Bonds	106,800.00	6	108.60	106691.4
5	Special Bonds	1,576.00	0	-	1576.00
6	Foreign Employment Bonds	73.80	0	-	73.80
Total		1,793,279.57	100.00	311,057.08	1,482,222.49

Source: Nepal Rastra Bank, Journal 2016.

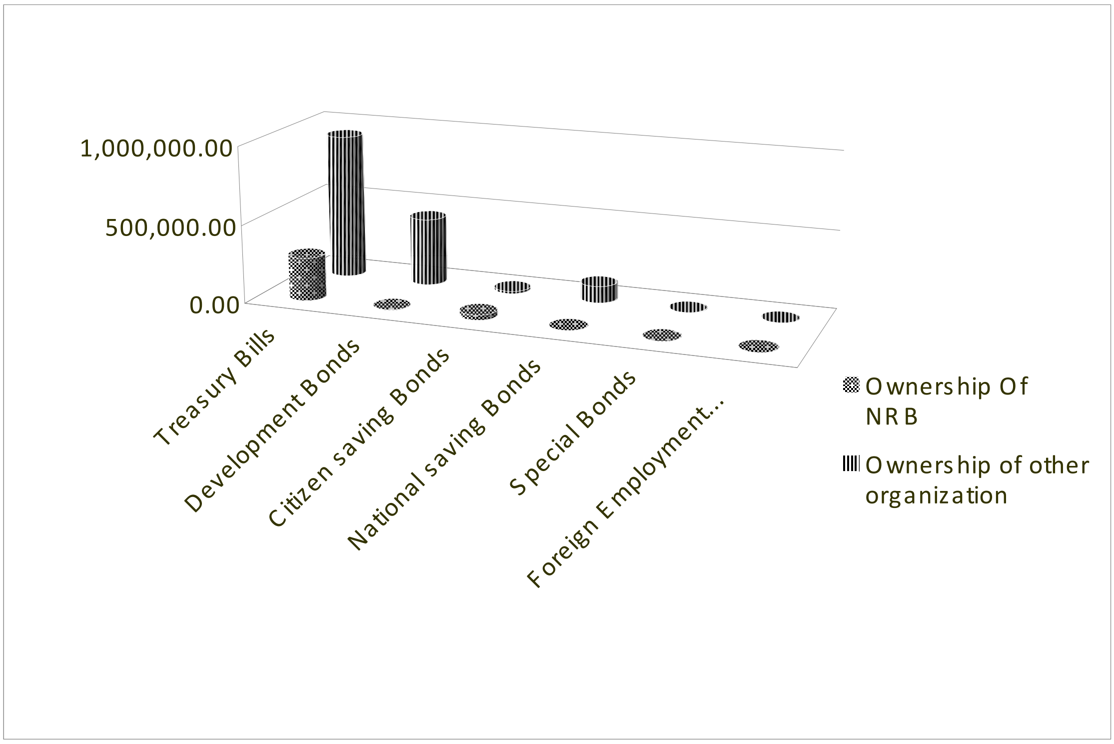
Figure: 4.4
Different government Bonds contributing in Internal debt of Govt. of Nepal



Source: Table no. 4.4

From table no. 4.4 and figure no. 4.4 it is clear that the internal debt of Nepal is largely dependent on Treasury bills which consists of 67% of the total internal debt raised while development bond is the second largest contributor making it to 24% of the total funds raised. Other instruments hold very negligible share in comparison to these two instruments.

Figure: 4.5
Ownership of Government Securities (NRB vs. others)



Source: Table no. 4.4

From figure 4.5 we can see the portion of different bonds held by NRB and other organizations that has been issued by the government of Nepal as of Bhadra, 2073. NRB holds treasury bills of highest amount followed by citizen saving bond while other organization also hold the treasury bill of highest amount, development bonds in the second and national saving bonds in the third. If we compare the holding by these two groups we see NRB holding citizen saving bond more in amount than that of other organization while in rest all the others bonds it is others organizations that hold more in amount than in comparison to NRB. As foreign investment bond is for the employee abroad so NRB does not hold any portion of it while special bond is also not held by NRB both these bonds are held by other organization or individual investors. Similarly, there is negligible hold of NRB of National saving bond as these bonds are directed to the Nepali individuals to promote their saving habits so other organization and individual have held more of this kind of bond. There is high degree of involvement of NRB and other organizations in the trade of treasury bills.

Table No. 4.5
Details of govt. Securities Issued In the
Current Fiscal Year as of Ashad, 2073 (Mid-June, 2016)

(Rs. In Lakhs)

S.N.	Types of Securities	Date of Issue	Payment Date	Interest/Discount	Net Issued Amount
1	Treasury Bill S.N. 1025	2071/8/28	2072/12/01	6.8154	5,000.00
2	Treasury Bill S.N. 100ka	2071/8/28	2072/02/31	7.0110	5,000.00
3	Treasury Bill S.N. 1025ka	2071/8/28	2072/08/27	7.2850	5,000.00
4	Development Bond 2072 gha	2071/09/16	2072/09/16	9.5000	30,000.00
5	National Saving Bond 2072	2071/10/06	2072/10/06	9.7500	40,000.00
6	Treasury Bill S.N. 1044	2072/01/13	2073/04/10	9.1139	7,500.00
7	Treasury Bill S.N. 1046	2072/01/27	2073/04/24	8.9244	15,000.00
8	Development Bond 2072 gha	2072/02/19	2073/02/19	9.5000	50,000.00
9	Treasury Bill S.N. 1051	2072/02/31	2073/05/27	8.4764	12,500.00
10	Treasury Bill S.N. 110ka	2072/02/31	2073/08/27	8.2522	10,000.00
11	Treasury Bill S.N. 1051 ka	2072/02/31	2073/02/30	8.7316	10,000.00
12	Treasury Bill S.N. 1052	2072/03/07	2073/06/03	8.3699	10,000.00
13	Treasury Bill S.N. 1055	2072/03/28	2073/06/24	8.2707	20,000.00
14	Treasury Bill S.N. 1051 ka	2072/03/07	2073/03/05	8.6138	10,000.00
15	Treasury Bill S.N. 1055 ka	2072/03/28	2073/03/26	8.6408	20,000.00
16	Treasury Bill S.N. 111ka	2072/03/07	2073/09/05	8.4860	10,000.00
17	Treasury Bill S.N. 114ka	2072/03/28	2073/09/26	8.6956	9,966.00
18	Foreign Employment SB 2073	2072/03/12	2073/03/12	10.50	33.80
19	National Saving Bond 2073	2072/03/12	2073/03/19	10.00	66,800.00
	Total				336,799.80

Source: Nepal Rastra Bank, Journal 2073.

From Table 4.5 we can see different types of government securities issued, on different dates with varying maturity periods and of different denominations, by NRB on behalf of Nepal government to meet the debt requirement. A total of NRP 336,799.80 lakhs was raised using different instruments and among all of them Foreign employment saving bond 2073 contributed the least making it to NRP 33.80 Lakhs despite the highest rate of interest (10.50%) than any other securities. This bond is especially targeted to the foreign employee with a primary objective to develop in them a saving habit so that they can make best use of their hard earned money back home and also to fulfill the debt requirement of government as a secondary objective. Despite this noble objective of the government the response is quite underwhelming.

