

CHAPTER-I

INTRODUCTION

1.1 Background of the study

Financial instruments refers to the stock, bond, debenture and other financial assets those represents the right of the holder to receive future prospective benefits under the terms and conditions provided in the instrument(s). Financial instruments are traded in the financial market. Investors can buy or sell securities immediately at a price that varies little from the financial markets and facilitates the pricing discovery process. Buy and sell orders that flow from investors' demand and supply preferences determine the price of securities in the security market. Since securities market is the major component of capital market it is the need of today to address the investor's preferences as to the financial assets those are transacted in such markets. This study is a small attempt towards the end.

Financial market facilitates the transaction of financial assets like deposits, loan, bonds, securities, stocks, cheques, bills etc. Financial market refers to all the activities of financial institutions those transact on financial assets and liabilities.

“Financial market is defined as place where fund supplier and fund borrowers are brought together with the help of financial intermediaries directly or indirectly. These intermediaries channel nation's savings into most productive uses. Lenders or suppliers of funds exchange money for other financial assets that tend to provide a better future return. The net effect such a transaction is that they buy a claim against some one's money holding at some future date. In fact, they create loanable funds in the financial market.” (*Hemming and Pigott; 1975:11*). “Financial market is functional perspective is a rational system of collecting

savings and allocating them efficiently to the ultimate users for investment in productive assets or current consumption.” (*Kidwell and Peterson; 1981: 25*). Like wise Mishkin (1992), Baye and Jansen (1996), Mayo (2002) consent that financial market is the arrangement that helps to allocate resources efficiently.

Financial market can be better understood with a full-fledged knowledge on their various types and categories. The lines of demarcation are not clear-cut in practice. Even then for the purpose of simplification and made it understandable, financial market is classified as Capital market, Money market, Primary market, Secondary market and Loan and security market etc.

Capital market is an important part of financial market. The market in which long term financial instruments, such as equities and bonds, are raised and traded is capital market. Capital market securities include such marketable debt securities with long term financial instruments, such as equities and bonds, are raised and traded is capital market.

Capital market securities include such marketable debt securities with maturities of a year or more and equity securities. Most of associated markets come under the scope of capital market. In fact, capital market deals with longer term and relatively riskier securities. All those who needed longer-term funds depend on capital market. Likewise, business and industries issue shares and other securities to raise funds from capital market. In the context of Nepal, capital market is slowly growing as well as improving. Growth of capital market has made it possible for the public limited companies to raise the long term capital by issuing shares and other industrial bonds to the investing public. On the whole, capital market is proving very significant to enhance the country’s financial sector development. It is mainly because capital market as much more diverse than those found in money market.

Capital market is further classified into stock market, Money lenders, and Local Businessmen etc.

Whatever may be the classification, financial instruments is the main medium through which each of the markets discussed above deals. Securities market cannot remain aloof what kind of securities are dealt in securities market. Speaking another way, securities market and its status are determined by the securities that are transacted in the securities market. On the other the depth and breadth of financial instruments are highly dominated by investors preferences. Due to this very reason, this study attempts to identify the factors that influence investors while making investment decision so far as the matter of investing in financial instruments is concerned. To which securities investors give more priority, what the reasons are those mainly attract the investors to invest in a particular security, why they prefer one security over other(s) etc. are the issues to be addressed here in the study. Further, this study also strives to address whether or not the Nepalese investors are compensated rightly as per the risk they bear.

1.2 Statement of the Problem

These days the no. of investors in both the primary and secondary market is increasing rapidly. Most of the investors seem to be unaware about the financial instruments of the market and the mechanism of capital market. The no. of complaints and grievances by investors is too increasing. In Nepal, it is said that, stock market is slowly developing according to needs of the economy although they are not sophisticated as in the market of the advanced countries. The security market is taking its ride on a slow pace is, of course, affected by the investors' awareness. In this context, it is relevant to address the investors'

preferences towards the financial instruments they can invest in Investors are said to be the backbone of economic development. Therefore the investors should be encouraged to make investments in security markets by creating congenial investment environment. Government and concerned parties concerned to the financial field can create such environment. However they must know the preferences of investors. In this context a research on the general awareness of the investors was felt. It is necessary to research investor's preferences. This helps to identify how far the investors are aware regarding the investing decision. Following are the issues that the study is going to address:

1. Do the Nepalese investors prefer one common stock to other(s)?
2. What is the status of investor's preferences regarding investment in different sectors?
3. For what purpose Nepalese investors tend to invest?
4. What are the influencing factors for investors to attract investing in securities?

1.3 Objectives of the study

The primary objective of the study is to know the Nepalese investor awareness and there investment in different instruments as priority basis.

The specific objective of this study can be outlined as follows:

- To examine the status of investors' preferences towards the financial instruments.
- To analyze influencing factors those attract investors to invest in particular security or securities.
- To assess investors awareness regarding the investment decision in selecting securities.

-To explore the shortcomings of security-related organization as perceived by the investors.

1.4 Significance of the study

The main objective of the study is to focus on the investor's awareness, although the role of every investor will have not well knowledge about the real financial instruments. Financial sector in the economic development of nation remained controversial for same time; recent theories in finance suggest that stock markets do promote long term growth (Papaioannou & Duke, 1993:36). Development of capital markets in any country requires political and economic stability and growth oriented policies as pre –condition. At the first stage instruments price rise and the investors gradually gain confidence in the capital market.

The market is dominated by individual investors and most of them are not making informed investment decision rather driven by markets rumors. Information helps investors to decide whether or not to invest in the instruments of certain company.

In order to complete the role of institutional investor, adequate instruments are required. The role of institutional investor in the capital market is known to add up new instruments through collective investment schemes, play role in stabilization of the securities prices, make rational analysis of information and pressurize the issuer for the regular flow of credible information.

This research is very useful to all the parties like security businesspersons, market makers, brokers, companies and investors etc. who are directly or indirectly involved in the stock market because it provides the guidelines to the stock market and potential investors to make investment decisions. Issuer Company may also take the advantage of the study by

examining the investors' psychology towards the investment in different financial instruments.

The investors are the sovereigns of security market so their needs and desires must be identified so that they can rightly be rewarded for the sacrifice from their part. Academicians, research scholars, students and policy makers may be benefited from this study as it tends to give some practical insights that can be very useful to turn the theoretical knowledge into practical field.

1.5 Limitation of study

This study is subject to some constraints. Some of the unavoidable hindrances that come in this study are as follows:

1. This research is mainly based on primary data. However secondary data will also be employed as per necessity to support the study.
2. The reality of the study fully depends on questionnaires, which are duly filled by the respondents. Total number of respondents is 112 for this study and the respondents are from Kathmandu valley.
3. There may be so many financial instruments but equity shares, preference shares, debentures, and government bond are considered in this study.
4. The study covers past and present state of the stock market and investors in Nepal. Hence it does not make any projections about its future.
5. Only selected statistical tools have been employed in this study.
6. Promoters and their shares are excluded.

1.6 Organization of the study

This research has been organized in five chapters as below:

Chapter I: Introduction:

The first chapter deals with introduction. This includes background, statement of problem, objectives of the study, significance of the study, limitation of the study.

Chapter II: Review of Literature:

Second chapter presents review of available literature. It includes review from book, reports, article journal, previous thesis etc.

Chapter III: Research Methodology:

Third chapter incorporates the research methodology used in the study, which includes research design, sources of data population and samples, methods of data collection and analysis etc.

Chapter IV: Presentation and Analysis of Data:

The fourth chapter deals with data collected from different sources. Based on the data analysis of analysis of investors' preferences will be made using statistical and non-statistical tools. This chapter also includes major findings.

Chapter V: Summary, Conclusion and Recommendation:

The fifth chapter includes summary, conclusion and offers suggestions for further improvement.

CHAPTER - II

REVIEW OF LITERATURE

In this chapter, the basic literatures related to the research topic are reviewed. It includes prior theories and review of the empirical evidences of previous studies. The first section of this chapter contains a brief description of the theories of the investment and risk and return. It includes the technical analysis, fundamental analysis and efficient market theories. The second section provides reviews on empirical experience of previous studies.

2.1 Conceptual Framework

2.1.1 Investment

“An investment is a commitment of money that is expected to generate additional money. Every investment entails some degree of risk; it requires a current sacrifice of money for a future uncertain benefit.” (*Francis; 1999:1*).

Investment is a subject of growing importance. Investors in general have to be careful in making best use of their funds. Taking the example of our own country, many investors face serious losses due to irrational investment behavior. But rational investors make investigation before investment and they can gain more from capital market. Investment as such is a rational investment behavior. But informative and rational investors make investigation before investment. Investment here can be conceptualized to employing savings in securities to generate future income.

In capital market perspective, investment is making transactions in shares and debentures through the use of brokers since they facilitate trading in the stock exchange. But this may not be investment to an economist. An economist uses the term investment to have addition to nation's physical stock of capital like establishing new factories installing new machineries and addition to inventory. Since buying shares and debentures do not add to an addition to the stock of physical assets it does not constitute investment to an economist.

An entrepreneur thinks upon investment as profit generating vehicle. In this regard, investment is equated to the entrepreneurs' shelf –employment of funds in his business. As for instance, many entrepreneurs employ their capital in doing business. In financial institution's perspective, investment is the canalizations of collected saving from savers by way of credit and loans to those who need for meeting their varying needs and purposes. To the government investment involves the resource mobilizing process in the various productive sectors of the economy.

Looking still in other way, investment implies the process of channeling investor's public funds in various securities issued by the government, companies, financial institutions, industries and many other undertakings through the intermediary network. In Nepal many public limited companies have been successful enough to raise capital from capital market by issuing financial securities with higher commitment of returns to investing public.

From the above discussion, it is clear that the term investment is a word of many meanings having different implications to different people and institutions. Investment means employing money to generate more money in future. It is the sacrifice of current consumption of savings for future income available for consumption.

Return is the primary motive of investment, but it always entails some degree of risk. Buying common stocks, bonds of company, depositing money into bank account, buying a piece of land, gold or silver are examples of investment as all of them involve trade-off between risk and return. All these examples involve sacrifice of current consumption in expectation of future return. Hence they are investments. As such, the main objective of investment is to maximize the wealth or capital gain of an investor resulting from rise in market value of securities.

Further, Investment can be either a real investment or a financial investment. Investment in tangible assets like land and machinery is a real investment. It has productive capacity. But, investment in financial assets like common stocks and bonds is a financial investment. It does not directly pose the productive capacity. Financial assets are direct claims to the income generated by real assets. In this sense, the values of financial assets are by itself derived from the values of the underlying real assets of the firms and their effective utilization to exist profit.

Generally, investment is different from speculation based on time horizon and risk return characteristics of the investment. But, speculation has a very different kind of implication in investment. There can be no success of investment without speculation. As such, intelligent speculation is investment. But the true and genuine investor is interested usually in long-term investment with a good rate of return and earned on a consistent basis. The speculator seeks opportunity promising very large returns, earned rather quickly, so the investment period may be a few days to few months. Speculative investors are more interested in the abnormal, extremely high rate of return than the normal or moderate rate of return. “The growth of stock market in our country has provided investors with different alternative of

invest in portfolio of securities such as shares of joint venture banks, finance companies, insurance, selected manufacturing and service and trading firm. Because of large speculative tendencies among investors, many had lost money due to very irrational behavior as shown from experience of our Nepal Stock Exchange.” (*Shrestha and Bhandari; 2005: 23*).

2.1.2 Investment process

Investment process involves how an investor should make decisions about what marketable securities to invest in, how extensive the investment should be, and when the investment should be made. A five-step procedure for making these decisions is the basis of the investment process:

2.1.2.1 Investment policy

The first step, setting investment policy, involves determining the investor’s objectives and the amount of his or her investable wealth. Because there is a positive relationship between risk and return for sensible investment strategies, it is not appropriate for an investor to say that his or her objectives to attempt to “make a lot of money”. What is appropriate is for an investor to state that his or her objective is to attempt to make a lot of money while recognizing that there is some chance that large losses may be incurred. Investment objectives should be stated in terms of both risk and return, therefore.

This step in the investment process concludes with the identification of potential categories of financial assets to be included in the portfolio. This identification will be based on, the investment objectives, investable wealth and tax status of the investor. For example, usually

it does not make sense for individual investors to buy preferred stock or for tax-exempt investors to investing tax-exempt securities. Investment policy is the milestone of the investment process. Without it, investors have no appropriate context in which to make investment decisions. Unfortunately, however, investment policy often receives the least attention from investors.

2.1.2.2. Security Analysis

The second step in the investment process is performing security analysis. It involves examining several individual securities within the broad categories of financial assets previously identified. One reason to examine securities is to identify those that seem miss priced. There are various approaches to security analysis. However, most of these approaches fall into one of two classifications. The first classification is technical analysis; analysts who use this approach to security analysis are called technicians, or technical analysts. The second classification is fundamental analysis; those who use it are known as fundamentalists, or fundamental analysis, in discussing these two approaches to security analysis, the focus will be first on common stocks and then on other types of financial assets.

In simplest form, technical analysis involves the study of stock market prices in an attempt to predict future price movements. Price prices are examined to identify recurring trends or patterns in price movements. Then more recent stock prices are analyzed to identify emerging trends or patterns that are similar to past ones. This analysis is done in the belief that these trends or patterns repeat themselves. By identifying an emerging trends or pattern, the analysts hope to predict accurately future price movements for a particular stock.

On the other side, fundamental analysis begins with the assertion that the true (or intrinsic) value of any financial assets equals the present value of all cash flows, the owner of the assets expects to receive. Accordingly, the fundamental stock analyst attempts to forecast the timing and size of these cash flows and then converts the cash flows to their equivalent present value using an appropriate discount rate. More specially, the analysts attempt to estimate the discount rate and to forecast the dividends a particular stock will provide in the future; this process is equivalent to forecasting the firm's earning per share and payout ratios. Once the true value of the common stock of a particular firm has been estimated, it is compared with the current market price of the common stock to determine whether the stock is fairly priced. Stocks whose estimated true value is less than their current market price are known overvalued, or overpriced, stocks, whereas those whose estimated true value is greater than their current market price are known as undervalued, or under priced.

The magnitude of cause the strength of the true value and the current market price is important because the strength of the analyst's conviction that a given stock is miss priced will depend, in part, on it, fundamental analysts believe that any notable cases of miss pricing will be corrected by the market in the near future, meaning that prices of undervalued stocks will show unusual appreciation and prices of overvalued stocks will show unusual depreciation.

2.1.2.3. Portfolio Construction

The third step in the investment process, portfolio construction, involves identifying specific assets in which to invest and determining how much to invest each one. The issues of

selectivity, timing, and diversification need to be addressed by the investor. Selectivity, also known as micro forecasting, refers to security analysis and focuses on forecasting price movements of individual securities. Timing, also known as macro forecasting, involves forecasting price movements of common stocks in general relative to fixed income securities, such as corporate bonds and treasury bills. Diversification, as mentioned earlier, involves constructing the investor's portfolio in such a manner that risk is minimized, subject to certain restrictions. Portfolio construction further should be rational and even qualitative analysis is must.

2.1.2.4. Portfolio Revision

The fourth step in the investment process, portfolio revision; concern the periodic repetition of the previous three steps. Over the time the investor may change his or her investment objectives, which, in turn, would make the currently held portfolio more optimal than previously held. The investor may create a new portfolio by selling certain securities and by purchasing others another motivation for revising a portfolio would be if the prices of securities changed- some securities that initially were not attractive may become attractive and others those were attractive at a time may no longer be so. The investor may want to add the former to his or her portfolio and eliminate the latter. Such decisions depend on, among other things, transaction costs incurred in making changes and the magnitude if the perceived improvement in the investment outlook for the revised portfolio.

2.1.2.5. Portfolio Performance Evaluation

The fifth step in the investment process, portfolio performance evaluation, involves determining periodically how the portfolio is performing in terms of the return earned and also the risk experienced by the investor, thus, appropriate measures of return and risk as well as relevant standards (or benchmarks) are needed. Different index, experience curve, and utility measurement can help in this regard.

2.1.3 Types of Investors

There are various types of investors in the market. Some are discussed here:

2.1.3.1. Individual Investors

A person who invests in securities is called individual investors. They have a job apart from investing in securities. Individual investors have an opportunity cost on obtaining investment information from reading publication, tracking stocks, prices, companies performance building files on securities. This opportunity cost is the time and resources forgone that could have been used in other endeavors.

2.1.3.2. Institutional investors

Institutional investors are those investors, which is an institution or organization. The institutional investors seek to derive the necessary information from stock recommendations, earning forecast, written reports, and overall performances when talking investment decisions.

