INVESTORS PREFERENCE IN CHOICE OF FINANCIAL INSTRUMENTS IN NEPAL

Submitted By:

KAMAL POKHREL

SHANKER DEV CAMPUS

TU Regd. No: 7-1-205-34-2000

Roll No. 372/062

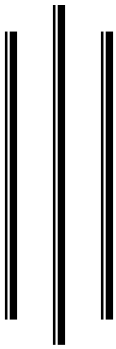
A Thesis

Submitted to:

Office of the Dean

Faculty of Management

Tribhuvan University



In partial fulfillment of the requirement for the degree of

Master of Business Studies (M.B.S)

Putalisadak, Kathmandu

October, 2009

RECOMMENDATION

This is to certify that the thesis

Submitted by:

KAMAL POKHREL

Entitled:

INVESTORS PREFERENCE IN CHOICE OF FINANCIAL INSTRUMENTS IN NEPAL

has been prepared and approved by this Department in the prescribed format of the Faculty of Management. This thesis is forwarded for examination.

……	……..…….	……..
Asso. Prof. Achyut Raj Bhattarai	**Bisheshwor Man Shrestha**	**Prof. Dr. Kamal Deep Dhakal**
(**Thesis Supervisor**)	(**Head, Research Department)**	**(Campus Chief)**

…….

Lecturer Shree Bhadra Neupane

(Thesis Supervisor)

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis

Submitted by

KAMAL POKHREL

Entitled:

INVESTORS PREFERENCE IN CHOICE OF FINANCIAL INSTRUMENTS IN NEPAL

And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for

Master Degree in Business Studies (M.B.S.)

Viva-Voce Committee

Head, Research Department	……
Member (Thesis Supervisor)	……
Member (Thesis Supervisor)	……
Member (External Expert)	……

DECLARATION

I hereby declare that the work reported in this thesis entitled **INVESTORS PREFERENCE IN CHOICE OF FINANCIAL INSTRUMENTS IN NEPAL** submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master's Degree in Business Studies (M.B.S.) under the supervision of Lecturer Shree Bhadra Neupane and Associate Professor Achyut Raj Bhattarai of Shankar Dev Campus Putalisadak, Kathmandu.

.....

Kamal Pokhrel
Researcher
Shanker Dev Campus
Roll NO:- 372/062

ACKNOWLEDGEMENT

This is such a mind-blowing opportunity as an M.B.S. student which has been provided by T.U. to me. As far as thesis in concerned, it really increases the knowledge of the student in the course of analysis in my respective work. It helps me to show my capacity as well as practical experience for future works.

I would not have accomplished this thesis without the help of several hands. I would like to express my thanks to my colleagues Mr. Tulsi Dahal, Mr. Sudip Subedi, Mrs. Sanchita Gorkhali and Mr. Krishna Prasad Acharya, Lecturer of Shanker Dev Campus for their guidance. I would also like to express my grateful gratitude to all those respondents for their help and support.

To prepare this thesis the regular inspiration has been provided by my supervisors Lecturer Shree Bhadra Neupane, Vice Campus Chief Shanker Dev Campus and Associate Professor Achyut Raj Bhattarai of Shanker Dev Campus who gave me the valuable time and suggestions for preparation of my thesis. I am grateful to the librarians of Shanker Dev Campus.

I would like to express my profound gratitude to my parents, family members and beloved friends too.

Kamal Pokhrel
Shanker Dev Campus

Date: ……..

Table of Contents

List of Table

List of Figure

ABBREVIATION

A/C	Account
BA	Banker's Acceptance
CDs	Certificate of Deposit
CDM	Central Department of Management
CIT	Citizen Investment Trust
F/Y	Fiscal Year
IPA	Index Perceived Agreement
IPO	Initial Public Offering
LTD	Limited
MBS	Master of Business Studies
MEC	Marginal Efficiency of Capital
MPS	Market Price per Share
NAV	Net Asset Value
NCM	NIDC Capital Market
NEPSE	Nepal Stock Exchange
NIDC	Nepal Industrial Development Corporation
NOS	Number
NRB	Nepal Rastra Bank
OTC	Over the Counter
REPO	Repurchase Agreement
SEBON	Security Board of Nepal
SEC	Security Exchange Centre
SN	Serial Number
T-Bills	Treasury Bills
TU	Tribhuvan University
US	United States of America
WTO	World Trade Organization
Vs	Versus

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Investment is a present sacrifice for the sake of future benefits. The present is certain, but future is uncertain, therefore investment always involves risk. Investments are made in various sectors to gain more in future. In order to invest in any sector we should analyzed how risky is that sector and how much return can we earned. The performance of investors determined investors invest their money when interest or dividend is safeguarded through return. Investors are presumed to have identical planning horizons and do have identical expectation regarding expected return.

In other words, investment is a commitment of money or other resources in the future. Investment involves risk because future is uncertain. To earn higher in future investors has to bare high risk. In simply language, investment is to earn positive return in future by investing a certain amount in present. We always think about positive earning in future, so to overcome it we have to invest in present. Investments are made in two assets; they are real assets and financial assets.

“Britannica Encyclopedia defines investment as a process of exchanging income during one period of time for an asset that is expected to produce earning in future periods. Thus consumption in the current period is foregone in order to obtain a greater return in the future.” *(Britannica Encyclopedia; 2003:213)*

Investment is the investor's decision to channalise the saving into a venture with the expectation of some extra return in the future. Investor sacrifices the present consumption for saving and invests with the desire to get larger sum in the expected future. Investor sacrifices the present certain for the future uncertain additional benefit.