4.1.5 Corporate Debenture Currently Floating in Nepali Market

Table 4.6
Interest Rate of debenture Currently Floating in Nepali Market

Fiscal Year	Debenture Name	Coupon Rate	Tenure/ Period
2058/59	HBL Bond 2065	8.50%	7 years
2059/60	NIBL Bond 2066	7.50%	7 years
2060/61	EBL 2067	6%	7 years
2061/62	BOK Bond 2068	6%	7 years
2062/63	NIBL Bond 2069	6%	7 years
2063/64	NIC Bond 2070	6%	7 years
2064/65	NSBI Bond 2071	6%	7 years
2065/66	NIBL Bond 2072	6.50%	7 years
2066/67	NEA Bond 2071	7.75%	5 years
2067/68	HBL Bond 2074	8%	7 years
2068/69	KBL Bond 2073	8%	5 years
2069/70	NIB Bond 2076	8%	7 years
2070/71	NABIL Bond 2080	8.50%	10years
2071/72	Laxmi Bank Debenture 2078	8.50%	7 years
2072/73	SBL Bond 2079	8.50%	7 years

Source: Annual Trading Report of NEPSE from the fiscal year 2058/59to 2072/73

The interest rate structure of debenture currently available in the market, as shown by the table above, ranges from 6% to 8.5%. The interest in debenture issued by NABIL Bank Limited, Laxmi Bank Limited & Siddhartha Bank Limited has high interest rate of 8.5% and the lowest being 6% issued by Everest Bank, Bank of Kathmandu Ltd, NIC Bank Ltd and Nepal SBI Bank Ltd. From the table above, the first ten bonds have already matured. From 2065/66 onwards we can see the gradual increment in the interest rate over the time period and finally reaching the highest rate of 8.5% till 2072/2073. Though the interest rate seems to increase but the increase is not enough to attract the investors in the bond. This is the present situation of corporate debenture having comparatively very less issue with even less number of organization along with very low increase in the interest rate. So it is obvious that if there is equal or higher interest rate provided by the bank than the investors will switch to investing in the bank rather than investing in the bond since it is easy depositing in the bank than going for any other new alternatives to the habituated investors with the classic mindset.

4.1.6 Corporate and Govt. Bonds Listing and Trading in Security Market

Table No. 4.7
Trading of Corporate & Govt. Bonds 2072/73

S.N	Corporate Bonds	Qty.	Rate	Amount NRP
1	NABIL BANK Ltd. 2073	1000	1000	1000000
2	HIMALAYAN BANK BOND 2072	20000	1000	20000000
3	EVEREST BANK BOND 2061	7260	1000	7260000
4	NIB BOND 2072	10000	1000	10000000
5	NIB BOND 2067	1740	1000	1740000
6	BOK BOND 2069	8530	1000	8530000
7	LAXMI BANK BOND 2072	10000	1000	10000000
Total		58530	7000	58530000
Government Bonds				
1	BIKAS RINPATRA 2071 KA	50000	104	5200000

Source: Annual Trading Report NEPSE of fiscal year 2072/73

With reference to the above table and the Annual Trading Report NEPSE 2009/2010 , it is found that no bond transactions has been recorded during last few years, eight transactions of bond trading were recorded during the fiscal year 2067. Out of 8 one held for government bond namely Bikas Rinpatra 2071 ka (Development bond 2071 ka) amounting NRP 5.2 million and remaining 7 for corporate bonds with total amount of NRP 58.53 million. The trading of bonds is very negligible in comparison of the common stock. The main reason for such least no of trading is due to the availability of less no of bonds issued by corporate houses, low number of individual investors and different income tax on interest for individuals and corporate companies as a result only individuals can trade with individuals and corporate companies with corporate companies there by further narrowing down the transaction.

So far listing of the government bonds and corporate bonds are considered it was found that till the end of Ashad 2067, there were 176 listed companies with 821.75 million shares having paid up value of Rs. 79.36 billion. 14 corporate bonds with the value of Rs 5.36 billion and 17 government bonds having the paid up value of Rs 24.95 billion were listed at NEPSE. In the fiscal year 2071/72 one corporate bond worth NRP 222.77 million and 4 government bonds worth NRP 9800 million was found listed. Similarly in the fiscal year 2072/73 no corporate bond was listed leaving alone the two government bonds worth NRP 79909.00 (thousands) to be listed. All these facts are evident that bonds, especially corporate bonds, are not more frequently listed and traded in the secondary market of Nepal which in not a good symptom of overall development of the capital market of Nepal.

4.1.7 Growth Trend of Corporate Debentures Fitted in Curvilinear Model

Now an effort is made to fit the growth of the corporate debentures in a curvilinear model and issue for some few years ahead is forecasted. The amount of debenture issued per year by the corporate organization to till date is taken to serve the objective.

Table 4.8
Growth Trend of Corporate Bond Fitted in Curvilinear Model

(in millions)

Year	x = No of year	y=Amount of corporate Bond	xy	x^2	x^3	x^4	x^2y
2061/62	1	93	93	1	1	1	93
2062/63	2	0	0	4	8	16	0
2063/64	3	0	0	9	27	81	0
2064/65	4	0	0	16	64	256	0
2065/66	5	360	1800	25	125	625	9000
2066/67	6	0	0	36	216	1296	0
2067/68	7	300	2100	49	343	2401	14700
2068/69	8	300	2400	64	512	4096	19200
2069/70	9	850	7650	81	729	6561	68850
2070/71	10	250	2500	100	1000	10000	25000
2071/72	11	2950	32450	121	1331	14641	356950
2072/73	12	750	9000	144	1728	20736	108000
Total	78	5853	57933	650	6084	60710	601793

Source: Table 4.1

Table No. 4.9

Forecasted amount of corporate bond from 2073/74 to 2074/75

('Rs' in million)

Year	Forecasted amount of Corporate Bond
2073/74	1987.341
2074/75	2401.2991
2075/76	2854.5255
2076/77	3347.0201
2077/78	3878.7829
2078/79	4449.8129

Figure: 4.6
Trend line of forecasted amount of corporate bond from 2073/74 to 2078/79

If all the economic parameters favor the ongoing situation then the forecasted trend of the corporate bonds indicates a good possibility of the corporate bonds of Nepal in the near future. It shows the possibility of increment in the corporate bonds over the coming year which, obviously, is good news for the development of the debt market of Nepal.

It is found that commercial banks are the main issuer of the commercial bonds while NRB is the main of government security. Beside this, financial institutions are the main holders of the debt-securities in the context of Nepal.

4.2 Presentation and Analysis of Primary Data

This chapter reflects the methodology. To meet the objective of the study, to evaluate the management, professionals, investors and general public view related to debentures a set of questionnaire consisting ten different questions covering different aspects of debenture was used, randomly. From the response of the questions, some sorts of analysis is made and some conclusion is drawn which further helped the researcher to make notable recommendations. Out of 100 respondents 22 were from listed companies, 12 from issue managers/brokers, 48 individual investors and 18 the expert group. So the respondents are classified into four groups L.C (listed companies), I.M (issue managers/ brokers), I.I (individual investors) and Exp. (experts).

Securities preferred to invest on

In their overall ranks for the securities to invest on such as common stocks, debt securities (debentures), preference share, mutual funds and others, majority of respondents gave their first priority to option ‘a’ (common stocks), second priority to option ‘b’ (debt securities-debentures), third priority to option ‘d’ (mutual funds), fourth priority to option ‘c’ (preference share) and no respondents showed any response towards option ‘e’ (any others) .

Table No: 4.10
Choice of Securities for investment by all Respondents

Options	L.C.	I.M.	I. I	Exp.	Total
(a)	12	6	33	7	**58**
(b)	6	3	8	5	**22**
(c)	1	1	4	2	**8**
(d)	3	2	3	4	**12**
(e)	0	0	0	0	**0**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

After analyzing the data received by all respondents on choice of securities to invest on, Table 4.10 shows that out of total respondents (i.e., 100), 58% respondents gave their first priority to common stocks, 22% respondents gave their first priority to debt securities (debentures), 12% respondents gave their first priority to mutual funds and only 8% respondents gave their first priority to preference share while no priority to any others. This shows that the majority of the respondents gave first priority to common stocks.

In addition to above, each group's response on choice of securities for investment is analyzed here. The majority of respondents, i.e. 54.55% listed companies, 50% issue manager/broker and 68.75% individual investors gave their first choice to common stocks for investment where as 38.89% experts gave their first choice to common stock and no interest shown towards others means. The practice of issuing common stocks is very popular in the Nepalese capital market because majority of investors are familiar with this security from the very beginning. It can be inferred that common stock market has dominated Nepalese capital market due to the poor practice of issuing other investment alternatives. As preferred stocks, corporate bonds, and very few availability of investment alternatives, majority of investors are familiar with common stock only. Majority of the companies used common stock for raising long-term fund, as it is already popular to investor.