2.1.4 Financial Instruments

Securities means shares, stock, debenture etc. issued by a corporate body or a certificate relating to unit saving scheme or group saving scheme issued by any corporate body in accordance with the prevailing laws or negotiable certificate of deposit or treasury bill issued by Government and it includes the securities issued under full guarantee of the Government or securities as prescribed by government by a notification publishes in the Nepal Gazette or receipts relating to deposits of securities as well as rights and interest relating to securities.

Financial instruments are traded in the financial market. Investors can buy or sell securities immediately at a price that varies little from the financial markets and facilitates the pricing discovery process. Buy and sell orders that flow from investor's demand and supply preferences determine the price of securities in deficit and surplus units of society. The common stock, preferred stock, debentures and government securities and mainly used in terms of securities in Nepal. The preferred stock and debentures are not commonly used in Nepal. Basically the common stocks are traded through NEPSE. Government securities are also important securities, which are issued by government through Nepal Rastra Bank. The major financial instruments in Nepal are:

-) Common stock
-) Debt
-) Preferred stock
-) Government Securities

J **Common stock**

Common stock represents an ownership position. The holders of common stock are the owner of the firm, have the voting power that among other things elects the board of directors, and have a right to the earnings of the firm after all expenses and obligation have been paid; but they also run the risk of receiving nothing if earning are insufficient to cover the obligations.

Common stockholders hope to receive a return based on two sources dividends and capital gains. Dividends are received only if the company earns sufficient money and the board of directors deems it proper to declare dividends. Capital gain arises from advancement in the market price of the common stock, which is generally associated with a growth in per share earnings. Because earnings often do not grow smoothly over time. This fact points the need for careful analysis in the selection of securities for purchase and sale, as well as, in the timing of these investment decisions, for common stock has no maturity date at which a fixed value will be realized.

“When a company needs capital for expansion, it sells shares its stocks to the public. Most companies issue million numbers of shares so each share represents only a tiny piece of company. These shares are also transferable.” (*Fisher; 2002: 2*).

“The common stockholders of a corporation are its residual owners; their claim to income and assets comes after creditors and preferred stockholder have been paid in full. As a result,

stock holder's return on investment is less certain than the return to a lender or to a preferred stockholder is not bounded on the upside as are returns to the others." (Prasanna, 1994:24).

Advantages and disadvantages of common stock can be described as follows:

-) Common stock provides ownership of the firm.
-) It provides control power.
-) Purchase of common stock gives the following rights to stockholders:
 -) Voting right
 -) Participation in general meeting
 -) Right getting information
 -) Electing as a board of director
 -) Participation in the profit and loss of the company
 -) Transferring shares
 -) Proxy representation

The disadvantages of holding common stock are as follows:

1. It is more risky than other securities
2. The rights may not be exercised in his or her best interest as individual investor represents very small proportion of total shares.
3. On liquidation, holders of common stock are last in the priority of claims. Therefore, the portion of capital they contribute provides a cushion for creditors, if losses occur on dissolution.
4. As an owner of firm, investor of common stock should bear legal responsibility, and personal liability.

J Debt

“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 debts contract, then these holders may be able to exert some influence on the direction of the company. Holders of long-term debt do not participate in the residual earnings of the company; instead, their return is fixed. Their debt instrument has a specific maturity, whereas a share of common or preferred stock does not. In liquidation, the claim of debt holder is before that of preferred and common stockholders. Depending on the nature of the debt instrument, however, there may be difference in the claim among the various creditors of a company.” (*Vane Horne; 2000:211*).

I) Debenture

The term debenture usually applies to the unsecured bonds of a corporation. Investor looks to the earning power of the corporation. Because these general credit bonds are not secured by specific property. “In the event of liquidation the holder becomes a general creditor. Although the bonds are unsecured, debenture holders are protected by the restrictions imposed in the indenture, particularly the negative pledge clause, which precludes the corporation from pledging its assets to other creditors.” (*Vane Horne; 2000:513*).

II) Subordinate debentures

Subordinated debentures represent debt that ranks behind debt senior to these debentures with respect to the claim on assets. In the event of liquidation, subordinated debenture holders usually receive settlement only if all senior creditors are paid the full amount owed them. “These holders still would rank ahead of preferred stockholders in the event of

liquidation. The existence of subordinated debentures may work to the advantage of senior holders, because senior holders are able to assume the claims of the subordinated debenture holders.” (*Vane Horne; 2000: 513*)

III) Mortgage Bonds

A mortgage bond issue is separated 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. As with other secure lending arrangements, the market value of the collateral shows the market value of the bond issue by a reasonable margin of safety.” (*Vane Horne; 2000: 513*).

IV) Income Bonds

Income bonds provide that interest must be paid only when the earnings of the firms are sufficient to meet the interest obligations. The principal, however, must be paid when due. Thus the interest itself is not a fixed charge. Income bonds, historically, have been issued because a firm has been in financial difficulties and its history suggests that it may be unable to meet a substantial level of fixed charges in the future. More generally, however, income bonds simply provide flexibility to the firm in the event that earnings do not cover the amount of interest that would otherwise have to be paid. Income bonds are like preferred stock in that the firm will not be default if current payments on the obligations are not made. They have an additional advantage over preferred stock in that the interest is a deductible expense for corporate income tax computations, while the dividends on preferred stock are not.

The main characteristic and distinct advantage of the income bond is that interest is payable only if the company achieves earnings. Since earnings calculations are subject to differing interpretations, the indenture of the income bonds carefully define income and expenses. If it did not, litigation might result. Some income bonds are cumulative indefinitely (if interest is not paid, it accumulates, and it must be paid at some future date); others are cumulative for the first three to five years, after which they become non-cumulative.

Income bonds usually contain sinking fund provisions to provide for their retirement. The annual payment to the sinking funds range between ½ and 1 percent of the face amount of the original issue. Because the sinking fund payment requirements are typically contingent on earnings, a fixed cash drain on the company is avoided. “Typically, income bondholders do not have voting rights when the bonds are issued. Sometimes, bondholders are given the right to elect some specified number of directors if interest is not paid for a certain number of years.” (*Weston and Copeland; 1990:967*).

V) Floating-Rate Notes

When inflation forces interest rates to high levels borrowers are reluctant to commit themselves to long-term debt. Yield curves are typically inverted at such times, with short-term interest rates than long-term. One factor is that borrowers would rather pay a premium for short-term funds then lock themselves into high long-term rates for two or three decades. Two risks are faced by those who defer long-term borrowing in hope that interest rates will soon fall. First, there is no assurance that rates will not rise even higher and remain unexpectedly high levels for an indefinite period. If long-term rates rise to 15 percent, for

example, debt that looked expensive at 123 percent will seem like a bargain to a borrower who passed it up in the hope of waiting out the rates of crisis. Second, the short-term money may simply become unavailable.

VI) Equipment Trust Certificates

Although equipment trusts financing is a form of lease financing. “The certificates themselves represent an intermediate to long-term fixed income investment. This method of financing is used by railroads to finance the acquisition of rolling stock.” (*Vane Horne; 2000: 514*).

VII) Equity-Linked Debt

“A convertible bond is one that may be exchanged, at the option of the holder, into a certain numbers of shares of common stock of the corporation. The number of shares into which bond is convertible, is specified in the bond indenture, and these shares remain unissued until actual conversion.” (*Vane Horne; 2000: 514*).

Purchasing of debt provides the followings advantages and disadvantages to debt holders:

From the viewpoint of long-term debt holders, debt is less risky than preferred or common stock, has limited advantages in regard to income, and is weak in regard to control. To elaborate:

-) In the area of risk, debt is favorable (relative to preferred or common stock) because it gives the holder priority both in earnings and in liquidation. Debt also has a definite maturity and is protected by the covenants of the indenture.

) In the area of income, the bondholder has a fixed return, except in the case of income bonds or floating rate notes. Interest payments are not contingent on the company's level of earnings or current market rates of interest. However, debt does not participate in any superior earnings of the company, and gains are limited in magnitude. Bondholders actually suffer during inflationary periods. A 20-year, 6-percent bond pays \$60 of interest each year. Under inflation, the purchasing power of this \$60 is eroded, causing a loss in real value to the bondholder. Frequently, long term debt callable. If bonds are called, the investor receives funds that must be reinvested to be kept active.

) "In the area of control, the bondholder usually does not have the right to vote. However, if the bonds go into default, then bondholders, in effect, take control of the company." (*Weston and Copeland; 1992: 969*).

) **Preferred Stock**

Preferred stocks have fixed dividend and right of acquiring principal before common stock at the time of liquidation. "Preferred Stock is said to be a "Hybrid" security because it has features of both common stock and bonds. Preferred stocks are preferred with respect to assets and dividends. In the event of liquidation, preferred stockholders have a claim on available assets before the common-stockholders. Furthermore, preferred stockholders get their stated dividend before common stockholders can receive and dividends." (*Vane Horne; 2000: 515*).

"Preferred stock provides the following advantages to the investor." (*Weston and Copeland; 1992:969*).

) It provides reasonably steady income.

-) Preferred stockholders have a preference over common stockholders in liquidation; numerous examples can be cited where the preference position of holders of preferred stock saved them from losses incurred by holders of common stock.
-) Many corporations (for example, insurance companies) like to hold preferred stock as investment because 70 or 80 percent of the dividends received on these share is not taxable.

Preferred stock also has some disadvantages to investors:

-) Although the holders of preferred stock bear a substantial portion of ownership risk, their returns are limited.
-) Price fluctuations in preferred stock may be greater than those in bonds; yet, yields on bonds are sometimes higher than those on preferred stock.
-) The stockholders have no legally enforceable right to dividends.
-) Accrued dividend arrearages are seldom settled in cash comparable to the amount of the obligation that has been incurred.

) **Government Securities**

Government issues various types of securities to fulfill and undertake the development works under the deficit budget and raises scattered funds from public. These securities are assumed to be less riskily as compared with external debt. Government issues securities internally and externally, the main source of internal debt is government bonds. NRB has been actively issuing various government securities in the country. It is one of the most

important issuance of the government to maintain the deficit budgetary system of Nepal. The Government Securities, which are issued by NRB, are described in brief below.

1 Treasury Bills

It is the short-term government bond. It is issued to fulfill deficit budgetary system in Nepal. It normally matures in 91 days while some securities mature in 365 days. It is issued to collect scattered funds and to mobilize it in productive sector and conduct fiscal and monetary policies. It is issued on the basis of auction so that any individuals and institutions can invest in Treasury Bills.

2 Development Bonds

NRB has been issuing these bonds in the market. It is a long-term government bond. It has normally 5 years maturity period. The security holders can use it as collateral if they need money immediately. Institutional and individual investors purchase it. It has fixed and minimum interest percentage. The securities holder normally obtains 90 percent amount of total value if he keeps them on collateral. The income from these bonds is taxable.

3 National Saving Bonds

It is a long –term government bond. It has normally 5 years maturity period. Individuals, organization and financial institution purchase this bond except commercial banks. In this bond, interest is paid semi-annual basis. It can be purchased as a promissory note. Principal is refunded after its maturity period. It has fixed interest rate, which can be sold easily from one person to another in the market. It can be used as collateral as in the case of Development Bonds.

J **Citizen saving certificate**

It is also a long-term government bond. It has normally 5 years maturity period. It has fixed interest rate which is paid semi-annual basis. It cannot be used as collateral. Individual and institutional purchase can buy this bond. It is a taxable bond.

4 Special Bonds

This type of bond is issued on special occasions when government falls short of funds. The government can issue special bonds to those parties to whom government has to make payment. The holder can use it as collateral.

2.1.5 Market Risk and Return

Capital market are said to be efficient when security prices fully reflect all available information. In such a market, security prices adjust very rapidly to be new information.

The risk of a portfolio depends not only on the standard deviation of the individual securities comprising the portfolio but also on the correlation of possible returns. For a two-security portfolio, an opportunity set line describes the risk return trade off for various combinations.

The diversification effect sometime causes the opportunities set line to bend back ward, with the minimum variance portfolio having a lower standard deviation than that of the least risky security.

The capital asset pricing model allows us to draw certain implication about expected return of specific security. The key assumptions in the model are perfect capital markets exist and

that investors have homogeneous expectations. In this context, the relevant risk of security is its undiversifiable risk. This risk is described by the slope of the characteristic line, here security returns in excess of the risk free rate are related to excess return for market portfolio, known also as beta, it is used as measure of the systematic risk of a security. The total risk of a security can be divided into unsystematic and systematic components. Systematic risk is risk that cannot be diversified away, for it affects all securities in the market. Unsystematic risk is unique particular security and can be eliminated with efficient diversification.

2.1.6 Sources of Investment Risk

“Every investment involves uncertainties that make future investment returns risky. Here are some of the sources of uncertainty that contribute to investment risk.” (*Francis; 1999:3-9*).

) Political Risks

Political risk arises from the exploitation of a political weak group for the benefit of a politically strong group, with the effects of various to improve their relative position increasing the variability of return from the effected asset regardless of whether the charges that causes political risk are sought by political or by economic interests, the resulting variability of returns is called political risk if is accomplished through legislative, judicial for administrative branches of the government. Political risk can be international as well as domestic.

J **Industry Risk**

Industry risk is that apportion of an investments total variability of return caused by events that affect the products and firm that make up an industry. The stage of the industry's life cycle, international tariffs and or quotas on the products produced by an industry related taxes, industry wise labor union problems, environmental restrictions, raw material availability, and similar factors interact and affect all the firms in an industry simultaneously. As a result of these commonalities, the prices of the securities issued by competing firms tend to rise and fall together.

The above-mentioned uncertainties are the major sources of investment risk. Moreover, there might be numerous minor sources of investment risk. The just discussed major sources are of additive nature, which adds up to total risk i.e. variance.

2.1.7 Trade off Between Risk and Return

Risk is complicated subject and needs to be properly analyzed. The relationship between risk and return is described by investor perception about risk and their demand for compensation. No investor will like to invest in risky assets unless he is assured of adequate compensation for the assumption of risk. Therefore, it is the investors required risk premiums that establish a link between risk and return. In a market dominated by rational investor, higher risk will command by rational premiums and the trade off between the two assumes a linear relationship between risk and risk premium.

2.1.8 Utility and Indifference curve

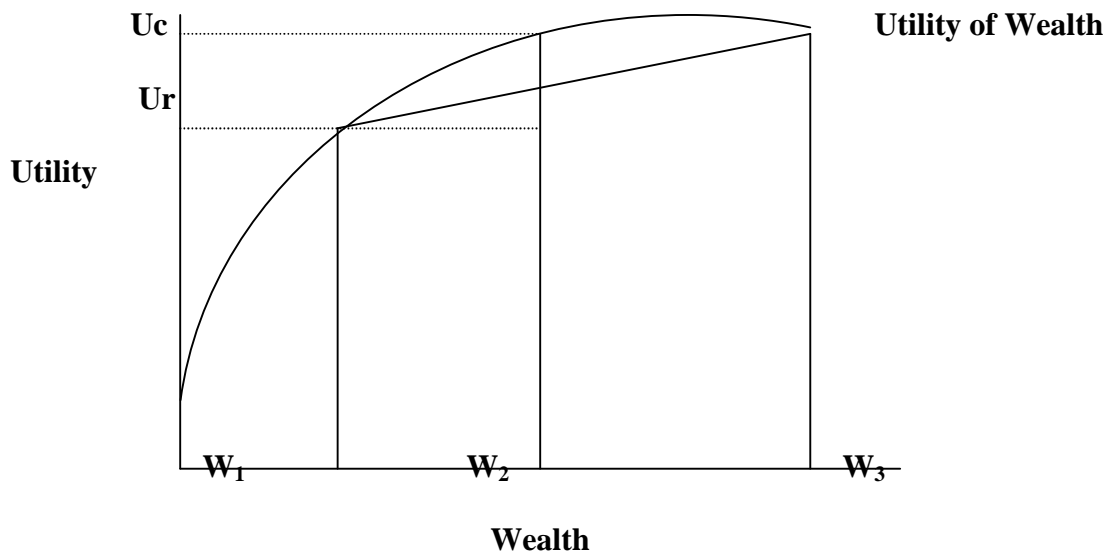
The term utility means the comparative satisfaction that an individual or investor derives from economic activity such as work, consumption or investment. In investment, the implication of utility is the ability or quality of a security investment to satisfy an investor. A security is demanded, as it possesses utility. This means that higher the utility the greater would be demand for the security. It is a subjective or psychological entity. Attitude of an investor toward the product can be understood or explained with the help of utility. Hence, utility concept is helpful to understand the investor behavior and thereby demand for a security in the market. When an investor invests a security, he or she derives satisfaction or benefits. This benefit or satisfaction is called utility in economies. “Therefore, utility is a psychological entity that is why it cannot be measured directly and accurately.” (*Shrestha and Bhandari; 2003:104*).