Reasons for slow Growth of Debt Market in Nepal

In their overall ranks for the major reasons for slow growth of Nepalese debt securities market, majority of the respondents gave their first priority to option 'a' (lack of investors awareness towards debt securities), second priority to option 'b'(lack of capital gain opportunity), third priority to option 'd' (Limited Issuance of Quality Bonds), fourth priority to option 'c' (Lack of Proper Legal Provision), fifth priority to option 'e', (poor practice of information disclosure by private organization)

Table No: 4.11
Reasons for Slow Growth of Nepalese Debt Securities Market

Options	L.C.	I.M.	I. I	Exp.	Total
(a)	10	5	20	8	**43**
(b)	8	3	9	2	**22**
(c)	1	2	8	1	**12**
(d)	3	1	7	4	**15**
(e)	0	1	4	3	**8**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

After analyzing the data received from all respondents on reasons for slow growth of

Nepalese debt market , 4.11 shows that out of total (i.e., 100) respondents, majority of respondents i.e. 43% respondents gave their first priority due to lack of investors' awareness towards debt securities which impede the growth of debt market, 22% respondents gave their reason due to lack of capital gain opportunity, 15% respondents gave their first priority due to limited issuance of quality bonds, 12% respondents gave their opinion due to lack of proper legal provision, and remaining 8% respondents gave their opinion due to the poor practice of information disclosure by private organization.

In addition, while analyzing each group's responses on their reasons, we see the following results. The majority of respondents, i.e. 45.45% listed companies, 41.67% issue managers/brokers and 41.67% individual investors, and 44.44% experts gave the first priority due to lack of investors awareness towards debt securities (Table 4.11). This shows that the important factor for the smooth growth of Nepalese corporate debenture market is investors' awareness.

There are many more tools to make investor aware about bond market. Among them, issuing debenture in the capital market is one and disclosure of price sensitive information is the other. If the debentures are not issued, how investors know about that. Similarly without the knowledge of price sensitive information of debenture/bond issuing companies, how they know the financial background, performance etc. of the companies that attracts them towards their debt securities. So, for the growth of corporate bond market the bond issuing companies should disclose its financial performance time to time. Such timely disclosure of price sensitive information helps to attract the investors or public towards their debt securities.

Reasons for Few Practices of Corporate Debentures by Corporate Organizations

In their overall ranks on reasons for less practice of corporate debentures by corporate organizations, majority of the respondents gave their first priority to option 'b' (lack of sound debt market in Nepal), second priority to option 'a'(credit oriented transaction have dominated debenture market) & 'd'(lengthy process of issuing as well as ineffective rules and regulations) in unison, third priority to option 'e' (increase in financial risk) and fourth priority to option 'c' (political instability) .

Table No: 4.12
Priority of Reasons for Less Practice of Debentures by Corporate Organizations by all Respondents

Options	L.C.	I.M.	I. I	Exp.	Total
(a)	3	3	8	5	**19**
(b)	9	3	24	7	**43**
(c)	4	2	2	1	**9**
(d)	2	3	12	2	**19**
(e)	4	1	2	3	**10**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

After analyzing the data received by all respondents on priority of reasons for less practice of debenture by corporate organizations, Table 4.12 shows that out of total respondents (i.e., 100), 43% respondents gave their first priority to lack of sound debt market in Nepal, and 19% ,each, respondents gave their first priority to lengthy process of issuing as well as ineffective rules and regulations & credit oriented transaction have dominated debenture market, 10% respondents gave their first priority to Increase in financial risk and rest of the respondents(9%) gave their first priority to political instability. This shows that the major reasons for few practice of debenture by few number of private organization is due to the lack of sound debt market in Nepal. Similarly, lengthy process of issuing as well as ineffective rules and regulations and credit oriented transaction dominating Nepalese market is the second major reasons for few practice of debenture by few numbers of private organizations.

In addition, each group's response on reasons for few practice of debenture by few numbers of private organizations is analyzed. The majority of respondents, i.e. 40.91% listed companies, 25% issue managers/brokers, 50% individual investors and 38.89% experts gave their first priority to lack of sound debt market in Nepal (Table 4.12). This shows that systematic growth of Nepalese debt market is required to attract investors and issuers towards it. Similarly, lengthy process of issuing as well as ineffective rules and regulations should be revised to make it favourable to debenture investors and issuers.

Reasons for Using Bank Loan Instead of Issuing Debentures by Nepalese Organizations

In their overall ranks on reasons for using bank loan instead of issuing debentures by Nepalese corporate organizations, majority of the respondents gave their first priority to option 'a' (easy access to bank loan), second priority to option'd' (fear factor regarding under subscription of debentures), third priority to option 'b' (tedious and lengthy process of issuing debenture), fourth priority to option 'c' (cost of bank loan is less than debenture issue) and last priority to others.

Table No: 4.13
Priority of Reasons Regarding Use of Bank Loans Instead of Issuing Debentures by Nepalese Corporate Organizations by All Respondents

Options	L.C.	I.M.	I. I	Exp.	Total
(a)	10	6	20	9	**45**
(b)	4	3	8	4	**19**
(c)	2	1	7	2	**12**
(d)	6	2	10	3	**21**
(e)	0	0	3	0	**3**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

After analyzing the data received by all respondents on priority of reasons for using bank loans instead of issuing debentures by Nepalese corporate organizations, Table 4.13 shows that out of total respondents (i.e., 100), 45% respondents gave their first priority to bank loan instead of bond issue as it is easily available, 21% respondents gave their first priority to fear factor of under-subscription of debentures, and 19% respondents gave their first priority to issuance of debenture being lengthy process and 12% of the respondents gave their reason as the cost of bank loan is being less than that of bond issue and only 3% respondents gave their first priority to others.

In addition, each group's response on reasons for using bank loan instead of issuing bond is analyzed. The majority of respondents, i.e. 45.45% listed companies, 50% issue managers/brokers, 41.67% individual investors and 50% experts gave their first priority to bank loan instead of issuing debentures by Nepalese corporate organizations. Similarly, 50% of issue managers gave their first priority to bank loan as the collection of funds by issuing bond is a lengthy process (Table 4.13). As bank loan is less costly and easily available source of financing, majority of the respondents gave their first priority in using bank loan instead of issuing debenture. However, bank loan is suitable for short term financing and bond issue is suitable for long-term financing.

Response of Investment in debentures/bonds

A question had been asked to the total no of respondents on whether investment has been made in debentures/bonds so far. Out of total respondents (i.e. 100), 42% of respondents replied “Yes” and remaining 58% of them replied “No”.

Table No: 4.14
Profile of Respondents on Investment in Debentures/Bonds

Options	L.C.	I.M.	I. I	Exp.	Total
Yes	14	10	8	10	**42**
No	8	2	40	8	**58**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

After analyzing the responses received by all respondents on investment in debentures/bond, Table 4.14 shows that the majority of respondents, i.e. 63.64% listed companies, 83.33% issue mangers/brokers, 16.67% individual investors and 55.56% experts of respondents replied “Yes” while remaining respondents replied “No”. Most of the individual investors replied “No” which means general investors are far from awareness towards investment on debenture/bonds markets and there is high percentage of those investors but very few investors are interested towards it. But most of the respondents of each sector are well acquainted with debenture/bond market which means they are investing on debenture.

It can be added that the debenture/bond market in Nepal is very lean as the Nepalese capital market is in the emerging stage and its history is also very short.

Reason for various kinds of Debt Instruments not being practiced in Nepal

Similarly, another question had been asked in order to analyze poor practice of various kinds of debt instruments in Nepal. Majority of the respondents gave their first priority to option ‘a’ (lack of large business house), second priority was given to option ‘c’ (public unawareness), third priority was given to option ‘b’ (lack of appropriate legislative provision) and fourth reason according to the respondents was option ‘d’ (any others.)

Table No: 4.15
Profile of Respondents on Poor Practice of Various Kinds of Debt Instruments, due to Lack of Large Corporate Houses

Options	L.C.	I.M.	I. I	Exp.	Total
(a)	10	6	23	8	**47**
(b)	4	4	10	3	**21**
(c)	8	2	12	6	**28**
(d)	0	0	3	1	**4**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

After analyzing the responses received by all respondents on reason for various kinds of debts instruments not being practiced in Nepal, Table 4.15 shows out of total respondents (i.e., 100), 47% respondents give first priority to lack of large business organization, 28% of respondents give first priority to public unawareness, 21% give first priority to lack of appropriate legislative provision and 4% of the respondents think any other reasons.