The exact relationship between utility and wealth is called the investor’s utility of wealth function. Under the assumption of nonsatiation, all investors prefer more wealth to less wealth. Every extra dollar of wealth enhances an investors prefer more wealth to less wealth. Every extra dollar of wealth enhances an investors’ utility.

A common assumption is that investors experience diminishing marginal utility of wealth. Each extra dollar of wealth always provides positive additional utility, but the added utility produced by extra dollar becomes successively smaller. Figures will Illustrates the utility of wealth function of an investor. Higher levels of wealth (read off the horizontal axis) produce higher levels of utility (read off the vertical axis). The assumption of nonsatiation requires that the utility of wealth function is always positively sloped no matter what the level of

wealth. However, this utility of wealth function is concave (it is bowed downward). As wealth increased, the corresponding increase in utility becomes smaller. That is, marginal utility diminishes. An investor with diminishing marginal utility is necessarily risk averse. An investor with diminishing marginal utility is necessarily risk averse. “This risk averse investor is unwilling to accept a fair bet. The utility of wealth function explains that preference.” (Alexander, Sharpe and Bailey; 2003:122-123).

Figure 2.1
Investor’s utility of wealth function

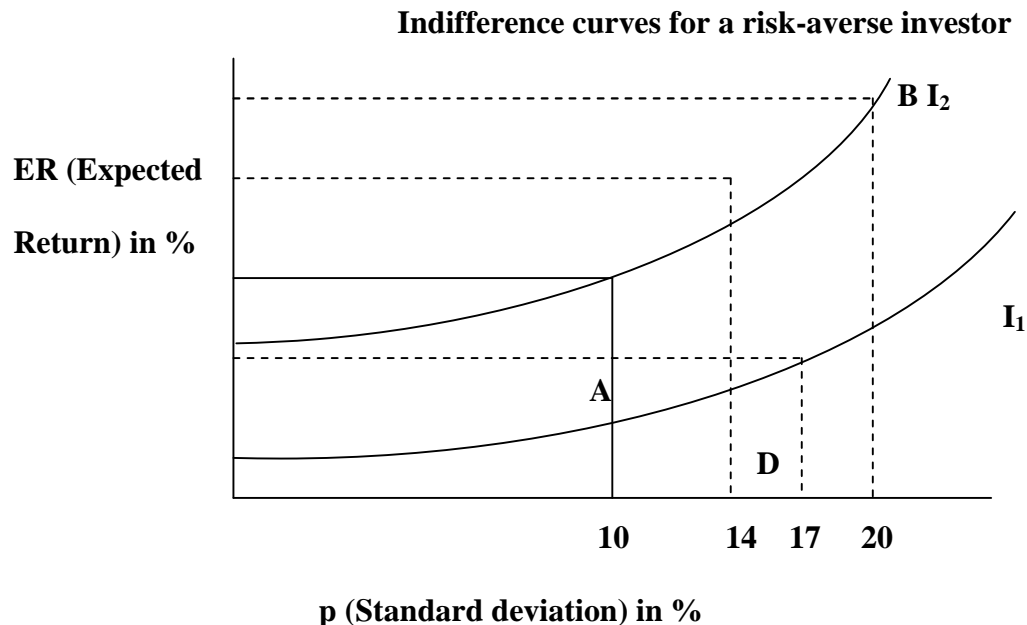


(Source: Alexander, Sharpe and Bailey; 2003:122-123)

Indifference curve represents a set of risk and expected return combinations that provide an investor with the same amount of utility. The investor is indifferent about the risk expected return combinations on the same indifference curve. Because indifference curves indicate an investor’s preferences for risk and expected return, they can be drawn on a two dimensional figure where the horizontal axis indicates risk as measured by standard deviation and the vertical axis indicate reward as measured by expected return.

Following figure shows several indifference curves a hypothetical risk-averse investor might possess. Each curved line indicates one indifference curve for the investor and represents all combinations of portfolios that provide the investor with a given level of expected utility. For example, the investor with the indifference curves in figure would find portfolios A and B (the same two portfolios in the figure) equally desirable, even though they have different expected returns and standard deviation, because they both lie on the same indifference curve, I_2 . Portfolio B has a higher standard deviation (20%) than portfolio A (10%) and is therefore less desirable on that dimension. However, exactly offsetting this loss in desirability is the gain in desirability provided by the higher expected return of B (12%) relative to A (8%)

Figure 2.2



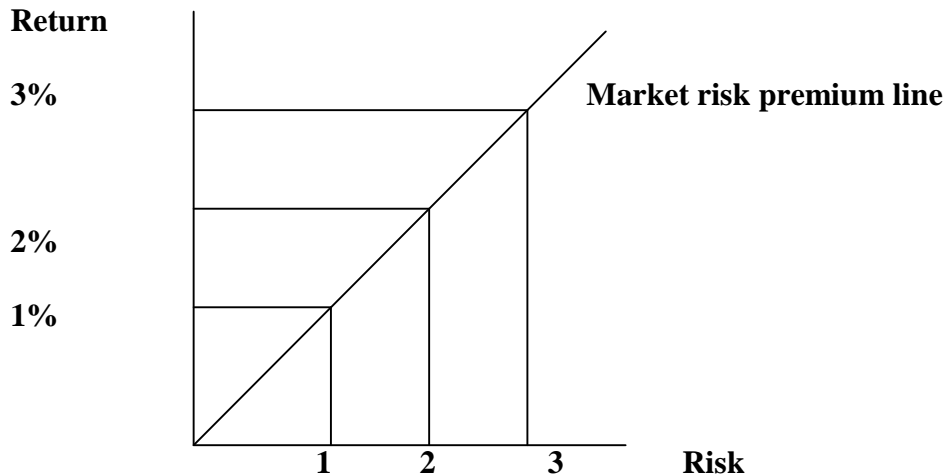
2.1.9 The Positive Trade-Off between Risk and Return

An investment manager can usually attain more return by selecting dominant assets that involve risk. While it is not true that a riskier asset will pay higher average rate of return, it

is usually true. The reason is that investors are risk averse. As a result, high-risk assets must offer investors high returns to induce them to make the riskier investments.

Figure 2.3:

Positive trade off between risk and return



The figure 4.3 represents a higher risk premium. For taking risk 1, the expected return is R_1 when an investor assumes risk 2, the return must be R_2 increasing the return (risk premium) by $R_2 - R_1$ for assuming more risk: $2 - 1$."The assumption of linear relationship states that the risk premium must increase or decrease in proportion to a change in level of risk. It also indicates higher the risk higher the return and vice versa." (Prasanna; 1994: 196).

2.1.10 Factor to be considered while making Investment in Financial Assets

Investor should consider various factors before selecting securities such as good future prospects, risk factor, reliable management of the company, beneficial company, higher growth company etc. The investors who invest in the securities should compare the price and value of share. The rules and regulation alone cannot protect the investor's preferences. The investors should know about the securities and companies' performances. Normally the following factors should be considered in investment decision:

- J Risk of securities
- J Liquidity
- J Availability and Accessibility
- J Investment portfolio
- J Stability of income and Cash flow
- J Strength
- J Mobility
- J Cash flow

The investors are to be informed about the following before making investment in the Initial public Offerings (IPO):

- J The investor should take the necessary information company's such as promoters, size of company, company's environment, Board of Director, and forecasted statements (Proforma Balance Sheet) etc. from the Prospectus, Article of Association, and Memorandum of association of concerned company.

) To study the public announcement, the company should communicate through national daily newspaper before 7 to 15 days the opening of the issue of shares.

The investors are required to be informed on the followings before investment in the share in the secondary market.

) Keep the information of companies; return to shareholders the form of cash dividend, bonus share etc. and timely information about the company's earning per share, price earning ratio, future plan and growth of the company.

) Analyze the information notified to the investors in the notice board of SEBO and NEPSE about the companies.

) Study the articles related to the trading of shares and economic matters published in the different newspapers and magazines.

) Study the trading statements and financial analysis of listed companies published by NEPSE.

) Study annual reports and other information published by SEBO.

Like wise other specific matters to be considered while trading with securities are as follows:

1. Order specification

Investors are required to give written purchase and sale order to broker in the format as prescribed by the Stock Exchange. The form for the order can be received from Broker Company.

2. Subject Matter to Be Revealed Along With Order and the Time That the Order Remains Outstanding

The name, type, number and price of the security must be described in the order specification. Like wise the time that the order will remain outstanding should also be described and in case such time is not specified the order will be assumed to remain outstanding for 15 days from the time such order is placed.

3. To receive certification of the order given to the broker company

After giving order to the broker company, the certificate should be taken from the concerned broker that identifies the broker to whom the order is placed.

4. To receive the information of the execution of the order

Broker Company must execute the order in the trading floor of stock exchange within the stipulated time. The information of such transaction must be forwarded to the investor in the time when the transaction takes place or in the day following the date of transaction.

5. To give security or purchase price

While investor receives the information of execution of his or her order from Broker Company the investor, within the five transaction days, requires paying purchase price if the order is to purchase security. If the order is to sell then he must submit the security and the certificate given by the seller of the security.

6. Provision Regarding Buying or Selling of One Security In A Day in the Different Prices:

Security of a company can be transacted in different prices in the same day.

7. Transaction Risk

Investor must be careful as to the possibility that the security may not be received in time. Such risk may arise due to the negligence of the Broker Company. If the broker company does not settle the transaction of the security within one-month investor should contact with stock exchange explaining such case.

8. My Word My Bond

Since security transaction is based on “my word my bond” the investor must forward related documents to the concerned parties. The risk that arises due to non-submission of the documents should be born by the concerned parties.

9 Right to Receive Information

Investor can take details of the buying or selling price of the security, commission of broker, amount he or she is entitled to receive etc. from the stock exchange. Investor should report to stock exchange in time for the problems he or she faces in course of dealing with Broker Company. The problems will be solved by the stock exchange if the problems are in the jurisdiction of the exchange.

2.2 Review of Thesis

Bharat Prasad Bhatta (1997) has conducted his master’s degree thesis on the topic “*Dynamics of Stock Market in Nepal*”.

His research objectives are:

) To analyze the trend of the Nepalese stock market.

-) To diagnose and compare sectoral financial status of the stock in Nepalese stock market.
-) To analyze the market share prices of the Nepalese stock market.
-) To find out the impact of the secondary on primary market and vice versa.

Analysis:

The stock market and economic activities move in the similar direction. They influence each other. The development of the former is reflected in the latter. The stock market raises and mobilizes the invest-able resources to finance the long-term large projects in the economy. The stock market therefore can be regarded as a heart of economy. The investors are interested to invest their resources in the shares of corporate sector through the stock market in the Nepalese economy. The investors are interested to invest their resources in the shares of corporate sector through the stock market in the Nepalese economy. It is necessary to develop the entrepreneurship and encourage the entrepreneurs to start the productive venture as soon as possible. Management capability of the entrepreneurs is a key for better performance of the firms. Government should launch programs to enhance management capability of the entrepreneurs, which may contribute to raise the return from the investment.

His findings are as follows:

-) Development of manufacturing sector is utmost to foster banking, finance and insurance sectors.
-) The secondary aspect of the stock market is not also functioning well in Nepal. There is almost no liquidity in the stock market for shares except that of banking and some finance and insurance sectors.

- J 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 good prospect for the mobilization to finance the productive enterprises in Nepalese economy.

Nabaraj Adhikari (1999) has also conducted a research on “*Corporate Dividend practice in Nepal*”.

His research objectives are as follows:

- J To explain whether companies paying larger dividends have a good financial position or not, whether the companies with higher payouts have an improved or not.
- J Whether the companies with higher yield having an improved financial ratio or not.
- J Whether the difference between dividends and stock prices, dividend payout affect the share prices of finance and non-finance sectors differently or not.
- J The motives of paying cash and stock dividends whether dividend is a residual decision or not.
- J If there are any types of company’s announcements of earnings on market price of a share.
- J Whether legal restriction on share repurchases should continue to prevail or not.
- J Kind of dividend policy should be followed by Nepalese enterprises.

Analysis:

Stocks with larger ratio of dividend per share to book value per share have higher liquidity. However, liquidity position of stocks paying higher dividends is also more variable as

compared to stocks paying lower dividends. Stocks with larger ratio of dividend per share to book value per share have lower leverage ratios.

When the difference between dividends and profitability is studied, it revealed that stocks with larger ratio of dividend per share to book value per share have higher profitability. However, these profitability ratios of stocks paying larger dividends are also more variable as compared to stocks paying smaller dividends. Positive difference is observed between the ratio of dividend per share to book value per share also have higher turnover ratios.

When the difference between dividends and profitability is studied, the stocks with larger ratio of dividend per share to book value per share have higher profitability. However, these profitability ratios of stocks paying larger dividends are reluctant to employ higher degree of leverage in their capital structure. Leverage ratios of stocks smaller dividends are reluctant to employ higher degree of leverage in their capital structure. Leverage ratios of stocks smaller dividends are also more variables as compared to stocks paying higher dividends.

When the difference between dividends and profitability is studied, it revealed that stocks with larger ratio of dividend per share to book value per share have higher profitability. However, these profitability ratios of stocks paying larger dividends are also more variable as compared to stocks paying smaller dividends. Positive difference is observed between the ratio of dividend per share to book value per share also have turnover ratios. However, turnover ratios of stocks paying larger dividends are also more variable that of stocks paying smaller dividends.

His findings are as follows:

-) There is also a positive difference between the ratio of dividend per share to book value per share and interest coverage.
-) A positive difference is found between payouts and quick ratio. It may be due to more reduction of quick assets rather than current assets when more dividends are paid out.
-) The position of current ratio of stocks paying larger dividends is also more variable as compared to stocks paying lower dividends. Where as a negative difference observed between dividend payouts and earnings before tax to net worth.
-) There is a negative difference observed between dividend payouts and earnings before tax to net worth.
-) The difference between dividend payouts and turnover ratios has been observed to be positive. Stocks with larger dividend payouts have higher turnover ratios.
-) The stocks with larger ratio of dividend per share to market price per share have higher liquidity. Liquidity positions of stocks paying larger dividends are also more variable as compared to stocks paying lower dividends.

Surya Chandra Shrestha (1999) has conducted research on “*Stock Price Behavior in Nepal*”; this study aims to examine the efficiency of the stock market in Nepal.

His research objectives are as follows:

-) To examine the serial correlation of the successive daily price changes of the individual stocks.

-) To determine whether the sequence of price changes is consistent with changes of the series of random number of expected under the independent Bernoulli process.
-) To determine the efficiency of the stock market through the theoretical model of efficient market hypothesis in the Nepalese stock market.
-) To provide feedback policy input towards institutional development of efficient market.

Analysis:

The serial correlation coefficients of the daily price changes for 1 and 2 lag days, and runs of the series of daily price changes lead to conclude that the successive price changes are not independent random variable for the 30 sample stocks listed in the Nepal stock exchange Ltd. (NEPSE). Therefore, the random walk theory is not a suitable description for the stock market price behavior in Nepal.

His findings are as follows:

-) The dependence in the series of price changes observed imply that the price changes in the future market will not be independent from the price changes of the previous days. It implies that the information of the past price changes is helpful in predicting future price changes in way that the speculation through technical analysis can make higher expected profit than they would be under naïve buy- and- hold policy (i.e. average market return). Therefore, opportunities and available to sophisticated (both institutional and individual) investors to earn higher return in the market.
-) The existence and participation of the sophisticated investors have not been realized from the findings of this study. It is realized tan mostly the naïve investors have

dominated in the market that can cause prices to diverge significantly from intrinsic values because the very existences of the sophisticated traders cause to erase the opportunities of persistence in prices which establish independence of successive price changes.

Tekendra Bhattraï (2000) conducted a study entitled “*Risk and Return Analysis of Listed Manufacturing Companies in Nepal*” with the following objectives:

-) To identify whether the risk of companies can be eliminated through diversification or not.
-) To determine whether the sequence of price changes is consistent with changes of the series of random number of expected under the independent Bernoulli process.
-) To determine the efficiency of the stock market through the theoretical model of efficient market hypothesis in the Nepalese stock market.

Nepalese companies do not compensate investor rightly through return for the amount of risk they assumed. The investor should purchase under price stock like stock of Bottlers Nepal Ltd. But should sell overprice stock like that of Arun Vanaspati Udyog and Jyoti Spinning Mills. Investors should be careful about the systematic risk of the common stock instead of total risk as measured by the standard deviation.

Laxmi Pokharel (2000) submitted the thesis entitled “*Legal Provision to the Protection of Investors under the Nepalese Law and an Analytical and Critical Study*”. The following points were taken as the objectives of study.

-) To identify the investors and focus on the investing process
-) To make comparative study of Nepalese legal provisions in investors protection.
-) To analyze the trend of implementation of those legal provisions in regard to investors protection.