In addition, each group’s response on the reason of poor practice of various kinds of debt instruments in Nepal is analyzed here. The majority of respondents, i.e. 45.45% listed companies, 50% issue manager/brokers, 47.92% individual investors and 44.44% experts agree with the statement that lack of large business organization is the main reason for different kinds of debt instruments not being practiced in Nepal. This indicates that due to the lack of large corporate houses, public awareness, various kinds of debt instrument are not practiced in Nepal. Also, the large flotation costs at the time of issue can be bear by large corporate houses only. Also investors only like the debt securities of large and better performing companies. These big corporate houses can raise required funds easily and they didn’t need to issue bonds like securities. Therefore only fewer companies have been practicing issuing corporate debenture (bond) like securities.

The Present Rules & Regulations (Present Legal Provisions) Sufficient for the growth of Nepalese Debenture (bond) market

The above question had been asked to the total no. of respondents about sufficiency of the present rules and regulation for Nepalese debt market growth, **Table 4.2.1.7** shows that out of total respondents (i.e., 100), only 34% respondents were satisfied with the sufficiency of the present rules and regulation for Nepalese debt market growth while the major portion 66% were not satisfied with legal provisions. The majority of respondents replied that the present rule and regulations are insufficient for the growth of Nepalese debt market as the Nepalese capital market is in the creeping stage; enough rules and regulation are not made for protection for investors' rights and their mutual benefits.

Table No: 4.16
Profile of Respondents on Sufficiency of Present Legal Provision Related to Debt Market

Options	L.C.	I.M.	I. I	Exp.	Total
Sufficient	8	3	15	8	**34**
Insufficient	14	9	33	10	**66**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

In addition, while analyzing each group's response on sufficiency of present rules and regulation (present legal provisions) for Nepalese debt market growth in Nepal, the majority of respondents, i.e. 63.64% listed companies, 75% issue managers/brokers, 68.75% individual investors and 55.56% experts were not satisfied with the fact that the present rules and regulation (present legal provisions) of Nepalese capital market is sufficient but the remaining portion seemed to be satisfied with the present rules and regulation for the growth of debt (bond) market (Table 4.16). This indicates that there is not enough rules and regulation of capital market for the growth of debenture/bond market in Nepal.

Debt market in Nepal affected by political instability

In order to test the affect of the political instability, going on in Nepal, in the debt market the above question was asked to the respondents. In response, majority of the respondent kept the view that the political instability has widespread effect so it is difficult for any organization to be left unaffected either directly or indirectly.

Table No: 4.17
Profile of Respondents on affect of political instability on debt market

Options	L.C.	I.M.	I. I	Exp.	Total
Yes	16	8	39	14	**77**
No	6	4	9	4	**23**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

After analyzing the responses received by all respondents on whether there exists the affect of political instability on debt market, Table 4.17 shows out of total respondents (i.e., 100), 77% respondents think there exists the effect of political instability on debt market while 23% of the respondents consider that political instability doesn't have any effect of debt market as it is in the primitive stage in Nepal.

In addition, each group's response on debt market affection due to political instability is analyzed here. The majority of respondents, i.e. 72.73% listed companies, 66.67% issue manager/brokers, 81.25% individual investors and 77.48% experts agree with the statement that political instability does affect the debt market. While other differ this refuse to accept this. The respondents who believe this statement defend themselves saying that political turmoil and instability creates an environment of disbelief among the investors regarding the better performance of any organization thus discouraging them to invest on any securities and ventures. In fact political instability does not spare out anything from its reach so debt market is no exception.

Problems Facing by Corporate Debenture in Secondary Market

A question had been asked to the total no. of respondents about problems facing by corporate debenture in secondary market. Following Table 4.18 shows that out of total respondents (i.e., 100), 72% respondents agree that Nepalese corporate debenture is still facing a lot of problems in the secondary market but remaining 28% respondents disagree with the problems facing by corporate debenture in secondary market. This shows that majority of the Nepalese organizations are facing problem in secondary market.

Table No: 4.18
Responses of Respondents on Problems Facing by Corporate Debenture in Secondary Market

Options	L.C.	I.M.	I. I	Exp.	Total
Yes	16	8	38	10	**72**
No	6	4	10	8	**28**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

In addition, each group's response on problems facing by corporate debenture in secondary market is analyzed. The majority of respondents, i.e. 72.73% listed companies, 66.67% issue managers/brokers, 79.17% individual investors and 55.56% experts believe that corporate debentures are facing lots of problems till now in secondary market (Table 4.18). The first and the foremost problem is the disbelief from both the investors and the organizations in investing or issuing debt as a good alternative. Second there is no specific plan and vision from the government in promoting the secondary market as a result the disbelief is getting more serious and grave.

The government debt securities market is sound and systematic

After having known the critical condition of corporate debt securities another question asked to the respondents about the performance of government securities in the capital market of Nepal. In response majority of the respondents thought that debt instruments of government is doing far better and the situation is satisfactory for multiple reason associated with the government securities. Out of total respondents (i.e., 100), 62% respondents present their opinion that present situation of government debt securities is sound and systematic while 38% of respondents refused to agree with this opinion as clearly mentioned in the following Table 4.19.

Table No: 4.19
Profile of Respondents on systematic and soundness of government debt securities?

Options	L.C.	I.M.	I. I	Exp.	Total
Yes	12	8	32	10	**62**
No	10	4	16	8	**38**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

In addition, each group's responses on systematic and soundness of government securities in Nepal are analyzed. The majority of respondents, i.e. 54.55% listed companies, 66.67% issue managers/brokers, 66.67% individual investors and 55.56% experts favored the opinion that present situation of government debt securities is systematic and sound. The main reason for favoring the government securities by investor is that it does not have any default risk since government securities being totally risk-free. It holds a longer history than other organizations and it can be trusted irrespective of any situation, political or economic upheavals.

4.2.1 Testing of Hypothesis

After collecting the responses and drawing some of the direct quantitative inferences from the data, the researcher is now intended to find whether the respondents belonging to different field and classes of work differ in themselves regarding the conclusion on some of the major questions the researcher seriously focuses on as per the objective of this thesis. In other words does there exists significant differences between the observed and expected values or not. As the number of respondents taken from different classes were different in number and their response to the question was disproportionate to their number of involvement so a hypothesis is tested to get the validity of the result so obtained from the respondents on some of the major questions like the preference of the securities to invest on, main reason contributing in the slow growth of debt market in Nepal and the main reason for the few practice of corporate debentures by corporate organization in raising the long term-fund.

Testing of hypothesis (Securities preferred to invest on)

Hypothesis – 1

In 100 random samples of respondents, it contains the following distribution which was noted on the basis of different related fields. The test is to draw the choices of various debt securities by Nepalese investors for investment.

Table No: 4.20
Hypothesis Test Regarding to the Choices of Securities

Options	L.C.	I.M.	I. I	Exp.	Total
a) Common stock	12	6	33	7	**58**
b) Debt securities	6	3	8	5	**22**
c) Preference share	1	1	4	2	**8**
d) Mutual funds	3	2	3	4	**12**
e) Others	0	0	0	0	**0**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

Table No: 4.21
Test of Chi-Square

Observed Frequencies (O)	Expected Frequencies (E)	O-E	$\frac{(O-E)^2}{E}$
12	12.76	-0.76	0.0453
6	6.96	-0.96	0.1324
33	27.84	5.16	0.9564
7	10.44	-3.44	1.1335
6 3 **9**	4.84 2.64 **7.48**	1.52	0.3089
8	10.56	-2.56	0.6206
5 1 **7** 1	3.96 1.76 **6.68** 0.96	0.32	0.0153
4 2 **9** 3	3.84 1.44 **7.92** 2.64	1.08	0.1473
2 3 4 0 **9** 0 0 0	1.44 5.76 2.16 0 **9.36** 0 0 0	-0.36	0.0138
Total			**3.3735**

Test Statistics under H_o,

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

χ^2 **= 3.3735**

Degree of freedom = (R-1) (C-1) – 11 [Since 11 degree of freedom loss due to pooling]

= (5-1) (4-1) - 11

= 1

Critical Value or Tabulated Value = the critical value of $\chi2$ at 5% level of significance for 1 d. f. is 3.841.