Analysis:

The study was based on doctrinal approach and as well as non doctrinal as needed to obtain information based on survey method. Most of the information had been taken from secondary sources of data. Mainly the study was based on doctrinal approach and as well as non doctrinal as needed to obtain information based on survey method. Most of the information had been taken from secondary sources of data. Mainly the study was undertaken as the descriptive and diagnostic in its theoretical point of information.

He had mainly focused to analyze the trend of implementation of Nepalese legal provisions with regards to investors protection and to find out the legal strengths and weakness of executive bodies with regards to investors protection.

His findings are as follows:

-) In this study, pokharel found that Nepal had drafted various laws to protect the interest of investors on the scattered forms—acts, regulation and byelaws. But there was still an absence of particular and separate legislation for the protection of investors.

-) Nepalese investors were not governed under the corporate norms and values due to lack of proper knowledge of their right. They could be victimized but they did not complain at concerned authority.
-) The main ground of investors deceiving are insiders trading mal-motion on the prospectus, wrong financial statement of company, wrong auditing reports, wrong performance details, and public information.
-) Various grievances like wrong details on underwriting and listing the share, delay on return of money, delay on distribution of bonus shares, dispatching proper information to shareholders or potential investors, misusing the application money are the main deceiving groups of investors in Nepalese context.

Sudip Upadhyaya (2004) has conducted a study similar to the present one entitled “*Investors’ Preference and Financial Instruments*” putting the objective of study as:

-) To study the preferences of investors in the financial instruments.
-) To assess investors’ awareness regarding the investment decisions in selecting securities.
-) To analyze the investment trend in the security market of Nepal, and
-) To suggest some practical recommendations on the basis of the findings of the study.

Analysis:

The researcher gives the following important remarks in regard to the investors’ preferences from the analysis; it seems that the Nepalese investors’ prefer common stocks when making investment decision. The common stock has the largest chunk of trading in the market. The main attraction of common stock is due to return: dividend of the company. The stocks of

banking sectors have the largest amount of trading in the market or the market capitalization of common stock of banking sectors is very high. Hence, the preference of investors is on common stock of banking sector.

The main findings of the study were as follows:

-) The investors give the second priority to the government securities because the government securities are taken as risk less investment.
-) The Nepalese investors least prefer the preferred stocks and debenture.
-) It was found that from the primary data, no attraction of investors is the main reasons of the Nepalese companies for not preferring to issue debenture and preferred stock frequently. The market capitalization of the securities shows that the Nepalese security market is in development stage since the capitalization is in increasing trend.
-) The Nepalese investors do not seem aware in regarding investment in the security market. They don't analyze the risk and return before making any investment in any securities. They invest their money just by observing the market trend, which is very unscientific in Nepalese context because Nepalese security market is not in equilibrium.
-) The investors are feeling the existing rules and regulations regarding sufficient and timely information from the companies where they have invested their money.

Another study conducted by Chandika Oli (2007) entitled “*Stock Market Behavior in Nepal*” gives some important insight into the Nepalese stock market.

The main objectives of the study were as follows:

-) To identify the trend and development of stock market and economic growth.

-) To assess the relationship of stock market indicators with different macro economic indicators.
-) To recognize the affect of factors of macro environment (cultural and political) upon stock market with the degree and significance.

Analysis:

The researcher analyzed the data by comparing the GDP and market capitalization. Since the ratio of market capitalization to GDP very low for the periods, stock market size is not yet sufficient to show its impact on nation's economy. On the other, trend of turnover ratio and value of share traded to GDP ratio show that stock market in Nepal is very small relative to its economy, and stock market in Nepal is yet to make its presence felt in the national economy.

His findings are as follows:

-) Nepalese stock market is highly dominated by the largest companies in terms of turnover, as the concentration ratio is very high.
-) Stock volatility as measured by twelve month rolling standard deviation and stock volatility ratio give the basis to conclude the inability of Nepalese stock market to handle risk relatively to volume of stock in Nepal.
-) Scrutiny of difference of NEPSE due to industrial sectors reveals that NEPSE index due to industrial sectors are significantly differ each other. This further confirms the conclusion that Nepalese stock market is highly concentrated to one or group of the industrial sector(s). It is the banking sector at which the market is highly concentrated.

- J Observing the pattern of variation the price for closing date of coming year may happen to be positive if the same trend continues. The analysis of run test further confirms the results that there are wider fluctuations of average stock price in stock market.
- J Nepalese stock market cannot handle large volume of tracings with less price swings. As there are very weak positive relationship is observed in Nepalese stock market between volatility and value of shares traded.
- J Numbers of listed companies have been found to have greater impact upon NEPSE index than value of stock traded and number of stock traded. However NEPSE index is also positively influenced by number of stock traded and value of stock traded.
- J NEPSE index remains unaffected by the advent of cultural event like Dashain. However it is affected by the political events as the results of two different political events suggested so. On the other way NEPSE index carries the political information but fails to carry the cultural information. On the basis of findings she recommends the following:
 - J Turnover ratio, value traded ratio to volatility and concentration indicates the illiquidity and high risk in equity investment. To correct this problem acquisition and dissemination of information relating to stock market component is a must.
 - J The country should initiate the policies to reduce cost of mobilization of savings and to facilitate the investments as there is positive impact of total savings on NEPSE index Investors should be provided with wider variety of securities to meet their risk return preferences so that, unlike in present situation majority of the nation's

population participate actively in buying and selling of securities that causes the stock market to be developed and nation's economy, in turn, will be spur.

Research Gap

Efficient Securities market is not only the output of interaction of institutions involved and mechanism of process of trading securities; however it is also the thing that is influenced by the investment habit, psychology and awareness of investors. In this connection, this study contributes something new toward the securities market that is not sought yet by surveying the psychology and awareness of investors investing in various types of securities. This sort of study identifying investor's perception and awareness is a new and challenging in itself but is also an opportunity to learn and identify investors from their innermost. More specific studies as to the investors' attitudes and perception in the security market related field, for example in the field of policies and operational issues, is necessary opening up the new and challenging research avenues for researchers.

CHAPTER- III

RESEARCH METHODOLOGY

This chapter presents all the necessary steps to be followed throughout this research work in order to achieve and accomplish the objective of the study. Research methodology discussed in this chapter helps to guide the research study providing different issues and aspects. It systematically solves the various sequential steps to adopt by a researcher in studying problem with the objectives in view. This chapter is to outline the nature and sources of data, sample selection & classification of variables, techniques and steps adopted in interpreting and analyzing the data. It also focuses on how to collect required data, what is the population and sample, and what techniques to be adopted to analyze and interpret etc.

3.1 Research Design

Current research applies analytical and descriptive techniques to evaluate and analyze the investor's preferences toward financial instruments. Therefore, current research is both analytical and descriptive. It is analytical in the sense that it uses different analytical tools to analyze the investor's preferences toward financial instruments similarly it is descriptive in the sense that it clarifies different aspects of investor's preferences toward financial instruments. As per the nature of the research primary data have been extensively used.

3.2 Source of Data and Collection Procedure

Mainly needed primary data and information are gathered through questionnaire. Direct interview and mail questionnaire method of collection data are employed to collect primary data. Needed secondary data that support the study have been collected through the various published and unpublished sources.

3.3 Population and Sample

All the investors those who invest in financial securities in Nepal constitute population. Total population of Nepalese investors is divided into two parts namely individual and institutional investor. The detail sample plan is based on stratified and purposive sampling. The samples of this study are as follows:

Table 3.1

Number of respondents

S.N	Categories	Numbers
1	Individual investors	56
2	Institutional investors	56
	Total	112

There are total 112 respondents. Out of them, first half of the respondents i.e. 56 respondents are individual investors who were met in the securities trading offices (brokerage firms), who were gathered there for the purpose of collecting information regarding different

securities and some primary data was collected through telephone and email. Another half of the respondents are institutional investors, (see appendix; 2). This classification has been made for the purpose of analyzing the difference in the investor's opinion with respect to major aspect of investors' preferences towards financial instruments.

3.4 Data Analysis

I) Median values

The median is the middlemost or most central item in the set of numbers. In other words, the median is a single value which divides the total number of observations into two equal parts such that 50 % of items lie below median value. It is used to show the importance of respondents towards the events. If respondents opine their response from one extreme to another extreme (i.e. "satisfied very much" to "dissatisfied very much"), the median can be used to identify their importance (*Pradhan; 2003:74*).

The median is the middle value of the given distribution. Median is defined as 'the value of the variable which divides the group into two equal parts, one part comprising of all the values greater than and the other part comprising of all values less than median.' Thus, the median divides the whole distribution into lower 50% and upper 50% of the values.

Thus, the median is different from mean as the median describes the 'position' of the variable in the distribution (*Sunity shrestha and Sunil amatya; 2004:99*)

For calculating the median, first of all find, $N/2$, identify the class- interval corresponding to this in c.f., then use the following expression,

$$Md = L + \frac{N/2 - \sum cf}{f} \times h$$

Where, Md = median

L = lower limit of the median class

c.f = c.f. preceding the median class

f = frequency of the selected class

N = total number of observation

h = height

II) Chi-square test

Chi-square, symbolically written as χ^2 , is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance. As a non-parametric test, it can be used to determine if categorical data shows dependency or the two classifications are independent. It can also be used to make comparisons between theoretical populations and actual data when categories are used. Thus, the chi-square test is applicable in large number of problems. The test is, in fact, a technique through the use of which is possible for all researchers to i) test the goodness of fit: ii) test the significance of association between two attributes, and iii) test the homogeneity or the significance of population variance. Here in this study chi-square is utilized to test the significance of association between two attributes.

Chi-square is calculated utilizing the formula below:

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

Where,

$$E = \frac{RT \cdot CT}{N}$$

RT = Row total

CT = Column total

χ^2 = Value of Chi Square

O = Observed Frequency

E = Expected Frequency

N = Grand total

Testing of Hypothesis

In this research, following hypothesis has been tested. A set of hypothesis is the combination of two things viz. Null hypothesis and alternative hypothesis denoted by H_0 and H_1 respectively. These are given below:

Set I: In the first set, the difference between type of investors and their attitude towards securities have been tested specifically.

H_0 : There is no significant difference between type of investors and their attitude towards securities.

H_1 : There is difference between type of investors and their attitude towards securities.

Set II: In the second set, the differences between the type of bond and type of investors have been tested.

Ho: Individual and institutional investors do not differ due to bonds type.

H₁: Individual and institutional investors differ due to bond type.

Set III: In the third set, differences between the types of investors as to their tendency to perform risk-return analysis have been tested.

Ho: Individual and institutional investors do not differ as to their tendency to perform risk and return analysis.

H₁: Individual and institutional investors differ as to their tendency to perform risk and return analysis.

III) Arithmetic Mean:

Arithmetic mean is the average return over periods. Arithmetic man of a given set of observation is their sum divided by the number of observations. To illustrate it, let's suppose that X₁, X₂, X₃ X_n denote return of given 'n' number of respondents and \bar{X} is the arithmetic mean of the given observation. It is calculated by,

$$\bar{X} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n}$$

Or,

$$\bar{X} = \frac{\sum X}{n}$$

Where,

\bar{X} = Arithmetic mean

$X_1, X_2, X_3, \dots, X_n$ = Set of observations

n = total no of observations

X = Sum of given Observations

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

This chapter presents the data those are relevant for making contemplated comparisons and analysis. This chapter also related to a number of closely related operations, which are performed with the purpose of summarizing the collected data and organizing these in such manner that they answer the research questions. Investor's preferences, reason for preferring one security over others, level of satisfaction they enjoy by buying security and grievances of investors against different institution etc. are the issues to be presented and analyzed here in this chapter.

1.1 Investor's Preferences and Type of Securities

An important thing in Nepalese capital market is to know what kinds of security investors prefer most. In this very regard, Investors are identified in terms of what type of security they prefer most given the certain number of securities those are generally in Nepalese market. Another issue in this regard is to identify whether the tendency of the institutional and individual investor related to each other or not. This is also tested in the null hypothesis that the type of security and type of investors are independent against the alternative hypothesis that these two attributes are associated and the association is not because of some chance factor but it exists in reality. The table 4.1 shows how the investors rate these securities in a scale of 1 (most preferred) to 5 (least preferred).

Table 4.1

Status of investor's preference and type of securities

Type of security	Rank					Median value	Overall rank
	1	2	3	4	5		
Common stock	53	43	13	2	1	13	1
Preferred stock	5	19	40	20	28	20	3
Debentures/Bonds	12	25	16	50	9	16	2
Government Bonds	42	25	5	30	10	25	4

Source: Field Survey, 2009, Kathmandu

(Calculations are shown in Appendix – 2)

The table 4.1 shows that common stock is the security that is most preferred by the investors, followed by government bonds, preferred stock and debentures respectively. From the table it is clear that median values of common stock, preferred stock, debentures and government bonds are 13, 20, 16 and 25 respectively. As these median values stood for indicating the concentration of respondents, for common stock the more of respondents are centered to the 4th rank resulting into median of 25. Thus it can be regarded that the common stock is the most preferred financial instruments among Nepalese investors. The second preference of Nepalese investors goes for government bonds and third preference to preferred stock and debenture is the kind of securities that is least preferred by Nepalese investors.

Table below gives the information of the results of the two types of investors viz. individual and institutional and their responses to the statement they would like or dislike transacting

on the each of the given securities. Total number of each of the responses on each security according to investors' category are presented in the table 4.2.

Ho: (Null Hypothesis): There is no significant difference between Individual & Institutional Investment

H1: (Alternative Hypothesis): There is significant difference between Individual & Institutional Investment.

Table 4.2

Attitude of investor towards transacting on securities

Type of securities	Responses	Type of investor		Calculated t	Result
		Individual	Institutional		
Common stock	Like	45	47	0.243	Ho is accepted
	Dislike	11	9		
Preferred stock	Like	15	11	1.727	Ho is accepted
	Dislike	37	49		
Debentures/Bonds	Like	43	36	2.105	Ho is accepted
	Dislike	13	20		
Government Bonds	Like	48	42	2.036	Ho is accepted
	Dislike	8	14		

Source: Field Survey, 2009, Kathmandu and appendix

Note: i) Tabulated t value of t at .05 level of significance for 1 d.f. is 3.84

(Calculations are shown in Appendix – 3)

For common stock the t-value is highly insignificant. Hence we conclude that the preference of two types of investors do not differ and are similar as regards the attitude of transacting common stock among them. Like wise calculated value of t for preferred stock and government bonds are less than tabulated values of t at 5 percent level of significance. So null hypothesis is accepted and this implies that the preferences of both types of investors to transact on these securities do not differ. In case of debentures the calculated value of t is also less than the tabulated value, it is not significant and hence the null hypothesis is accepted at 5 percent level of significance. Hence it can be concluded that the preference of two types of investors in regards the transaction of securities do not differ significantly.

4.2. Relative Important Features of Common Stock

Respondents are given following features of common stock to rate as per the features' importance to investors. The results of the responses of the respondents are as follows:

Table 4.3

Importance of features of common stock as viewed by the respondents

S.N	Features of common stock	Rank										Median value	Overall Rank
		1	2	3	4	5	6	7	8	9	10		
1	Power to exercise rights	9	12	15	18	9	10	15	17	4	3	11	4
2	Participation in management	13	14	7	10	12	11	25	7	8	5	10.5	3
3	Sense of ownership	3	2	8	9	6	5	10	45	20	4	7	1
4	Participation in earnings	45	15	4	5	8	2	10	7	3	13	7.5	2
5	Bulk transaction	21	23	13	19	7	5	10	11	-	3	11	4
6	Marketability	21	25	11	13	15	17	1	2	6	1	12	5

Source: Field Survey, 2009, Kathmandu

(Calculation of Median values are shown in Appendix – 4)

The table 4.3 shows that various important features of common stock viewed by the respondents. The main reason to prefer common stock is because it entrusts holders the sense of ownership. Next to this, participation in earnings is the second feature of common stock in terms of the perceived importance of Nepalese investors. In the same way participation in management, bulk transaction, power to exercise right and marketability are in third, fourth and fifth priority in the Nepalese investor's perception. Marketability is in last to attract the motive of investors to purchase common stock. The median value of the above features are 7, 7.5, 10.5, 11, 11 and 12 respectively for the participation in earnings, marketability, bulk transaction, power to exercise rights, participation in management and sense of ownership respectively. The main reason of Nepalese investor's inclination towards the common stock can be attributed to their sense of ownership. Like wise common stock is relatively liquid and it has attribute of marketability. This is also a factor that attracts Nepalese investors to transact on the common stock.

4.3 Industrial Sectors and Investment Attitude of Investors

There are different industrial sectors one can invest in but which is the most attractive is the issue to be addressed here in this section. Investors are provided with the following industrial sectors and are asked to rate them as per their willingness to invest in the sector. The results of their ratings are appeared as in the table 4.4.