Decision: Since the calculated value of χ^2 is less than the tabulated value (i.e., 3.3735< 3.841), the null hypothesis (H_o) is accepted at 5% level of significance for 1 d. f. which means there is no significant difference between observed and expected frequencies regarding to the choice of securities.

To test whether the difference in the opinions of the respondents is significant, the chi-square test is employed. The calculated chi-square value is 3.3735 and critical or tabulated value at 5% level of significance for 1 d. f. is 3.841. It can be said that opinions of four different responding groups are similar and there is no significant difference with respect to the choice of securities for investment.

Testing of hypothesis (Reason for slow growth of Debt market)

Hypothesis – 2

In 100 random samples of respondents, it contains the following distribution which was noted on the basis of different related fields. The test is to draw the factors due to which Nepalese debt securities market cannot grow properly.

Table No: 4.22
Hypothesis Test Regarding to the Reason for the Slow Growth of Debt Securities Market

Options	L.C.	I.M	I.I.	Exp.	Total
Lack of investors Awareness	10	5	20	8	**43**
Lack of Capital gain opportunity	8	3	9	2	**22**
Lack of Legal Provisions	1	2	8	1	**12**
Limited Quality Bonds	3	1	7	4	**15**
Poor Practice of Information Disclosure	0	1	4	3	**8**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

Table No: 4.23
Test of Chi-Square

Observed Frequencies (O)	Expected Frequencies (E)	O-E	$\frac{(O-E)^2}{E}$
10	9.46	0.54	0.0308
5	5.16	-0.16	0.0050
20	20.64	-0.64	0.0198
8	7.74	0.26	0.0087
8 3 **11**	4.84 2.64 **7.48**	3.52	1.6565
9	10.56	-1.56	0.2305
2 1 **13** 2 8	3.96 2.64 **13.8** 1.44 5.76	-0.8	0.0464
1 3 **12** 1 7	2.16 3.30 **14.46** 1.80 7.2	-2.46	0.4185
4 0 1 **12** 4 3	2.7 1.76 0.96 **10.70** 3.84 1.44	1.3	0.1579
Total			**2.5741**

Test Statistics under H_o,

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$$\chi^2 = 2.5741$$

Degree of freedom = (R-1) (C-1) – 11 [Since 11 degree of freedom loss due to pooling]
= (5-1) (4-1) - 11
= 1

Critical Value or Tabulated Value = the critical value of $\chi 2$ at 5% level of significance for 1 d. f. is 3.841.

Decision: Since the calculated value of χ^2 is less than the tabulated value (i.e., 2.5741< 3.841), the null hypothesis (H_o) is accepted at 5% level of significance for 1 d. f., the null hypothesis is accepted which means there is no significant difference between observed and expected frequencies regarding to the reason for the slow growth of debt market in Nepal.

To test whether the difference in the opinions of the respondents is significant, the chi-square test is employed. The calculated chi-square value is 2.5741 and critical or tabulated value at 5% level of significance for 1 d. f. is 3.841. It can be said that opinions of four different responding groups are similar and there is no significant difference with respect to the reason for the slow growth of corporate debenture market.

Testing of hypothesis (Reason for few practice of debenture by org.)

<u>Hypothesis – 3</u>

In 100 random samples of respondents, it contains the following distribution which was noted on the basis of related fields. The test is to draw the reason of few practices of debt debentures by private organization.

Table No: 4.24
Hypothesis Test Regarding to the Reasons of Few Practices of Debentures

Options	L.C.	I.M./B.	Ind. Inv.	Experts	Total
Domination of Credit Oriented Transaction	3	3	8	5	**19**
Lack of Sound Debt Market	9	3	24	7	**43**
Political Instability	4	2	2	1	**9**
Length Process of Issuing/ Ineffective Rule	2	3	12	2	**19**
Increase in Financial Risk	4	1	2	3	**10**
Total	**22**	**12**	**48**	**18**	**100**

Source: Field Survey, 2074.

Table No: 4.25
Test of Chi-Square

Observed Frequencies (O)		Expected Frequencies (E)		O-E	$\frac{(O-E)^2}{E}$
3 3	**6**	4.18 2.28	**6.46**	-0.46	0.0328
8 5	**13**	9.12 3.42	**12.54**	0.46	0.0169
9 3	**12**	9.46 5.16	**14.62**	-2.62	0.4695
24		20.64		3.36	0.5470
7		7.74		-0.74	0.0707
4 2 2	**8**	1.98 1.08 4.32	**7.38**	0.62	0.0521
1 2 3	**6**	1.62 4.18 2.28	**8.08**	-2.08	0.5354
12		9.12		2.88	0.9095
2 4	**6**	3.42 2.20	**5.62**	0.38	0.0257
1 2 3	**6**	1.20 4.80 1.80	**7.8**	-1.8	0.4154
Total					**3.0750**

Test Statistics under H_o,

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$\chi^2 = 3.0750$

Degree of freedom= (R-1) (C-1) - 10 [Since 10 degree of freedom loss due to pooling]

= (5-1) (4-1) - 10

= 2

Critical Value or Tabulated Value = the critical value of $\chi2$ at 5% level of significance for 2 d. f. is 5.9915.

Decision: Since the calculated value of χ^2 is less than the tabulated value (i.e., 3.0750< 5.9915), the null hypothesis (H_o) is accepted at 5% level of significance for 2 d. f., the null hypothesis is accepted, which means there is no significant difference between observed and expected frequencies regarding to the few practices of debentures.

To test whether the difference in the opinions of the respondents is significant, the chi-square test is employed. The calculated chi-square value is 3.0750 and critical or tabulated value at 5% level of significance for 2 d. f. is 5.9915. It can be said that opinions of four different responding groups are similar and there is no significant difference with respect to the few practices of debentures.

4.3 Major Findings of the Study

4.3.1 Major Findings of the Study

The major findings from the data analysis have been concluded as follows;

1. More or less debentures issued Nepalese market posses similar features like interest payment semi-annually, call provisions, non-convertibility, and nature of placement. Most of the debentures were issued by banks. Maturity period were around 7 years till the issue of 2072/73. Pattern had changed in the issuance of period 2072. In 2073, tenure was 7 years for both debentures. Mostly used issue managers are Ace Development Bank Ltd and NMB. All debentures were non-callable, non-convertible and placement were done through both public placement and issue manager.
2. Nepalese debt market is highly dominated by government which contributes 95.38% of the total debt market in Nepal. While corporate debt contribute only 4.62% of the total debt market in Nepal. In year 2072 there is good margin of increase in bank deposit rates due to the liquidity crunch in that period. So in order to attract more investors in bond the interest rate in bond should be increased which also may help to solve the problem of under subscription of Nepalese debentures.

3. It is found that commercial banks are the main issuer of the commercial bonds while NRB is the main of government security. Beside this, financial institutions are the main holders of the debt-securities in the context of Nepal.
4. Manufacturing industries may be attracted to issue debenture with interest rate that will attract investors to debentures against deposits in the present scenario of higher lending rates. Very few instances of secondary trading of corporate debentures were found in Nepal. Proper infrastructure is required to support and encourage secondary trading of Nepalese corporate debentures.
5. Awareness level among general investors about debenture is found to be low which is showing impact in secondary market of debenture. The issuing trend of debenture issuance is expected to contribute in developing Nepalese corporate debentures.
6. Government should promote debenture market of Nepal and should remove the prevailing different rate of taxes in the interest of individual investors and that of the organizational investors.

4.3.2 Major Findings in Primary data

To fulfill the objectives of problems and prospects of Debt market in Nepal, following major findings are obtained after analysis of primary data which are collected by questionnaires method from all respondents i.e. listed companies, issue mangers/brokers, individual investors and experts and has been analyzed using chi-square test and other statistical tools. Findings are presented as follows:

1. With respect to the preference regarding choice of securities to invest on, Common stock beats all other options. All the groups including the listed companies, issue managers/brokers, experts' majority preferences are also significantly high in favor of common stocks. In the view of investors, common stock is more popular than other securities. This is due to the poor practice of issuing other investment alternatives as preferred stocks, corporate debentures, and very few availability of investment alternatives, majority of investors are familiar with common stock only. Majority of the companies used common stock for raising long-term fund, as it is already popular to investor and can easily be subscribed. This may be the major issue of debt

market. This indicates that if other instruments with superior quality are also practiced for raising long-term fund, they may have good prospects of over subscribing. This shows some prospects of better future for debt market. Finally, the result of hypothesis test agrees with this statement too.