Table 4.4

Industrial sectors and investment attitude

		1	2	3	4	5	Median value	Rank
1	Bank	58	25	7	5	6	7	1
2	Finance	17	23	21	19	18	19	7
3	Hotel	10	22	17	16	7	16	5
4	Manufacturing and Processing company	5	22	13	18	6	13	4
5	Insurance Company	6	9	20	21	18	18	6
6	Trading Company	7	5	30	15	12	12	3
7	Others	9	6	4	18	-	7.5	2

Source: Field Survey, 2009, Kathmandu

(Calculation of Median values are shown in Appendix – 5)

The table 4.4 shows that the most attractive sector for Nepalese investors is banking sector, as the median value (7) for this sector is less in comparison of other six sectors (mentioned above in table). Other sector is the next most attractive sector after banking sector for Nepalese investors. This finding supports the growing tendency of investment in this sector. The median value of insurance, hotel, trading, manufacturing & processing, and other sectors are 18, 16, 12, 13 and 7.5 respectively indicating the consecutive priority of investors so far as their matter of investing in different industrial sector is concerned.

1.4 Investment objectives of the Investors

Investment objective is the foundation of investment on the basis of which investor's makes a decision regarding selection of security, evaluation of the performance and time horizon of investment etc. The investment objective of investors is not only a basis to identify investor's investment psychology but also a milestone to set investment related policies and to set price and other features of securities. In this regard the investors are identified on the

basis of what type of objective they bear in mind while investing in securities. Investors are asked to rank following major objectives in order of their importance to them. The detail results of their responses are given in the table 4.5

Table 4.5

Investment objectives of investors as viewed by investors

Investment Objectives	Rank				Median Value	Overall rank
	1	2	3	4		
Sufficient return	51	44	12	5	28	1
Less risk	21	31	27	33	29	2
Marketability	35	12	36	29	32	4
Social status	5	25	37	45	31	3

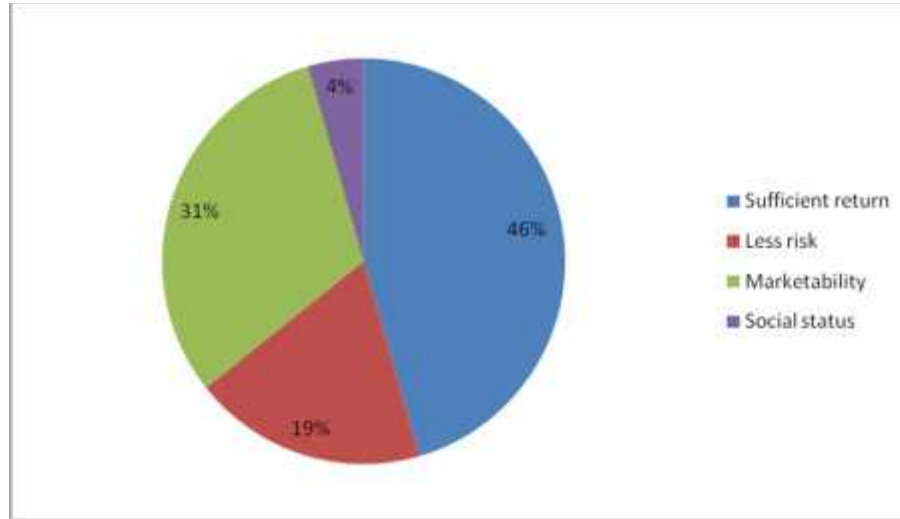
Source: Sample Survey, 2009, Kathmandu

(Calculations of Median values are shown in Appendix – 6)

Investors’ objectives to invest imply the major psychological reason for investing in securities. These simply explain for what purpose investors tend to invest i.e. either it is to maximize return, to enhance their social status, or to minimize the possible risk. The table above shows that out of the given kind of objectives ‘sufficient return’ is the kind of investor’s objectives for which they attach most in comparison with others. Out of the total respondents 46 percent investors rank this objective as the most important which is presented in the chart no. 4.1.

Figure 4.1

Pie chart showing no. of respondents rating the given objectives as first ranking



Rank computed on the basis of median value is also lowest among all i.e. 28 which indicates the concentration of more number of investors in this option. The second most important objective for the investor is less risk, as the median value of this option is least of all the option except that of the first option. Although there are 19 percent of investors ranking this option as first, the overall median value is lower than all other option except the first option. So less risk is another important aspect next to sufficient return for Nepalese investors. After the sufficient return and less risk, investors want security having features of good marketability and thereafter they seek security that enhances their social status.

In this analysis investors seem less concern over social status and more concern over sufficient return and less risk so far as the matter of investing in securities is concerned.

4.5 Shortcomings of debentures and preferred stock

Debentures and preferred stock are not used as commonly as common stock in Nepalese market as this is discussed in part 4.1. Moreover the tendency of this is same for both the institutional and individual investors. What are such reasons that get the Nepalese investors feel so alienated with debt security is a question to be analyzed here onwards. The answer of this perhaps will be the solution in itself to correct the problems that has been apparent in Nepalese bond market. Followings are some of the major problems in investing these sorts of securities.

Table 4.6

Problems in investing in debt and preferred stock

S.No	Statements	Rank					Median value	Overall ranking
		1	2	3	4	5		
1.	No provision of handsome return that compensates the perceived risk of investors.	44	19	14	18	17	18	2
2.	These financial instruments provide only certain return.	35	40	22	13	2	22	7
3.	Overburden of legal formalities	21	17	21	12	41	21	6
4.	Due to the lack of professional practices	33	15	14	32	18	18	3
5.	Lack of marketability and liquidity.	45	19	6	31	11	19	4
6.	No legal protection in favor of investors	6	18	20	24	44	20	5
7.	Due to the lack of wide varieties in these kinds of securities.	51	34	10	9	8	10	1

Source: Field Survey, 2009. Kathmandu

(Calculation of the Median Values are shown in Appendix – 7)

While investors are asked to give their views as to the reasons in terms of their agreement or disagreement, the result appears as in the table 4.6. Comparing the median value of second last column of the table, it is apparent that the reason to less or no use of debt can be attributed the cause that debt or preferred stock does not provide wide variety in their kinds, so investors are less inclined towards these securities. In the same way the second thing investors agree upon is that these securities provide less return than it actually required compensating the risk inherent in these securities.

The reason such as illiquid and less marketable tends investors to have negative attitude towards these securities (i.e. Debentures and preferred stocks). Of course there are no provisions for investors who do require adjustable return as per the market scenario. As a result they also agree that the securities provides stable return and this sometime seems unreliable as the market may create good opportunity to earn extra return if the same investment is made in other area. Among the various disadvantages investors are less vexed at the overburden of legal formalities, lack of professional practices and legal insecurity etc. as the median values for these are greater in comparison to others.

Bond preference

Of course bond market is not as in the height as stock market. However there are so many types of bonds that meet the investors' need and get them propel to invest in these securities but what is such bond that can win the investor's psychology is the main question to be addressed. Investors are given the bond option having following alternative features and asked which of these they like most. The results of their views are provided in table 4.7.

Null Hypothesis: H₀: There is no significant difference between Individual and Institutional Investment in different types of bond preference

Alternative Hypothesis: H₁: There is significant difference between Individual and Institutional Investment in different types of bond preference

Table 4.7

Preference of alternative bonds

Observations	No of respondents					
	Institutional	%	Individual	%	Total	%
Bond that gets you participates in profits and or loss (income bond).	9	8.04	6	5.36	15	13.39
Bond that adjusts promised interest rate according to the rate in the market (floating rate).	16	14.29	7	6.25	23	20.54
Bond that is pledged against the firm's assets (mortgaged bond).	13	11.61	26	23.21	39	34.82
Simple debt that pays regular interest (simple interest).	18	16.07	17	15.18	35	31.25
Calculated value of χ^2	10.82					

Source: Field Survey, 2006, Kathmandu.

Note: i) Tabulated t value of χ^2 at .05 level of significance for 3 d.f. is 7.82

(Calculation of χ^2 value is shown in Appendix – 8)

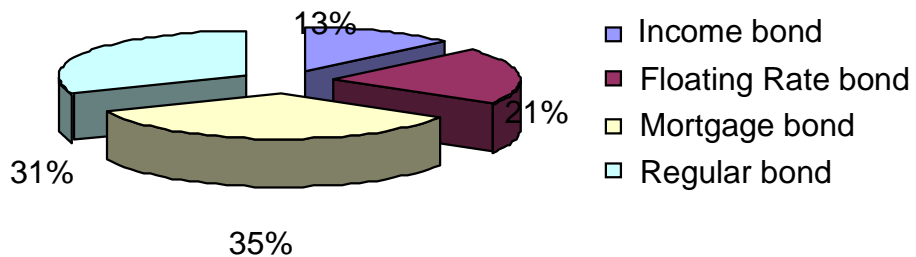
From the table 4.7 one can observe that out of the total respondents 39 respondents like such bond that is pledged against the firm's assets and it is technically called mortgaged bond. Like wise mortgage bond is the most favored bond followed by simple interest bond, floating rate bond and income bond. The result of the survey has also been presented in

figure below. It shows that out of the total respondents 39 (34.82 percent), 35 (31.25 percent), 23 (20.56 percent) and 15 (13.39 percent) respondents are in favor of mortgage, simple interest, floating rate and income bond respectively. This shows that firms should not only issue bond of traditional nature but they should also add some feature(s) in bond to pull bond market up to an inspiring level.

The viewpoints of respondents are not similar when their type is varied where most of the individual investors favor mortgage bond i.e. 26 respondents while only 13 institutional investor's favor this bond. The difference of views can apparently be seen for each of the kind of observation describing the type of bond.

. **Figure 4.2**

Preference of investors towards different kinds of bond



To test the significance of this difference χ^2 test of independence of attribute is calculated. Calculated value of χ^2 at the last row of the table 4.7 shows that this value is greater than the tabulated value, thus it is significant at 5 percent level of significance and null hypothesis is rejected as such it can be concluded that the difference observed between the institutional

and individual investors in their views is significant and they forward different views as to the type of bonds they like or dislike.

4.7 Factor Affecting Choice of Security

Factors those affect or determine the choice of security may be innumerable depending upon the status of security market in the country and investor's psychology. As a matter of fact nothing can fully explain the determining factors those affect the choice of the investors in buying security notwithstanding here an attempt has been made to identify some of the important factors that may affect their choice. Given the following important four factors influencing the choice of security investors are asked to rate these giving 1 for most influencing to 5 for least influencing factor. The results of their rating are appeared as follows:

Table 4.8

Factor Affecting Choice of Security

Factors	Rank					Median value	Overall rank
	1	2	3	4	5		
Return pattern	22	65	15	6	4	15	2
Availability	12	30	34	21	15	21	3
Company's overall performance	77	16	12	2	5	12	1
Rumors	1	1	24	43	43	24	4

Source: Sample Survey, 2009, Kathmandu

(Calculations of Median Values are shown in Appendix – 8)

Numbers of respondents rating 'company's overall performance' as first ranking are highest of all the respondents i.e. it is 77. The median value of this factor i.e. 12 indicates that most of the respondents rate this factor as the factor determining the choice of security. Out of the given factors 'return pattern' is in the second position to determine the investor's choice of security as there are 22 respondents rating this option as second ranking. Median value of return pattern is 15 from this observation which lies in second rank as per the overall ranking of all the factors presented.

There are few respondents rating availability of security as the important factors determining the choice of security. The last ranking is received by 'rumors' and it is least important so far as the matter of affecting investor's choice of security is concerned. The median values of these factors are 21 and 24 respectively.

4.8 Reason for preferring government securities

As per the analysis in part 4.1 investors are inclined more towards government bonds than corporate bonds and preferred stock. In course of identifying the reason for preferring government security following analysis is performed and presented. On the other way, it is the needs to identify what are such features of government security that make the investors prefer the security. As an attempt towards that end following alternative features of government bonds are presented and asked to rate these as per their importance giving 1 to most important and 5 to least important.

Table 4.9**Reason for preferring government security as viewed by respondents**

Factors affecting choice of security	Rank					Median Value	Overall rank
	1	2	3	4	5		
Risk Free	78	15	9	1	9	9	1
Advantage for construction	12	42	15	12	31	15	2
Protection against malpractices	8	20	27	33	24	24	5
Less legal formalities	1	16	37	15	43	16	3
Stable return	13	19	24	20	36	20	4

Source: Sample Survey, 2009, Kathmandu

(Calculations of Median Values are shown in Appendix – 10)

The result gives the information that the most important feature of government security to propel investors to purchase these is it is risk free. There are 78 respondents those rates this features as 1, this resulted into the median value 9 indicating that most of the respondents tend to rate this feature as most important influencing factor affecting choice of security. Next to this, investor's favors this security for it being advantageous to construct portfolio as it can be used to uplift the opportunity set thereby provides more wide risk return space. Like wise as per the overall ranking based on median value stable return is in the third ranking as its median value is 3. Median value of 'protection against malpractices' and 'less legal formality' are 20 and 24 respectively indicating the less attractive features inherent in the government security.

4.9 Methodological Process of Risk and Return Analysis

Whether the Nepalese investors are fully aware of the risk and return or not are analyzed here or do the investors tend to adopt any particular method of analyzing risk and return of the security before investing in or not is the question to be addressed here in this section. Following is the result of survey conducted to identify behavior of investors in this regard.

Ho: (Null Hypothesis): There is no significant difference between individual and institutional investors in risk and return analysis of securities of different industries.

H1 :(Alternative Hypothesis): There is significant difference between individual and institutional investors in risk and return analysis of securities of different industries.

Table 4.10

Investors performing risk and return analysis

Response	No. of respondents				Total	%	
	Individual	%	Institutional	%			
Yes	25	22.32	37	33.04	62	55.36	
No	16	14.29	15	13.39	31	27.68	
Don't Know	15	13.39	4	3.57	19	16.96	
Total	56	50	56	50	112	100	
Value of χ^2	7.71						

Source: Field Survey, 2009, Kathmandu

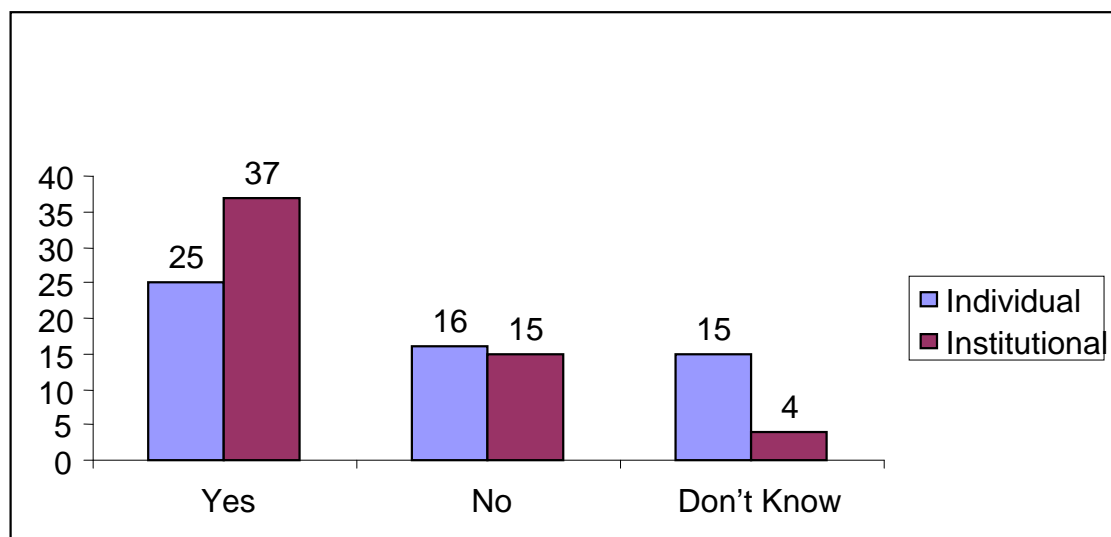
Note: i) Tabulated t value of χ^2 at .05 level of significance for 4 d.f. is 9.49.

(Calculation of χ^2 value is shown in Appendix – 11)

Out of the total respondents there are more of institutional investors (i.e. 33.04 percent) performing risk and return analysis while investing in securities. Like wise investors who don't perform risk and return are 31 for total. Investors having no idea as to this are 19. This is also presented in the figure 4.3.

Figure 4.3

Investors tendency to perform risk and return analysis



Out of the total respondents 55.36 percent perform risk and return analysis while rest 27.68 percent don't perform the risk and return analysis and balance have no idea as to what does it mean. The figure also shows that individual investors are less sensitive to the performance of risk and return analysis in comparison to institutional investors.