2. With respect to the reasons regarding slow growth of debt securities Market in Nepal , the majority of the respondents presented their opinions in following order i.e. lack of investors awareness towards debt securities, lack of capital gain opportunity, limited issuance of quality bonds, lack of proper legal provisions and poor practice of information disclosure by private organization are the major factors that obstructs the smooth growth of Nepalese Debt Market. This infers that to gain investors' awareness towards debt securities, public should be informed about debt and their advantage as more and more public involvement is necessary for improving debt market whereas to encourage the listed companies for supplying quality bonds is another major problems of corporate debt market in Nepal. If the corporate sector issues such bonds, the numbers of investors will increase towards corporate debt securities thereby increasing the chance of capital-gain due to continuous trading. Not only this but also proper legal provision should be made sufficient in order to protect for investors' rights and mutual benefits and timely disclosure price sensitivity information is the other to cope with these problems. If above problems are solved then there may be some prospects of debt market.
3. With respect to the reasons regarding only few private organizations are practicing corporate debentures as a source of long term-financing, majority of respondents gave their opinions in favour of lack of sound market in Nepal. Similarly, lengthy process of issuing as well as ineffective rules and regulations and domination of credit oriented transaction is the second major reason. This is also the second serious problem of Nepalese corporate debenture market. In addition, political instability and increasing in financial risk are other problems that obstruct the smooth growth of Nepalese corporate debenture. If large corporate houses fulfill their required fund by using credit facilities, there is no need of issuing corporate debenture in capital market.
4. With respect to the reasons regarding Nepalese organization use bank loan instead of issuing debentures, majority of respondents gave their opinions in favour of easy access to bank loan. And then remaining respondents gave their

opinions due to the fear-factor that debenture may go under subscribed if issued as the second reason. They also emphasized that raising of funds by issuing debenture is lengthy process, and cost of bank loan is less than that of debentures (bonds) issue.

5. With respect to the investment in debentures/bonds, majority of respondents of each sector replied yes except general investors due to which majority of respondents replied “No” in overall. Most of the individual investors replied “No” which means general investors are far from awareness towards investment on debenture/bond markets and there is high percentage (83.33%) of those investors but very few individual investors are well acquainted towards it. But most of the respondents of each sector are well acquainted with debt market which means they are investing on debt market.
6. In response to the reason behind various debt instruments not being practiced in Nepal majority believed it to be so due to the lack of large corporate houses, public awareness, lack of proper legislative provision as the main determining factor. Majority of the respondents agree with the statement stating that the large flotation costs at the time of issue can be bear by large corporate houses only so in their absence the issuance is naturally low. Investors’ also like the debt securities of large and better performing companies.
7. With respect to sufficiency of present rules and regulations for Nepalese debt market growth, majority of respondents agreed that the present legislative provisions regarding debenture/bond markets are insufficient. Some respondents presented their opinions that poor information disclosure from manufacturing and trading companies, high broker’s commission, inadequate private placement, lack of regulatory provisions regarding the trustee of debenture, lack of punishment for the cheaters and lack of establishing credit rating agencies, etc. shows the insufficiency of present rules and regulations of corporate debt securities market of Nepal. If above problems are solved, then corporate debentures market will move in the path of development which can trace the bright future of debt securities.
8. With respect to the effect of political instability in the debt market ,as another question, majority of the respondents were opined that political instability does affect the growth and development of debt market in specific term while equally to all the other sectors ,in general. Political instability makes the

investors insecure and there is not consistency in the rules and regulations that is meant in favour of the investors, issuers, brokers. The level of mistrust and insecurity is high in the case of political instability that makes great deal of investors passive thereby disappointing the investment habits which is quiet detrimental for the economy as a whole.

9. With respect to problems for corporate debentures/bonds in secondary markets in Nepal, majority of the respondents from each sector gave their opinions in favour of “Yes” which discourage the investors in purchasing corporate debt securities. It means there is a need of development of secondary market for the growth of corporate debt securities.
10. In response to the last question of the research about the status of performance of government debt securities and its soundness most of all the respondents were optimistic and agreed that government debt securities are doing far better than in comparison of the corporate debt instruments. The total debt markets' high contribution of about 85% is made by government debt securities. The main reason behind it is investors don't have to bear any risk holding the government securities unlike corporate bonds.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes the overall study into three sections i.e. summary, conclusion, and some recommendations provided to the concerned government bodies, general investors and corporate sector for the systematic development of Nepalese debt market. Before arriving to summary, conclusion and recommendations, the researcher has prepared plan, reviewed literatures and analyzed primary and secondary data using different statistical methods.

5.1 Summary

So far government securities is concerned, the history dates back to 1961 AD when the first treasury bill was issued amounting to NRP 7 million with 1% interest rate. In 1963 AD, with the introduction of public debt regulation act, Development bond worth NRP 137 million was issued. Similarly with the passage of time government started to borrow using national saving bond and, lately, from foreign employment bonds each with various objectives. The total amount of issuance till Bhadra, 2073 (mid august, 2016) the status of different government bonds are as follows: Treasury Bills (1,203,406.83 lakhs) , Development Bonds (435,194.00 lakhs), Citizen Saving Bonds (46,228.94 lakhs) , National Saving Bonds (106,800 lakhs), Special Bonds (1,576.00 lakhs) and Foreign Employment Bonds (73.80 lakhs)

This study is based on primary as well as secondary sources of information. The study of existing corporate debt market of Nepal was accomplished by using secondary data for the period of FY 2057/58 to FY2073/74. In this way, survey of respondents has been accomplished by using primary data of 100 respondents. Out of 100 respondents, there are 22 from listed companies, 12 from issue managers/brokers, 48 from individual investors, and 18 from experts. These respondents of four groups gave their opinions on different aspects of Nepalese corporate debt securities market. The opinion of each respondent group also analyzed on each question, to ascertain the differences in their opinions. For this not only a variety of statistical tests are employed but testing of hypothesis at 5% level of significance by using chi-square is also employed.

This study mainly focuses on analyzing the problems and prospects of Nepalese corporate debt market. Its specific objectives are: (a) to study the position of debt securities market in the structure of Nepalese market (b) to analyze the trend and ownership pattern of corporate debt securities (c) to examine the key investors of and characteristics of Nepalese debt securities (d) to explore the problems that affect development of bond market in Nepal and (e) to provide suggestions, ideas and recommendations based on the analysis of data.

Finally, the trend of issuing corporate debt securities is also increasing but not at satisfactory level. Participation of individual investors in purchasing corporate debt securities is also not at satisfactory level. Though the banking sectors debentures were oversubscribed, the numbers of investors are few. The general investor shows poor response to the recently issued debenture due to many factors affecting debt securities market whereas the government securities have the different story. Treasury Bills and Development bond is in increasing trend while increasing while Citizen Saving and Foreign Employment Bond is in fluctuating trend. In overall government bonds are doing well.

From the field survey, the researcher found the factors that obstruct the growth of debt securities market. Investors unawareness, inferior interest rate structure performance of issuing bodies, insufficient legal provision, limited supply of quality debenture, political instability, insufficient infrastructure, lengthy process of issuing debenture, etc. are the major problems due to which Nepalese debt securities market could not be developed properly. Therefore, there are a lot of things to be done to make the Nepalese debt market sound such as improvement of infrastructure of whole capital market & legal provisions regarding debt market, improvement of attitude of investors toward debt securities, good performance of issuing bodies, removal of policy uncertainty etc. should be improved which may help to develop debt market of Nepal.

5.2 Conclusions

From this study, the researcher concludes that there are some reasons such as continuously decreasing interest rate of debt securities and increasing number of finance companies, which are providing higher interest rate on deposits due to which general investors are showing poorer responses to the debenture issue. In addition, there are many problems, which are restricting the smooth growth prospect of corporate debt market. Lack of investors' awareness towards corporate debt securities, lengthy process of issuing as well as effective and efficient debenture market, lack of legal provision, limited supply of quality debenture and inadequate infrastructure facilities are serious problems of existing Nepalese debt market whereas poor practice of price sensitive information disclosure system, political insatiability, and investors' particular preferences on debenture issuing companies are major problems of Nepalese corporate debentures market.