The last row of the table presents the calculated value of χ^2 that is less than table value of χ^2 at 0.05 level of significance and 4 percentage d.f. This indicates that the tendency of individual and institutional investors do not differ significantly to perform risk and return analysis while investing in securities. i.e. the null hypothesis is accepted.

4.10 Investment processes

Investment processes are the sequential steps of making investment decision and going through these processes over the investment horizon. Whether or not Nepalese investors follow the investment processes is analyzed and interpreted in this section. Investors are provided with the following five investment processes and asked to mark yes if the respondents follow the process or processes. The results of their markings have been appeared as in the table 4.11 .

Table 4.11

Investment processes as followed by Nepalese investors

Investment process	Ranking									
	Yes Ins.	Yes Ind.	%	No Ins.	No Ind.	%	Don't know Ins.	Don't Know Ind.	%	Total
Set investment policy	50	48	87.50	5	5	8.93	4	0	3.57	112
Analyze security	40	37	68.75	9	6	4.46	10	10	17.86	112
Portfolio construction	30	24	48.21	18	5	20.54	20	15	31.25	112
Portfolio Revision	10	8	16.07	27	8	31.25	40	19	52.68	112
Portfolio performance evaluation	9	3	10.71	50	23	47.32	27	20	41.96	112

Source: Field Survey, 2009, Kathmandu

Out of the total respondents 87.50 percent set investment policy and remaining do not set investment policy. Like wise 68.75 of the total respondents analyze security before making investment decision remaining 31.25 percent do not analyze security. Here the interesting result is that most of the respondents do not construct portfolio deliberately either they do not know about it or they simply do not construct portfolio. Like number of respondents those revise and evaluate their portfolio are also minimum. Here out of the total respondents 16.07 percent revise portfolio but next 31.25 percent do not and still another 52.68 percent of respondents even don't know as to the revision of portfolio.

The last step in investment process is portfolio performance evaluation. For this step too Nepalese investors seem alienated, as there are only 10.71 percent of respondents who evaluate performance of portfolio and other 47.32 percent do not evaluate the performance of portfolio and balance don't know as to this.

4.11 Investor's grievances

Investors are the sovereigns of the capital market so the need of today to identify what sort of complain they have towards the parties of security market is the things to be addressed here in this section.

4.11.1 Investor's grievances against issuer companies

Issuer Company is the major part of the whole system of security market. Here, an attempt has been made to identify investor's grievances, if any toward Issuer Company if they

purchase their share in secondary market. The number of respondents along with the nature of grievances has been presented in the table 4.12 and these grievances are related with the investors who purchase share from secondary market.

Table 4.12

Secondary market investor's grievances towards Issuer Company

Nature of grievances	No of respondents	Percentage
Rejection to transfer the share or delay to do so.	-	-
No timely information as to the prices and financial statements	11	9.82
No timely delivery of dividends/bonus share/right share.	65	58.04
No timely annual general meeting.	1	0.09
Total	77	68.75

Source: Field Survey, 2009, Kathmandu

Out of the total respondents 112, 77 have complaint of one or other kind. This shows that 68.75 percent of the total investors have one or other kind of grievances. Most of the respondent complain that there are no timely delivery to dividends, bonus share, and right share like wise there are also a significant number of respondents those complain that no timely information of price, financial statements and other vital information. Out of the total respondents one respondent has complain about the general meeting that is not held in time.

Further the natures of grievances of the investors who purchase first issued security from the primary market are presented in the table 4.14.

Table 4.13

Primary market investor's grievances towards Issuer Company

Nature of grievances	No. of respondents with the grievances	Percentage (%)
Issuer Company does not provide the prospectus/security/purchase application form	-	-
Company wants to influence unduly through prospectus and other advertisements	35	31.25
Company does not provide the article of association, memorandum of association and other related documents for detail perusal.	7	6.25
Company rejects to receive the share application form duly filled by the investor.	-	-
Irregularities while allocating the security to the investors.	25	22.32
Total	67	59.82

Source: Field Survey, 2009, Kathmandu

The grievances of the investors who purchase share from primary market against Issuer Company also seems to be significant as there are 67 investors out of 112 respondents complains against Issuer Company in one or other area of functioning of Issuer Company. Most of the respondent complaint as to the company's tendency to influence unduly to the investors through different type of source of information having their reach. And some of

the respondents also dissatisfied with the process of allocating shares to the investors. Other 7 have complained that company does not provide necessary documents for detail perusal.

4.11.2 Investor’s grievances against Broker Companies

Broker companies are the organizations that remain in frequent contact with investors to manage investors’ investment options. In this course of action they have to perform innumerable functions. The grievances and complaint that are against this organization from the investor’s part is the questions to be answered in this part.

Table 4.14
Investor’s grievances towards Broker Company

Nature of grievances	No. of respondents with the grievances	Percentage (%)
Unavailability of security order form or rejection of the order from the company	-	-
No execution of the order given to the company	2	1.79
Execution of order in the prices more or less than the price stipulated	-	-
The company takes more commission/ transfer fees than it is provided	-	-
Wrong or no information as to the security and market	25	24.11
Total	27	24.11

Source: Field Survey, 2009, Kathmandu

There are 27 respondents out of the total 112 respondents having grievances against Broker Company that account for 24.11 in percentage. Of which Most of respondents feel that Broker Company does not provide necessary information as to the market scenario and

obstructs investor's from being informed with the same. In their views this the most offensive act to not provide vital information as and when investors feel necessity of such information. Of the 27 respondents two have a same complain that the order is not execute in the timely manner and creates difficulties to search for alternative investment opportunities.

4.11.3 Investors Grievances against Security Exchange Company

Security Exchange Company is the sole organization that regulates and looks after the functioning of other security related companies. The type and nature of grievances of the respondents are provided in the table 4.15

Table 4.15

Investor's grievances against Nepal Stock Exchange

Nature of grievances	No. of respondents with the grievances	Percentage (%)
Stock exchange does not inform to market as to the price sensitive information and financial statements.	34	30.56
Stock exchange does not provide the necessary information of the sold/purchased share.	-	-
It does not provide information relating to the membership, listing of securities and transactions etc.	5	4.46
Total	39	34.82

Source: Field Survey, 2009, Kathmandu

Of the total respondents there are 39 respondents having complain against exchange center. The complaint is that the center stock exchange does not inform to market as to the price sensitive information and financial statements. The respondents further complain that the

company used to provide information and financial statement of previous year in a web site www.nepalstock.com. Presently one cannot find the financial statements of listed company in the web site this has revealed their irresponsibility towards investors. Further another five respondents complain that the company cannot make up to date information as to the information relating to the membership, listing of securities and transaction etc.

4.11.4 Necessary Actions to Accelerate State of Security Market

As discussed above transactions of securities and overall situation of security market is in its developing phase and it is the need of today to get it accelerated. With a view to identify actions that possibly help upgrade the present state of security market following type of actions are identified and asked to rate these as per their necessity and urgency in the context of Nepalese security market. The results of their rankings are appeared in the table 4.16.

Table 4.16

Necessary actions to accelerate state of security market as viewed by respondents

Observations	Rank					Median	Overall Rank
	1	2	3	4	5		
1. Expansion of activities beyond capital city.	45	35	18	6	8	18	2
2. Arrangements for the involvement of Employee's Provident Fund, Citizen's Investment Trust, and Mutual Fund in security market	22	27	40	20	3	22	3
3. Sufficient Publicity	12	7	8	39	46	12	1
4. Amendment and strict implementation of rules and regulations	33	43	30	3	3	30	4

Source: Field Survey, 2009, Kathmandu

Investors feel that the first observation is the most important observation as an action to be taken to develop present state of Nepalese security market. The observation states that to accelerate present state of the Nepalese security market the access of the securities services, institutional capacity and services not only in capital city are the must. The security services are bounded in the capital city only and this needs to be corrected by expanding the services in outskirts too that propels all the people in the country to participate in the investment activities that may result into the more developed security market.

Next thing investors actively concerned over are amendment and strict implementation of current status of Nepalese security market. The Securities Ordinance 2005 has been enacted for the effective securities market regulations system. For the implementation of the ordinance, the necessary arrangement of legal provisions in line with international practices and the development of fair, dynamic and credible securities market is a challenging task. Company Ordinance, 2005 has provisioned trustee for the issuance of institutional debenture. However, in the absence of regulatory mechanism for the trustee another regulatory framework, there is a need for separate Trust Act to promote joint venture investment, securities depository and other trustee work for the mobilization of financial resources from financial market. Although the ordinance on securities, 2005 has authorized Securities Exchange Board for the regulation of the securities market, it hasn't provided autonomy related to employee and financial activities. It is necessary for the autonomy related to employee and financial activities. It is necessary for the autonomy and capacity building of the board. It has to be immediately equipped with resources and manpower.

Still the next important and urgent action to be taken to develop security market is to make clear-cut arrangements for regulations concerning the involvement of Employee's Provident Fund, Citizen's Investment Trust, construction extractive and IT sector and Mutual Fund in security market.

Sufficient publicity as to the security market and its benefits to the investors and general public is also an important thing to upgrade the present state of Nepalese security market. But this is a least important action, as viewed by the respondents, in comparison to others mention above.

4.12 Major Findings of the Study

On the basis of the whole issues dealt here in this research, following major findings can be pointed out:

- J Analysis of investor's preferences reveals that common stock is the security that is most preferred by the investors, followed by government bonds, preferred stock and debentures respectively. Median values of common stock, preferred stock, debentures and government bonds are 13, 20, 16 and 25 respectively. As these median values stands for indicating the concentration of respondents, for common stock the more of respondents are centered to the 1 and 2 scales resulting into median of 13. Thus it can be regarded that the common stock is most preferred financial instruments among Nepalese investors. Similarly, second preference of Nepalese investors goes for government bonds, third preference to preferred stock and

debenture is the security that is least preferred by Nepalese investors. For common stock the t-value is highly insignificant. Hence it is concluded that the preference of two types of investors do not differ and are similar as regards the attitude of transacting common stock among them. Like wise calculated value of 2 for preferred stock and government bonds are less than tabulated values of 2 at 5 percent level of significance. So null hypothesis is accepted and this implies that the preferences of both types of investors to transact on these securities do not differ. In case of debentures too, the calculated value of 2 is less than the tabulated value implying the preference of two types of investors in regards the transaction of debentures does not differ significantly.

J) The main reason to prefer common stock is because it entrusts holders the rights to participate in earnings. Among the various features of common stock the most preferred feature is that it entails the right to participate in earnings. Next to this, marketability is the second feature of common stock in terms of the perceived importance of Nepalese investors. Likewise Bulk transaction, Power to exercise rights and participation in management are in third, fourth and fifth priority in the Nepalese investor's perception. Sense of ownership is in last to attract the motive of investor to purchase common stock. The median value of the above features are 7.5, 12, 11, 11, 10.5 and 7 respectively for the participation in earnings, marketability, bulk transaction, power to exercise rights, participation in management and for sense of ownership respectively. The reason of Nepalese investors' inclination towards the common stock can be attributed to their willingness to participate in the earnings of the firm. Like wise common stock is relatively liquid and it has attribute of

marketability. These are factors that attract Nepalese investors to transact on the common stock.

) Analysis of attractiveness of industry sector show that for Nepalese investor's most attractive sector is banking sector, as the median value for this sector is 7. Thus the respondents are centered for the first ranking as opposed to other ranking. Finance sector is the next most attractive sector to banking sector for Nepalese investors. This finding supports the growing tendency of investment in this sector. The median value of insurance, Hotel, trading, Mfg, processing, and other sectors are 18, 16, 12, 13 and 7.5 respectively indicating the consecutive priority of investors so far as their matter of investing in different industrial sector is concerned.

) Investor's objectives to invest imply the major psychological reason for investing in securities. These simply explain for what purpose investors tend to invest that is either it is to maximize return, to enhance their social status, or to minimize the possible risk. The findings of this analysis is that out of the given kind of objectives 'sufficient return' is the kind of investor's objectives for which they attach most in comparison with others. Out of the total respondents 46 percent investors rank this objective as the most important. Looking at the overall rank computed on the basis of median value is also lowest to all that is 1.11 indicates the concentration of more number of investor's in this option. The second most important objective for the investor is less risk, as the median value of this option is least of all the option except that of the first option. So, less risk is another important aspect next to sufficient return for Nepalese investors. After the sufficient return and less risk investors want

security having features of good marketability and thereafter they seek security that enhances social status.

) In this analysis investors seem to be less concern over social status and to be more concern over sufficient return and less risk so far as the matter of investing in securities is concerned.

) The analysis that has performed to find out reason for less or no use of debt or preferred stock shows that the reason to less or no use of debt can be attributed to the cause that debt or preferred stock does not provide wide variety in their kinds so investors are less inclined towards these securities. In this way the second thing investors agree upon is that these securities provide less return than it actually required compensating the risk inherent in these securities. The reason that these securities are illiquid and less marketable tends investors to have negative attitude towards these securities (i.e. Debentures and preferred stocks). Of course there is no provision for investors who does require adjustable return as per the market scenario. As a result they also agree that the securities in question provides stable return and this sometime seems unreliable as the market may create good opportunity to earn extra return if the same investment is made in other area. Due to this very feature of these securities Nepalese investors do not want to invest in these types of securities (i.e. Debentures and preferred stocks). Among the various disadvantages investors are less vexed at the overburden of legal formalities, lack of professional practices and legal insecurity etc.

) Given the option of different type of debt security, 39 respondents like such bond that is pledged against the firm's assets and it is technically called mortgaged bond.

Likewise mortgage bond is the most favored bond followed by simple interest bond, floating rate bond and income bond. The result of the survey shows that out of the total respondents 39 (34.82 percent), 35(31.25 percent), 23(20.54 percent) and 15(13.39 percent) respondents are in favor of mortgage, simple interest, floating rate and income bond respectively. The chi-square test reveals that the difference observed between the institutional and individual investors in their views is significant and they put forward different views as to the type of bonds they like or dislike.

) Analysis of the factors determining investor's choice of security reveals that 'company's overall performance' receives first ranking as such this factor can be regarded as the most important factor determining their choice of security. Out of this given factors 'return pattern' is in the second position to determine the investor's choice of security as there are 22 respondents rating this option as second ranking. There are few respondents rating availability of security is the important factors determining the choice of security. The last ranking is received by 'rumors' and it is least important so far as the matter of affecting investor's choice of security is concerned. The median values of these factors are 2.41 and 3.70 respectively. The values are higher in comparison to this for other factors.

) The most important feature of government security to propel investors to purchase these is it is risk free. There are 78 respondents those rates this features in first ranking, this resulted into the median value 9 indicating that most of the respondents tend to rate this feature as most important. Next to this, investors favor this security for it being advantageous to construct portfolio as it can be used to uplift the

opportunity set thereby provides more wide risk return space. Like wise as per the overall ranking based on median value stable return is in the third ranking as its value is 20. Median value of 'protection against malpractices' and 'less legal formality' are 24 and 16 respectively indicating the less attractive features inherent in the government security.

) Out of the total respondents more institutional investors (i.e. 33.04 percent) perform risk and return analysis while investing in securities. Like wise investors who don't perform risk and return analysis are 31 while 62 respondent analyze risk and return before investment. Investors having no idea as to this are 19. The calculated value of 2 which is greater than table value at 0.05 level of significance and 3 d.f. indicates that the tendency of individual and institutional investors differ significantly to perform risk and return analysis while investing in securities. On the other way the differences observed between the individual and institutional investors is statistically significant giving the proof that they are not same so far as the matter of investing in securities is concerned.

) Out of the total respondents 87.50 percent set investment policy and remaining do not set investment policy. Like wise 68.75 of the total respondents analyze security before making investment decision while remaining 31.25 percent do not analyze security. Here is an interesting result that most of the respondents do not construct portfolio deliberately either they do not know about it or they simply do not construct portfolio. Like wise number of respondents those revise and evaluate their portfolio are also minimum. Here out of the total respondents 16.07 percent revise portfolio but next 31.25 percent do not and still another 52.68 percent of respondents

even don't know about the reason of portfolio revision. The last step in investment process is portfolio performance evaluation. For this step too Nepalese investors seem alienated, as there are only 10.71 percent of respondents who evaluate performance of portfolio and other 47.32 percent do not evaluate the performance of portfolio, and balances don't know as to this.

) Analysis of general awareness of investors towards security market and its functioning shows that investors are less aware towards the general functioning of security market in the country. This result is so dismal as so few of the respondents are concern over the general information as to the security market and it's functioning.

) Most of the respondents who purchase security in secondary market have the complain that there are no timely delivery to dividends, bonus share, and right share like wise there are also a significant number of respondents those complain that no timely delivery of as to the price, financial statement and other vital information. Out of the total respondents one respondent has complain about the general meeting that is not held in time.

) The grievances of the investors who purchase share from primary market against issuer company also seems to be significant as 67 investors complains against issuer company in one or other area of function of issuer company. Most of the respondents complain as to the company's tendency to influence unduly to the investors through different type of source of information having their reach. And some of the respondents also dissatisfied with the process of allocating shares to the investors.

Other 7 have complained that company does not provide necessary documents for detail perusal.

) There are 27 respondents out of the total of 112 respondents having grievances against Broker Company that account for 24.11 in percentage. Of which most of respondents feel that Broker Company does not provide necessary information as to the market scenario and obstructs investor's from being informed with the same. In their views this the most offensive act to not provide vital information as and when investors feel necessity of such information. Of the 27 respondents two have a same complain that the order is not executed in the timely manner and creates difficulties to search for alternative investment opportunities.

) Of the total respondents there are 39 respondents having complain against exchange center. The complain is that the center stock exchange does not inform to market as to the price sensitive information and financial statements. The respondents further complain that the company used to provide information and financial statement in previous year in a web site www.nepalstock.com and presently one cannot find the financial statements of listed company in the web site this has revealed their irresponsibility towards investors as per the investors' views. Further another five respondents complain that the company cannot make up to date information as to membership, listing of securities and transactions etc.

) The first thing that must be done to accelerate the present state of the Nepalese security market is to make conducive environment for the access of the securities services, institutional capacity and services not only in capital city are the must. Security services are bounded in the capital city only and this needs to be corrected

by expanding the services in outskirts too that propels all the people in the country to participate in the investment activities that may result into the more developed security market.

) Next thing investors actively concerned over are amendment and strict implementation of current rules and regulations in order to accelerate the current status of Nepalese security market. Still the next important and urgent action to be taken to develop security market is to make clear-cut arrangements for regulations concerning the involvement of Employees' Provident Fund, Citizens' Investment Trust, and Construction, extractive and IT sector and Mutual Fund in Security Market.

) Sufficient publicity as to the security market and its benefits to the investors and general public is also an important thing to upgrade the present state of Nepalese security market. But this is a least important action, as viewed by the respondents, in comparison to others mention above.

CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter attempts to summarize, give conclusive and suggestive end to the whole study. As essence to the study, the conclusion and suggestion would be of great help for the concerned parties. This chapter is divided into different parts namely summary, conclusion, recommendation, and suggestion, which are as follows:

5.1 Summary

This study is mainly related to identify the Nepalese investors' preferences and attitudes toward different kind of financial securities such as common stock, bond, government securities and preferred stock etc. This study is mainly exploratory for it attempts to explore the status of investors' attitude toward securities. The important inferences have been drawn on the basis of sample size of 112 respondents applying different tools and techniques of analyzing and presenting the data. Every constituents of the capital market may take advantage of this study for restructuring the operational and policies issues in respect to the capital market.

Analysis of attractiveness of industry sector shows that for Nepalese investors most attractive sector is banking sector, as the median value for this sector is highest of all. Finance sector is the next most attractive sector to banking sector for Nepalese investors. This finding supports the growing tendency of investment in this sector.

Analysis to identify the objective of holding particular security shows that out of the given kind of objectives 'sufficient return' is the kind of objective for which they attach most in comparison with others. The second most important objective for the investor is less risk, as the median value of this option is least of all the option except that of the first option. The analysis that has performed to find out reason for less or no use of debt or preferred stock shows that the reason to less or no use of debt can be attributed to the cause that debt or preferred stock does not provide wide variety in their kinds so investors are less inclined towards these securities. In this way the second thing investors agree upon is that these securities provide less return than it actually required for compensating the risk inherent in these security. The reason that these securities are illiquid and less marketable, investors tends to have negative attitude towards these securities (i.e. Debentures and preferred stocks). Of course there are no provisions for investors who do require adjustable return as per the market scenario. As a result they also agree that the securities in question provides stable return and this sometime seems unreliable as the market may create good opportunity to earn extra return if the same investment is made in other area. Due to this very feature of these securities Nepalese investors do not want to invest in. It is perhaps due to them being high risk and return investors. Among the various disadvantages investors are less vexed at the overburden of legal formalities, lack of professional practices and legal insecurity etc.

Out of the total respondents there are more of institutional investors (i.e. 33.04 percent) perform risk and return analysis while investing in securities. Like wise investors who don't perform risk and return are 31 as opposed to who perform are 62. Investors having no idea as to this are 19. The tendency of individual and institutional investors differs significantly

to perform risk and return analysis while investing in securities. On the other way the differences observed between the individual and institutional investors is statistically significant giving the proof that they are not same so far as the matter of investing in securities is concerned.

Out of the total respondents 87.5 percent set investment policy and remaining do not set investment policy. Like wise 68.75 of the total respondents analyze security before making investment decision remaining 31.25 percent do not analyze security. Here, out of the total respondents 16.07 percent revise portfolio but next 31.25 percent do not and still another 52.68 percent of respondents even don't know as to the revision of portfolio. The last step in investment process is portfolio performance evaluation. For this step too Nepalese investors seem alienated, as there are only 10.71 percent of respondents who evaluate performance of portfolio and other 47.32 percent do not evaluate the performance of portfolio, and balance don't know as to this.

Most of the respondents who purchase security in secondary market have the complain that there are no timely delivery to dividends, bonus share, and right share like wise there are also a significant number of respondents those complain that no timely delivery of as to the price, financial statements and other vital information. Out of the total respondents one respondent has complain about the general meeting that is not held in time.

The grievances of the investors who purchase share from primary market against Issuer Company also seems to be significant as there are 67 investors complaining against Issuer

Company in one or other area of functioning of Issuer Company. Other 7 have complained that company does not provide necessary documents for detail perusal. There are 27 respondents out of the total of 112 respondents having grievance against Broker Company that account for 24.11 in percentage. Of the total respondents there are 39 respondents having complain against exchange center. The complain is that the center stock exchange does not inform to market as to the price sensitive information and financial statements. Further another five respondents complain that the company cannot make up to date information as to membership, listing of securities and transactions etc.

Current condition of stock trader and market in Nepalese capital market seems lacking professionalism hence it needs to be professional in trading stock in the market, like wise security services are bounded in the capital city only and this needs to be corrected by expanding the services in outskirts too that propels all the people in the country to participate in the investment activities that may result into the more developed security market. Next thing investors actively concerned over are amendment and strict implementation of current rules and regulations in order to accelerate the current status of Nepalese security market.

Still the next important and urgent action to be taken to develop security market is to make clear-cut arrangements for regulations concerning the involvement of Employees Provident Fund, Citizens Investment Trust, Construction, Extractive and IT sector and Mutual Fund in security market.

5.2 Conclusion

On the basis of the whole study following conclusive end can be provided to this research:

Analysis of investors' preferences towards the financial securities paves the way to conclude that Nepalese investor's most preferred security is common stock. The most important characteristic that attracts investors to this security is that it allows investors to actively participate in company's earnings. Like wise they prefer this security more as compared to other security, for it being more marketable.

It is imperative to conclude that investors seem to be less concern over social status and to be more concern over sufficient return and less risk so far as the matter of investing in securities is concerned. The debt and/or preferred stock in Nepalese securities market do not provide wide variety in their kinds so investors are less inclined towards these securities. The reason that these securities are illiquid and less marketable, investors tends to have negative attitude towards these securities (i.e. Debentures and preferred stocks).

Company's overall performance and return pattern of the security under consideration are the factor those can be regarded as the most important factor determining their choice of security. Government bond is less risky and this attributes of the security attracts to invest in. Next to this, investors favors this security for it being advantageous to construct portfolio as it can be used to uplift the opportunity set thereby provides more wide risk and return space.

More of the institutional investors perform risk and return analysis while investing in securities. Most of the respondents do not construct portfolio deliberately either they do not know about it or they simply do not construct portfolio. Investors are less aware towards the general functioning of security market in the country. This result is so dismal as so few respondents are concern over the general information as to the security market and it's functioning.

Most of the respondents who purchase security in secondary market have the complain that there are no timely delivery to dividends, bonus share, and right share like wise there are also a significant number of respondents those complain that no timely delivery of as to the price, financial statements and other vital information. Complain against the Security Exchange Center is that the center does not inform to market as to the price sensitive information and financial statement of previous year in a web site www.nepalstock.com and presently one cannot find the financial statements of listed company in the web site this has revealed their irresponsibility towards investors as per the investor's views.

The first thing that must be done to accelerate the present state of the Nepalese security market is to make conducive environment for the access of the securities services, professionalism of the stock market and traders, institutional capacity and services not only in capital city but all over the country. Next thing investors actively concerned over are amendment and strict implementation of current rules and regulations in order to accelerate the current status of Nepalese security market.

Still the next important and urgent action to be taken to develop security market is to make clear-cut arrangements for regulations concerning the involvement of Employees' Provident Fund, Citizen's Investment Trust, Construction, Extractive and It sector and Mutual Fund in security market. Sufficient publicity as to the security market and its benefits to the investors and general public is also an important thing to upgrade the present state of Nepalese security market. But this is a least important action, as viewed by the respondents, in comparison to others mention above.

5.3 Recommendation

- J To issue common stock as source finance is relatively easy for Issuer Company since investors like to hold common stock as compare to other securities. However, debt market should be upgraded so that issue of debt capital would be easy, as any company with equity capital only cannot take advantages of leverage.
- J Debt and preferred stock are the kind of securities that are less preferred by Nepalese investors because of less variety. This demand for dynamic debt market with a good maturity mix of the debt securities. For this, policy making body and other related institution should pay their attention.
- J Investors prefer to invest in those securities whose overall company performance is outstanding. This suggests that development of security market is not only the matter of investor's awareness but also a thing of company's performances. This calls for the new initiatives from the part of Nepalese companies to enhance their deteriorating performance.

- J Investor seem to be less aware as to security market and its functioning, this calls for the initiation of the awareness program to make prospective investors fully aware and informed as to the security market.
- J Most of the investors in Nepal have one or other type of complaints against various types of institutions. These all the grievances should be handled promptly and reasonably otherwise the transparency, accountability and credibility of securities market will come to a difficult verge and the expense of which will be irrecoverable.
- J Current condition of stock trader and market seems lacking professionalism hence it needs to be professional in trading stock in the market, like wise security services are bounded in the capital city only and this needs to be corrected by expanding the services in outskirts to that propels all the people in the country to participate in the investment activities that may result into the more developed security market.
- J The Securities Ordinance 2006 has been enacted for the effective securities market regulation system. For the implementation of the ordinance, the necessary arrangement of legal provisions in line with international practices and the development of fair, dynamic and credible securities market is a challenging task. Company Ordinance, 2006 has provisioned trustee for the issuance of institutional debentures. However, in the absence of regulatory mechanism for the trustee another regulatory framework, there is a need for a separate Trust Act to promote joint venture investment, securities depository and other trustee work for the mobilization of financial resources from financial market. The act has not provided autonomy related employee and financial activities. It is necessary for the autonomy and capacity building of the board. It has to be immediately equipped with resources and manpower.

BIBLIOGRAPHY

Books:

- Cheney, John M. and Moses Edward A. (1995), "*Fundamentals of Investments*", Chicago: St. Paul's West Publishing Company.
- Fisher. E. Donald and Ronal J. Jordan (1996): "*Security Analysis and Portfolio Management*", Sixth Edition, New Delhi: Prentice Hall of India Pvt Ltd.
- Francis, J.C. (1992), "*Investment analysis and Management*", New Delhi: National Publishing Companys.
- Francis, Jack Clark (1986), "*Investment Analysis and Management*", New York: Harpes and Row publication Inc.
- Gupta S.P (1991), "*Statistical Methods*", New Delhi: Sultan Chand and Sons Publicaions.
- Henning, Charles N., William Pigott and Rober Haney Scott, (1975), "*Financial Markets and the Economy*", Enlewood Cliffs: New Jersey.
- Horne, James C. and Wachowicz, Jr. John M. (1996), "*Fundamentals of Financial Management*", New Delhi: Prentice-Hall of India Private Limited.
- Kean, S.M. (1983), "*Stock Market Efficiency: Theory, Evidence & Implication*", Delhi: Heritage Publisher.
- Lawerence, D.Schall and Healey, Charis W. (1991), "*Introduction to Financial Management*", Singapore: Mc. Graw-Hill Book, Inc.
- Levin, Richare and Rubin, David S. (1999), "*Statistics for Management*", New Delhi; Prentice Hall of India.
- Mayo, B. (2002), "*Stock Returns and Implications*", London: Macmillion company.
- Reilly, Frank K. (1986), "*Investments*", USA: The Dryden Press/CBS Publishing.

Sharpe William F., et.al. (2001), *“Investments”*, Delhi: Prentice Hall of India.

Shrestha Manohar Krishna and Bhandari Dipak B. (2005), *“Financial Markets and Institutions”*, Kathmandu: Asmita Books Publishers and Distributors.

Wolf, H.K. & Pant P.R., (2002) *“A handbook for Research Methodology and Thesis Writing”*, Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Journals and other Publications:

Agrawal, Jagdish (July 2000), *Nepal’s Capital Market: What it takes to improve*, **“Business Age”**, Kathmandu, New Business Age Publications Pvt. Ltd., Vol.2

Fama Eugene F., (1970), *“Efficient Capital Market: A Review of Theory and Empirical Works”*, **Journal of finance**. New York Heritage Publishers, Vol. 25, No. 5

HMG/N (1998), *“The Tenth Plan, Kathmandu”*: Kathmandu, National Planning Commission.

K.C Bijay (2004), *Development of Stock Market and Economic Growth in Nepal*, **SEBO Journal**, Kathmandu., Securities Board of Nepal, Vol.1,

Nepal Rastra Bank (2001), *“Economic Review”*, Kathmandu; Nepal Rastra Bank.

Nepal Stock Exchange, *“Annual Report”*, Kathmandu, Nepal Stock Exchange

Pradhan and Blampaki (2004), *Fundamentals of Stock Returns in Nepal*, **SEBO Journal**, Kathmandu. Securities Board of Nepal, Vol. 1

Pradhan, R.S (1993), *“Stock Market behavior in Small Capital Market: A case of Nepal”*, **Nepalese Management Review**, Kathmandu, C.D.M., T.U., Vol.9, No.1,

SEBO, *“Annual Report”*, Fiscal Year 2006/07

- Sharma, Bhaskar (June 2001), "*Nepal's Only Secondary Market in Shambles*", **Business Age**, Kathmandu, New Business Age Publications Pvt. Ltd. Vol.3, No.1
- Shrestha Manohar Krisna (2002), "*Capital Market in Nepal: Changing Dimension and strategies*", **The Nepalese Management Review**, CDM, Kathmandu, Vol.8, No.1
- Shrestha, M.K and Manandhar, K.D (1999), "*Bonus Share Issue Practice In Nepalese Corporate Firms*", **Management Dynamics**, Kathmandu, Shankar Dev Campus, TU, Vol. 9, No. 1
- Thapa Chandra (2002), "*Managing Banking Risk*", **Rising Nepal**, Kathmandu, Gorkhapatra Sansthan, Vol.2, No. 19,
- Tiwari, Gopal (1998), "Nepalese Propose Market and Its Efficiency", **The Rising Nepal**, Kathmandu, Gorkhapatra Sansthan, Vol.3, No.21

Dissertations:

- Adhikari, Nabaraj (1999), "*Corporate Dividend Practice in Nepal*", An Unpublished Masters Degree Thesis, Kathmandu, Central Department, T.U.
- Bhatta, Bharat P. (1997), "*Dynamic of Stock Market in Nepal*", An Unpublished Masters Degree Thesis, Kathmandu, Central Department, T.U.
- Chandika Oli (2007), "*Stock Market Behavior in Nepal*", An Unpublished Masters Degree Thesis , Kathmandu Central Department, T.U.
- Laxmi Pokharel (2000), "*Legal Provision to the Protection of Investors under the Nepalese Law and an Analytical and Critical Study*". An Unpublished Masters Degree Thesis, Kathmandu, Central Department, T.U.

Sudip Upadhyaya (2004), “*Investors’ Preference and Financial Instruments*”, An Unpublished Masters Degree Thesis, Kathmandu, Central Department, T.U.

Surya Chandra Shrestha (1999), “*Stock Price Behavior in Nepal*”; An Unpublished Masters Degree Thesis, Kathmandu, Central Department, T.U.

Tekendra Bhattraï (2000), “*Risk and Return Analysis of Listed Manufacturing Companies in Nepal*”, An Unpublished Masters Degree Thesis, Kathmandu, Central Department, T.U.