The oversubscription of banks' debenture shows some positive signals for the growth of corporate debt market and another important thing is that the government securities are going to trade at NEPSE floor; it means better prospects for the growth of government debt market, which will encourage the corporate debt market growth. If mentioned problems are cured in time, its growth prospect is widely felt by the researcher.

Again, the researcher found that the Nepalese general investors are so much interested on investing common stock while very few investors are interested on corporate debenture. They are less risky and provide fixed income. Likewise, companies are also attracting issuing common stock than debt securities even though debenture issue is suitable for long-term financing as well as can be less costly source of long-term financing than common stock.

On the other hand, the researcher wants to sum up some prospects of debentures market in his research's conclusion stating that increasing issuance trend of debenture, declining interest rate on deposits of commercial banks, growing participation of banking sector in issuing debentures, lots of public support towards banking sector's debentures, investors' desire to invest in risk free assets, etc. shows the growth prospects of debt securities market.

5.3 Recommendations

The researcher discovered so many weaknesses in all areas and overall system of Nepalese corporate debenture market. The researcher desires to give some advices to concerned authorities i.e., corporate sector, government, issue managers/brokers, individual investors, and institutional mechanism for converting the major problems into strength and grasping the opportunities for the overall development of Nepalese corporate debenture market.

(a) To Corporate Sector

Corporate sectors are important stakeholders of corporate debt market. If they do not issue debentures, development of corporate debt securities will be impossible. The researcher gives following suggestions to corporate sector.

1. To attract more investors toward corporate debt securities, corporate sectors should increase interest rate on debt securities. If interest rate on debt securities is higher than the inflation rate, the people investing on it don't need to sacrifice the purchasing power on the original investment.
2. From the field survey, other instruments with superior quality, like common stock, are also exercised for raising long-term fund; they may have good chances of over subscribing.
3. Issued debentures should be listed in NEPSE in order to provide secondary market operation. Provision of trustee should be made in debentures issue. In addition, huge portion of issued debentures should be subscribed through public offering rather than private replacement.
4. Price sensitive information should be completely disclosed in order to gain reputation of corporate companies. True financial conditions and plan should be brought out.
5. Inadequate legal provision and conflicting control mechanism should be opposed.
6. Public gives a lot of support to banking sector's debt securities, therefore, debt market growth is possible if it is initiated by banking sector. Similarly, potentiality of debt market growth is higher if it started from top-tier private companies.

(b) To Government

Government has main responsibilities in promoting desirable activities and restricting undesirable activities for the smooth growth of Nepalese corporate debenture market.

Since development of corporate debenture security is essential for the overall growth of capital market, concerned bodies of government should do following activities for the development of corporate debenture market.

1. To attract individual investors towards debt securities, the government should offer some facilities such as tax exemption on income of debt securities; repurchase facility etc. that helps to collect needed funds for corporate sectors.
2. Government should make legal provisions to protect the rights of investors. Not only this but also lengthy process of issuing debentures as well as ineffective rules and regulation should be revised frequently according to the current situation of nation, issuers and investors for the development of corporate debenture market.
3. It is clear that political stability as well as security of the nation is not favorable for the overall development of country. From which capital market is not also free from it. So, security as well as political stability should be maintained in the country.
4. Government should provide authorities to issue municipal debentures to local states by creating necessary laws.
5. Implementation and monitoring mechanism should make efficient and effective regarding debenture market.
6. Majority of the respondents replied that the infrastructure facility of Nepalese capital market is inadequate for the growth of corporate debenture market. The majority of respondents agree that the large flotation costs at the time of issue cannot bear by small corporate houses. So, government should provide adequate infrastructure, and make the cost of issuing debenture favorable.
7. Since, there is only one stock exchange in the country, which is located in the capital and there is no other alternative, participation of the investors from outside the valley is very low. Therefore, to develop a proper debt market, it should provide the opportunity for investing by the people outside the valley, the regional stock exchange concept brought out by the government in ninth-five year plan should be implemented. Expansion of the stock exchange outside Kathmandu will help to increase the number of investors from out of the valley in securities transaction.

(c) To Investors

There are two types of investors such as individual investors and institutional investors. From the field survey, it has found that majority of investors are not interested towards corporate debt securities. So, the researcher gives following suggestions to general investors.

1. It is found that majority of Nepalese investors are not interested towards corporate debentures market. It can be due to lack of knowledge about corporate debentures. So, investors should invest their some times in study about corporate debenture market.
2. Investors should be aware of their rights so that they may use it when needed while inadequacy of laws should be opposed.
3. Investors should change in their perception and attitude on corporate debenture and should invest in corporate securities after properly analyzing risk and return on debentures. Before making investment decision, they should think rationally.
4. From the field survey, majority of investors showed least interested towards manufacturing and trading companies. I like to sum up by stating all manufacturing and trading companies may not be weak. So that, they should identify strong companies and their debentures issue should take positively.

(d) To Institutional Mechanism

There has been making some directing, controlling mechanism of debt securities market, which also looks after Nepalese debentures market. There is NRB, NEPSE, ROC, SEBO/N etc. as institutional mechanism arrangement made by government. The researcher gives following suggestions to institutional mechanism to overrun existing debenture market problems.

1. Security Board of Nepal (SEBO/N) should co-operate NEPSE. Procedures of reviewing debentures prospect and issue approval should be quick. SEBO/N should add additional provisions that help to protect investors' interest. SEBO/N should ensure the timely disclosure of price sensitive information. NEPSE is being the trading place of limited listed shares based on traditional method i.e. open cry system. There is a need of trading securities by

computerized system i.e. online trading system. Auditing and accounting system should be strictly review and reward and punishment should be provided. Listing process of securities should be simplified. Information disclosure should be strictly enforced to listed companies.

2. Company Register Office (ROC) should be transparent and open with modern technology. Bureaucratic procedures must be quick and prospectus should be approved strictly reviewing all economic and technical aspect of companies.

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Annex: 1

Growth Trend of Corporate Bond Fitted in Curvilinear Model

The equation of curvilinear model is as below:

$y = a + b\,x + c\,x^2$ ....(i)

$\Sigma y = Na + b\,\Sigma x + c\Sigma X^2$ ....(ii)

$\Sigma xy = a\Sigma x + b\Sigma x^2 + c\Sigma x^3$ ....(iii)

$\Sigma x^2 y = a\Sigma x^2 + b\Sigma x^3 + c\Sigma x^4$ ....(iv)

Where,

$\Sigma x = 78$

$\Sigma y = 5853$

$\Sigma x^2 = 650$

$\Sigma x^3 = 6084$

$\Sigma x^4 = 60710$

$\Sigma xy = 57933$

$\Sigma x^2 y = 601793$

$N = 12$

Substituting the values in eq^n (ii), (iii) and (iv), we get

$5853 = 12a + 78b + 650c$ .... (v)

$57933 = 78a + 650b + 6084c$ .... (vi)

$601793 = 650a + 6084b + 60710c$ .... (vii)

By solving the equations (solved appendix:1)

The value of

$a = 179.2954543954166$…..

$b = -\ 116.16308691308$……

$c = 19.\ 63411588411588$….

Now substituting the value of a, b and c in eq^n (i), we get

$y = 179.3 + (-116.16)x + 19.63\,x^2$

Now,

The above equation is used to forecast the amount of corporate debt for 2073/74, 2074/75, 2075/76, 2076/77, 2077/78 and 2078/79.

The forecasted amount of corporate debt securities for 2073/74.

For year 2073/74, x = 13

$Y_{73/74}$ = 179.3 + (-116.16) * 13 + 19.63 * $(13)^2$

= Rs. 1987.341million

Similarly,

$Y_{74/75}$ = Rs.2401.2991 million

$Y_{75/76}$ = Rs. 2854.5255 million

$y_{76/77}$ = Rs. 3347.0201 million

$y_{77/78}$ = Rs. 3878.7829 million

$y_{78/79}$ = Rs. 4449.8129 million

Annex: 2

Hypothesis – 1

Hypothesis Setting

Null Hypothesis (H_o): There is no significant difference between observed and expected frequencies regarding to the choice of securities.