Websites:

www.investopedia.com 05/03/2009

www.nepalstock.com 13/03/2009

www.nrb.gov.np 21/03/2009

www.sebonp.com 08/04/2009

www.stockabout.com 17/04/2009

www.nepalsharemarket.com.np 05/03/2009, 21/03/2009, 13/04/2009, 05/06/2009

APPENDIEX -I
RESEARCH QUESTIONNAIRE

I hereby request you to fill up the questionnaire designed for proposed survey of the surveyor. The precious views and opinions from your side will be helpful for facilitating the research entitled ***“INVESTORS RATIONALITY IN CHOOSING A FINANCIAL INSTRUMENT IN NEPALESE CAPITAL MARKET”***. The views expressed by you here in the questionnaire will be used for the research purpose only and kept confidential.

I) For individual investor only :

Name (Optional) :

Address :

Qualification :

Occupation :

II) For institutional investors only :

Name (Optional) :

Address :

Qualification :

3. Which of the followings best matches with your investment purposes? Please rank in order of their importance to you.

- 1. Sufficient return..... ()
- 2. Less risk..... ()
- 3. Marketability..... ()
- 4. Social status..... ()
- 5. Other (please specify) ()

4. Following are the some of the features of common stock. Please rank in order of their following importance to you.

- 1. Power to exercise rights..... ()
- 2. Participation in management..... ()
- 3. Sense of ownership..... ()
- 4. Participation in earnings..... ()
- 5. Bulk transaction..... ()
- 6. Marketability..... ()
- 7. Others (please specify) ()

5. In Nepalese capital market, financial instruments except common stock have not been used frequently. How far do you agree/disagree with the following reasons of not using debt and preferred stock as frequently a common stock? Please make a tick mark as the appropriate number as per the following scheme:

1= strongly agree, 2= agree, 3= don't know, 4= disagree, 5= strongly disagree

S. No	Statements	1	2	3	4	5
1	No provision of handsome return that compensates the perceived risk of investors.					
2	These financial instruments provides only certain					

	return					
3	Overburden of legal formalities					
4	Due to the lack of professional practices.					
5	Lack of marketability and liquidity					
6	No legal protection on favor of investors					
7	Due to the lack of wide varieties in these kinds of securities					

6. Followings are some descriptions about different types of bonds. Which bond(s) do you prefer most? Please rank in order of their importance (If you prefer bond).

1. Bond that gets you participates in profit and loss.
2. Bond that adjusts promised interest rate according to the rate in the market.
3. Bond that is pledged against the firm's assets
4. Simple debt that pay regular interest.

7. Which of the following factors, in your opinion, is the most important factor to select securities to invest in? Please rank in order of their importance.

1. Earnings ()
2. Availability..... ()
3. Rumors..... ()
4. Company's overall performance..... ()
5. Others (please specify) ()

8. What may be the main attraction of government securities? Please rank in order of their importance.

1. Risk free/safe..... ()
2. Advantages for portfolio construction..... ()

- 3. High interest rate..... ()
- 4. Less legal formalities..... ()
- 5. Protection against mal practices..... ()
- 6. Others (Please specify) ()

9. When making investment decision, do you think, it is necessary to make risk and return analysis? Please make a tick mark in the box.

Yes 2. No 3. Don't know

10. Following are the general investment processes. Do you follow one or others process or processes please make a tick mark in the box.

	Yes	No	Don't know
1. Set investment policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Analyze security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Portfolio construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Portfolio revision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Portfolio Performance Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. While placing order of share through Broker Company, if you did not mention the time period of the order to remain outstanding. Which of the following legal provision is relevant in this regard?

- 1. The order will be assumed to remain outstanding for 15 days.
- 2. The order will be assumed to remain outstanding for 10 days
- 3. The order will be assumed to remain outstanding for 7 days.
- 4. The order will automatically be terminated.
- 5. The order is put aside to execute in the future.
- 6. Don't know.

12. What sort of information do you generally take after having filled the order specification? Please make a tick mark.

1. Certificate that describes you have submitted the order form to broker
2. Information as to the execution of order.
3. Financial aspects of the broker company.
4. Procedures of transaction of the securities.
5. Information about listed company.
6. Overall position of the Security market.

13. If you did not receive sales proceeds from the concerned broker company within which period do you report it to Stock exchange?

1. Within 7 or 8 transaction days.
2. Within 8 or 9 transaction days.
3. Within 11 days.
4. Within 23 days.
5. Don't know.

14. If your order is purchase order and you did not receive financial security within the given periods. Which of the following statement is true in this regard?

1. Such case should be reported to stock exchange within one month.
2. Such case should be reported to stock exchange within 8 days.
3. Such case should be kept secret.
4. Nothing one can do with such a case.
5. Don't know.

15. Are there any difficulties, in your opinion, to invest in financial security?

Please list them.....
.....
.....
.....

16. If yes, do you have any idea that can be done to decrease or eliminate the difficulties?

.....
.....
.....
.....

17. Following are some of the observations that can be done to develop security market in Nepal. Please rank in order of their importance.

1. The access of the securities services, professionalism of the stock market and traders, institutional capacity and services not only in capital city.
2. Making clear- cut arrangements for regulations concerning the involvement of Employee's Provident Fund, Citizen's Investment Trust, construction, extractive and IT sector and Mutual Fund in security market.
3. Sufficient publicity as to the security and security market.
4. Amendment and strict implementation of current rules and regulations.
5. Others (Please Specify).

18. Following are the subject matter of grievances against Issuer Company that issues security in the primary market. Please make a tick mark on the subject matter related to you.

1. Issuer Company does not provide the prospectus/security purchase application form.
2. Company wants to influence unduly through prospectus and other advertisements.

3. Company does not provide the article of association, memorandum of association and other related documents for detail perusal.
4. Company rejects to receive the share application form duly filled by the investor.
5. Irregularities while allocating the security to the investors.
6. Others (Please specify)

19. Make a tick mark on the grievances you have against Broker Company:

1. Unavailability of security order form or rejection of the order from the company.
2. No execution of the order given to the company.
3. Execution of order in the prices more or less than the price stipulated.
4. The company takes more commission/transfer fees than it is provided.
5. Wrong information as to the security and market.
6. Do not support to the new and lower level investors.
7. Other (please specify)

20. Following are the subject matter of grievances against Nepal Stock Exchange. Please make a tick mark on the subject matter related to you.

1. Stock exchange does not inform to market as to the price sensitive information and financial statements.
2. Stock exchange does not provide the necessary information of the sold/purchase share.
3. It does not provide information relating to the membership, listing of securities and transactions etc.
4. It does not have sufficient broker with compare to investor.
5. Other (please specify)

Give short description of the nature of the grievances (not more than 150 words):

.....
.....
.....

THANK YOU FOR YOUR KIND COOPERATION.

Appendix - 2

Calculation of Median Values (Table 4.1)

Type of security	Rank				
	1	2	3	4	5
Common stock	53	43	13	2	1
Preferred stock	5	19	20	40	28
Debentures/Bonds	12	25	16	50	9
Government Bonds	42	25	5	30	10

Median Value of Common Stock:

53, 43, 13, 2, 1

$n = 5$

Median = $(n+1)/2$ th item

= 3rd item

= 13

Other median values in this table are calculated on the same manner.

Appendix -3

Calculation of Chi Square Value (Table 4.2)

Ho: (Null Hypothesis): Investors like trading a Common Stock.

H1: (Alternative Hypothesis): Investors dislike trading a Common Stock

			Total
Like	45	47	92
Dislike	11	9	20
Total	56	56	112

We have,

$$\chi^2 = \sum (O - E)^2 / E$$

Where, $E = RT \times CT / N$

RT = Row Total

CT = Column Total

χ^2 = Value of Chi Square

O = Observed Frequency

E = Estimated Frequency

N = Grand Total

Calculation of χ^2

Observed Frequency (O)	Estimated Frequency (E)	(O - E)	(O - E) ² / E
45	46	-1	0.0217
47	46	1	0.0217
11	10	-1	0.1
9	10	1	0.1
			(O - E) ² / E = 0.243

χ^2 Calculated = 0.243

χ^2 Tabulated (2,2) 5 d.f. = 3.84

Calculation of Chi Square Value (Table 4.2)

Ho: (Null Hypothesis): Investors like trading a Preferred Stock.

H1: (Alternative Hypothesis): Investors dislike trading a Preferred Stock

			Total
Like	15	11	26
Dislike	37	49	86
Total	52	60	112

We have,

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

Where, $E = \frac{RT \times CT}{N}$

RT = Row Total

CT = Column Total

χ^2 = Value of Chi Square

O = Observed Frequency

E = Estimated Frequency

N = Grand Total

Calculation of χ^2

Observed Frequency (O)	Estimated Frequency (E)	(O - E)	(O - E) ² / E
15	12.07	2.93	0.711259
11	13.92	-2.92	0.612529
37	39.92	-2.92	0.213587
49	46.07	2.93	0.186345
			(O - E) ² / E = 1.727

χ^2 Calculated = 1.727

χ^2 Tabulated (2,2) 5 d.f. = 3.84

Calculation of Chi Square Value (Table 4.2)

Ho: (Null Hypothesis): Investors like trading a Debenture/Bond.

H1: (Alternative Hypothesis): Investors dislike trading a Debenture/Bond.

			Total
Like	43	36	79
Dislike	13	20	33
Total	56	56	112

We have,

$$\chi^2 = \sum (O - E)^2 / E$$

Where, E = RT X CT / N

RT = Row Total

CT = Column Total

χ^2 = Value of Chi Square

O = Observed Frequency

E = Estimated Frequency

N = Grand Total

Calculation of χ^2

Observed Frequency (O)	Estimated Frequency (E)	(O - E)	(O - E) ² / E
43	39.5	3.5	0.310127
36	39.5	-3.5	0.310127

13	16.5	-3.5	0.742424
20	16.5	3.5	0.742424
			$(O - E)^2 / E = 2.105$

χ^2 Calculated = 2.105

χ^2 Tabulated (2,2) 5 d.f. = 3.84

Calculation of Chi Square Value (Table 4.2)

Ho: (Null Hypothesis): Investors like trading Government Bonds.

H1: (Alternative Hypothesis): Investors dislike trading Government Bonds

			Total
Like	48	42	90
Dislike	8	14	22
Total	56	56	112

We have,

$$\chi^2 = \sum (O - E)^2 / E$$

Where, $E = RT \times CT / N$

RT = Row Total

CT = Column Total

χ^2 = Value of Chi Square

O = Observed Frequency

E = Estimated Frequency

N = Grand Total

Calculation of χ^2

Observed Frequency (O)	Estimated Frequency (E)	(O - E)	$(O - E)^2 / E$
48	45	3	0.2
42	45	-3	0.2
8	11	-3	0.818182
14	11	3	0.818182
			$(O - E)^2 / E = 2.036$

χ^2 Calculated = 2.036

2 Tabulated (2,2) 5 d.f. = 3.84

Appendix - 4

Calculation of Median Values (Table No. 4.3)

S.N	Features of common stock										
		1	2	3	4	5	6	7	8	9	10
1	Power to exercise rights	9	12	15	18	9	10	15	17	4	3
2	Participation in management	13	14	7	10	12	11	25	7	8	5
3	Sense of ownership	3	2	8	9	6	5	10	45	20	4
4	Participation in earnings	45	15	4	5	8	2	10	7	3	13
5	Bulk transaction	21	23	13	19	7	5	10	11	-	3
6	Marketability	21	25	11	13	15	17	1	2	6	1

Median Value Power to exercise rights

9, 12, 15, 18, 9, 10, 15, 17, 4, 3
n = 10

$$\begin{aligned} \text{Median} &= (n+1)/2^{\text{th}} \text{ item} \\ &= 5.5^{\text{th}} \text{ item} \\ &= 11 \end{aligned}$$

Other Median Values in this table are calculated in the same manner.

Appendix- 5

Calculation of Median Values (Table No. 4.4)

		1	2	3	4	5
1	Bank	58	25	7	5	6
2	Finance	17	23	21	19	18
3	Hotel	10	22	17	16	7
4	Manufacturing and Processing company	5	22	13	18	6

5	Insurance Company	6	9	20	21	18
6	Trading Company	7	5	30	15	12
7	Others	9	6	4	18	-

Median Value of Bank

58, 25, 7, 5, 6

n = 5

Median = $(n+1)/2$ th item

= 5.5th item

= 7

Other Median Values in this table are calculated in the same manner.

Appendix - 6

Calculation of Median Values (Table No. 4.5)

Investment Objectives				
	1	2	3	4
Sufficient return	51	44	12	5
Less risk	21	31	27	33
Marketability	35	12	36	29
Social status	5	25	37	45

Median Value of Sufficient Return

51, 44, 12, 5

n = 4

Median = $(n+1)/2$ th item

= 2.5th item

= 28

Appendix – 7

Calculation of Median Values (Table No. 4.6)

		1	2	3	4	5
1.	No provision of handsome return that compensates the perceived risk of investors.	44	19	14	18	17
2.	These financial instruments provide only certain return.	35	40	22	13	2
3.	Overburden of legal formalities	21	17	21	12	41
4.	Due to the lack of professional practices	33	15	14	32	18

5.	Lack of marketability and liquidity.	45	19	6	31	11
6.	No legal protection in favor of investors	6	18	20	24	44
7.	Due to the lack of wide varieties in these kinds of securities.	51	34	10	9	8

44, 19, 14, 18, 17

n = 5

Median = (n+1)/2th item

= 3rd item

= 14

Other Median Values in this research are done in the same manner.

Appendix - 8

Calculation of Chi Square Value (Table 4.7)

Ho: (Null Hypothesis): There is no significant difference between institutional investors and individual investors regarding preference of a bond.

H1: (Alternative Hypothesis): There is significant difference between institutional investors and individual investors regarding preference of a bond.

			Total
Income Bond	9	6	15
Floating Rate	16	7	23
Mortgage Bond	13	26	39
Simple Interest	18	17	35
Total	56	56	112

We have,

$$\chi^2 = \sum (O - E)^2 / E$$

Where, E = RT X CT / N

RT = Row Total

CT = Column Total

χ^2 = Value of Chi Square

O = Observed Frequency

E = Estimated Frequency

N = Grand Total

Calculation of χ^2

Observed Frequency (O)	Estimated Frequency (E)	(O - E)	(O - E) ² / E
9	7.5	1.5	0.8
16	11.5	4.5	2.76087
13	19.5	0.5	0.012821
18	17.5	0.5	0.014286
6	7.5	-1.5	0.8
7	11.5	-4.5	2.76087
26	19.5	6.5	3.166667
17	17.5	-0.5	0.014286
			(O - E) ² / E = 10.82

χ^2 Calculated = 10.82

χ^2 Tabulated (8,2) 3 d.f. = 7.82

Appendix - 9

Calculation of Median Values (Table No. 4.8)

Factors	Rank				
	1	2	3	4	5
Return pattern	22	65	15	6	4
Availability	12	30	34	21	15
Company's performance overall	77	16	12	2	5
Rumors	1	1	24	43	43

Median Value of Return Pattern

22, 65, 15, 6, 4

n = 5

Median = (n+1)/2th item

= 3rd item

= 15

Other median values in this table are calculated on the same manner.

Appendix - 10

Calculation of Median Values (Table No. 4.9)

Factors affecting choice of security	Rank				
	1	2	3	4	5
Risk Free	78	15	9	1	9
Advantage for construction	12	42	15	12	31
Protection against malpractices	8	20	27	33	24
Less legal formalities	1	16	37	15	43
Stable return	13	19	24	20	36

Median Value of Risk Free factor

78, 15, 9, 1, 9

n = 5

Median = (n+1)/2th item

= 3rd item

= 9

Other median values in this table are calculated on the same manner.

Appendix – 11

Calculation of Chi Square Value (Table 4.10)

Ho: (Null Hypothesis): There is no significant difference between individual and institutional investment in risk and return analysis.

H1 :(Alternative Hypothesis): There is significant difference between individual and institutional investment in risk and return analysis.

			Total
Yes	25	37	62
No	16	15	31
Don't Know	15	4	19
Total	56	56	112

We have,

$$\chi^2 = \sum (O - E)^2 / E$$

Where, E = RT X CT / N

RT = Row Total

CT = Column Total

χ^2 = Value of Chi Square

O = Observed Frequency

E = Estimated Frequency

N = Grand Total

Calculation of χ^2

Observed Frequency (O)	Estimated Frequency (E)	(O – E)	(O – E) ² / E
---------------------------	----------------------------	---------	--------------------------

25	31	36	1.16129032
37	31	36	1.16129032
16	15.5	0.25	0.01612903
15	15.5	0.25	0.01612903
15	9.5	30.25	3.18421053
4	9.5	30.25	3.18421053
			$(O - E)^2 / E = 7.71$

2 Calculated = 7.71

2 Tabulated (6,2) 5 d.f. = 9.49