Alternative Hypothesis (H_1): There is significant difference between observed and expected frequencies regarding to the choice of securities.

Fixing the level of significance at 5%

Calculation of expected frequencies (E):

$$\text{Expected Frequency of } R_iC_j = \frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}}$$

$$R_1C_1 = \frac{58 \times 22}{100} = 12.76$$

Similarly,

R_1C_1=12.76	R_2C_1= 4.84	R_3C_1= 1.76	R_4C_1= 2.64	R_5C_1= 0
R_1C_2=6.96	R_2C_2= 2.64	R_3C_2= 0.96	R_4C_2= 1.44	R_5C_2= 0
R_1C_3=27.84	R_2C_3= 10.56	R_3C_3= 3.84	R_4C_3= 5.76	R_5C_3= 0

R_1C_4=10.44 R_2C_4= 3.96 R_3C_4= 1.44 R_4C_4= 2.16 R_5C_4= 0

Hypothesis – 2

Hypothesis Setting

Null Hypothesis (H_o): There is no significant difference between observed and expected opinions regarding to the reason for the slow growth of debt market.

Alternative Hypothesis (H_1): There is significant difference between observed and expected opinions regarding to the reason for the slow growth of debt market.

Fixing the level of significance at 5%

Calculation of expected frequencies (E):

$$\text{Expected Frequency of } R_iC_j = \frac{Row\ Total \times Column\ Total}{Grand\ Total}$$

$$R_1C_1 = \frac{22 \times 43}{100} = 9.46$$

Similarly,

R_1C_1=9.46	R_2C_1=4.84	R_3C_1=2.64	R_4C_1=3.30	R_5C_1=1.76
R_1C_2= 5.16	R_2C_2=2.64	R_3C_2=1.44	R_4C_2=1.80	R_5C_2= 0.96
R_1C_3=20.64	R_2C_3=10.56	R_3C_3=5.76	R_4C_3=7.20	R_5C_3= 3.84
R_1C_4=7.74	R_2C_4=3.96	R_3C_4=2.16	R_4C_4=2.70	R_5C_4= 1.44

Hypothesis – 3

Hypothesis Setting

Null Hypothesis (H_o): There is no significant difference between observed and expected frequencies regarding to the few practices of debentures/bonds.

Alternative Hypothesis (H_1): There is significant difference between observed and expected frequencies regarding to the few practices of debentures/bonds.

Fixing the level of significance at 5%

Calculation of expected frequencies (E):

Expected Frequency of $R_iC_j = \frac{Row\ Total \times Column\ Total}{Grand\ Total}$

$$R_1C_1 = \frac{20 \times 19}{100} = 4.18$$

Similarly,

R_1C_1= 4.18	R_2C_1= 9.46	R_3C_1= 1.98	R_4C_1= 4.18	R_5C_1= 2.20
R_1C_2= 2.28	R_2C_2= 5.16	R_3C_2= 1.08	R_4C_2= 2.28	R_5C_2= 1.2
R_1C_3= 9.12	R_2C_3= 20.64	R_3C_3= 4.32	R_4C_3= 9.12	R_5C_3= 4.80
R_1C_4= 3.42	R_2C_4= 7.74	R_3C_4= 1.62	R_4C_4= 3.42	$R_5 C_4$= 1.80

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ABBREVIATIONS

DF:	Degree of Freedom
FY:	Fiscal Year
HBL:	Himalayan Bank Limited
M:	Millions
MD:	Maculay's Duration
NEPSE:	Nepal Stock Exchange
NIBL:	Nepal Investment Bank Limited
NRB:	Nepal Rastra Bank
NRP:	Nepalese Rupees
NSB:	National Saving Bond
NYSE:	New York Stock Exchange
PSC:	Public Saving Card
Rs:	Nepalese Rupees
SEBO/N:	Securities Board, Nepal
SRSM:	Sri Ram Sugar Mills
T-Bills:	Treasury Bills
TU:	Tribhuvan University
YTM:	Yield to Maturity

Appendix-1

Calculation of Forecasted Amount of Corporate Bond:

Multiplying equation (v) by 78 and eq^n (vi) by 12 and solving further we get,

$$
\begin{aligned}
456534 &= 936a + 6084b + 50700c \\
695196 &= 936a + 7800b + 73008c \\
\hline
238662 &= 1716b + 22308c \text{..........................(viii)}
\end{aligned}
$$

Multiplying eq^n (vi) by 650 and eq^n (vii) by 78 and solving further we get,

$$
\begin{aligned}
37656450 &= 50700a + 422500b + 3954600c \\
46939854 &= 50700a + 474552b + 4735380c \\
\hline
9283404 &= 52052b + 780780c \text{………………(ix)}
\end{aligned}
$$

Multiplying eq^n (viii) by 52052 & eq^n (ix) by 1716 and solving further we get,

$$
\begin{aligned}
12422834424 &= 89321232b + 1161176016c \\
15930321264 &= 89321232b + 1339818480c \\
\hline
3507486840 &= 178642464c \\
\therefore \quad c &= 19.63411588\text{……..}
\end{aligned}
$$

substituting the value of c in equation (ix), we get,

$$
\begin{aligned}
9283404 &= 52052b + 780780 \times 19.63411588\ldots \\
\therefore \quad b &= -116.16308689\text{……..}
\end{aligned}
$$

substituting the value of b and c is equation (v), we get,

$$
\begin{aligned}
5853 &= 12a + 78b + 650c \\
\text{or,} \quad 5853 &= 12a + 78 \times (-116.163086) + 650 \times 19.63411588\text{….} \\
\therefore \quad a &= 179.2954543954166\text{……}
\end{aligned}
$$

Thus, the required curvilinear equation fitting the trend of corporate bond is

$y = 179.3 + (-116.16)x + 19.63\ x^2$

APPENDIX-2

QUESTIONNAIRE

Dear Sir/Madam

A thesis paper titled, " Problem and Prospects of Debt Market in Nepal: A Case of Nepalese Commercial Banks" is underway on my effort and I have needed your response on some questions regarding debt market in Nepal. So I am putting forward this questionnaire hoping timely response, as a co-operation, since it is of great essence for me and the endeavor that I have undertaken.

Sincerely

Keshab Neupane

Researcher,

Central Department of Management

Instruction: Please tick (√) in appropriate alternatives among them and put your views in open ended questions.

Individual/Institutional Investors/Listed Company:
Name:
Occupation:

1. What types of securities do you prefer to invest on?

   a. Common stock/equity ☐
   b. Debt Securities ☐
   c. Preference share ☐
   d. Mutual funds ☐
   e. others ☐

2. In your opinion, what is the main reason for slow growth of debt securities market in Nepal?
   a. Lack of investors awareness toward debt securities ☐
   b. Lack of capital gain opportunity ☐
   c. Lack of proper legal provisions ☐
   d. Limited Issuance of Quality bonds ☐
   e. Poor Practice of information disclosure by Pvt. Org ☐

3. What do you think is the reason for few practice of corporate debentures by corporate organizations?
a. Domination of credit oriented transactions
b. Lack of sound debt market in Nepal
c. Political Instability
d. Lengthy process of issuing & rules regulations
e. Increase in financial risk

4. Why do the Nepalese organizations prefer bank loan instead of issuing debenture?
a. Easy access to bank loan
b. Tedious and lengthy process of issuing debenture
c. Cost of bank loan in less than debenture issue
d. Fear factor regarding the under subscription of debenture
e. Any Others………………………………

5. Have you invested in debentures and bonds?
a. Yes
b. No

6. In your opinion, why are not various kinds of debt-instruments practiced in Nepal?
a. Lack of large business organization
b. Lack of appropriate legislative provision
c. Public unawareness
d. Any other...

7. In your view, are the present rules & regulation sufficient for debt market growth?
a. Sufficient
b. Not Sufficient

8. Do you think that debt market growth in Nepal is affected by political instability?
a. Yes
b. No

9. For corporate debenture, are there any problems in secondary market?
a. Yes
b. No

10. Do you think that government debt securities market is sound and systematic?
a. Yes
b. No

The end