“Investment should ensure two aspects; first, the money should be available back when it is needed; second, the invested money should grow because a rupee's real value today is greater than a rupee's value tomorrow in a world of inflation. Investment thus is simply concerned with the increment of the investor’s wealth.” *(Cheney and Moses; 1999:46).*

“The increased amount that one gets from the investment, as it return, is termed as profit. The profit is always characterized by the uncertainty and this uncertainty of return is termed as risk. Risk prevails not only in profit but also for the return of principal. Return and risk are, therefore, the two basic components of the investments. It is said if there is no risk there is no profit, so return is taken as the compensation of that uncertainty or risk.” *(Bodie; 1993:41)*

Investment means the sacrifice of current prices for future prices. In other word, investors want to get more money in future than at present from investment. It is made only expected return and is also needed to the security market for the development of economic strength of nation. An investment is a commitment of funds made in the expectation of some positive rate of return. If the return is property undertaken, the return will be commensurate with the risk the investor assumes.

Capital market is a major component of financial market. It plays significant role of bridging of the deficit money and surplus money. In other word, capital market is an institution where stock and other securities are brought and sold continuously. Capital market makes much easier to investor for investment. So the stock market provides the best investment opportunity to the investors. The stock market is a place where share of listed companies are traded or transfer from one hand to another at a fair price through the organized brokerage system.

The major role of capital market is to provide buying and selling opportunities of financial assets at competitive price to the investors. So it is a medium through where saving and scarce resources are mobilized into productive sector that ultimately helps in industrialization of the nation. Development and expansion of capital market is essential for rapid economic growth of the country. It helps economic development by mobilizing long-term capital needed for productive sector.

Invest should ensure two aspects; first the money should be available back when it is needed; second the invested money should grow because a rupee's real value today is greater than a rupee's value tomorrow in a world of inflation. Investment thus is simply concerned with the increment of the investor's wealth. Investors are those people who

invest their saving in securities to assume risk for expectation of future return. The investment in security market in Nepal can be made through different IPO's (initial public offering) of corporate bodies and government bodies while there is only an organized security exchange, Nepal Stock Exchange (NEPSE) for making their securities market, an individual investor are also playing crucial role in security market.

Market has become just like a city due to globalization, every short of change occurring in one sector of the world affects the other with the result of dynamics of global changes and development. Securities market is rapidly responding. In context of Nepal, we can listen that the share price of certain groups has been increased or decreased; this is also considered as a part of investment.

Generally investors are of two types:

- Individual Investor
- Corporate Investor.

Individual investors are familiar to invest their money in primary market as well as secondary market. Corporate investors are also known as institutional investors; they collect the fund from various sectors and invest in securities or in capital market.

Investor has choice over the selection of financial instruments; they can select any of the alternatives on his or her own direction. Investor's decision is always guided by his or her own preference over the investment instrument. In context of Nepal financial instrument consist of common stock, preferred stock, debenture etc. Each and every instrument has its own features. Why the investors choose the particular instrument for investment? For the propose of above maintained facts it is necessary to know about the financial market and instrument. There are various factors which affect the decision of investors, whether to invest or not. Those factors includes advertisement of the company, financial position of the company, rules and regulation of the government, market condition, company's goodwill and personal factor of investor.

1.1.1 Financial Market and Instrument of Nepal.

The history of capital market in the Nepal was started from the rule of Rana Prime Minister Juddha Shamsher. The first council was established named as 'Industrial Council'. Further council drafted Company Act and Nepal Bank Act for the first time in 1936. Biratnagar Jute Mills Ltd was established in 1937, which era is concerned as industrial revolution era of Nepal. In the same year Nepal Bank ltd also issued the shares for its establishment. Slowly other various industries and factories were established along with it various act and laws are introduced.

In 1951 the 'Company Act 1951' was introduced and first issued of government bond in 1964 was other important development relating to capital markets. Security exchange centre also established in 1976, which was the first and most important attempt by the government. In a same way SEBO was established on 26th May 1993. The responsibility of SEBO was to list the company and show their financial performance and transaction, such as share price of the company etc. After eighteen years of incorporation, Nepal Government Nepal converted Security Exchange Centre into Nepal Stock Exchange (NEPSE) on 16th May, 1993, under a programme initiated to develop a competitive and efficient security market. Thus, NEPSE has the basic objective to impart free marginality and liquidity to government bonds and corporate securities by facilitating transaction in the trading floor through market intermediaries such as brokers and market makers. After the conversion of SEC into NEPSE, 25 brokers and 5 market makers were appointed. It started 'open cry out system' of trading through broker and market maker on 30th January 1994. Table No. 1.1 shows the listed companies by the end of the year 2005/06.

Table 1.1

Listed Companies **(***Source:Nepalstock.com)*

S.N.	Sector	No. of listed companies	Percentage
1.	Commercial Banks	21	13.46
2.	Development Banks	28	17.95
3.	Finance Companies	60	38.46
4.	Insurance Companies	16	10.26
5.	Hotel	4	2.56
6.	Manufacturing and processing co.	17	10.90
7.	Trading Company	4	2.56
8.	Other company	6	3.85
Total		156	100

Currently there are 135 listed companies in the security market of Nepal. Till now, the companies like bank, finance, insurance, hotels, manufacturing, trade etc have entered into security market for their capital but the companies like construction, information technology etc have not entered in security market yet. The commercial banking industry has historical performance very well in the capital markets, which infused a lot of investor interest in the market during the early stage of its development.

Public issues different instruments like ordinary shares, preference shares, rights shares and debenture were used to raise the capital. Table 1.2 shows the types of instruments and total amounts issued in the period of fiscal year 1993/94 to 2007/08.

Table 1.2

Instrument of Public Issue

S.N.	Instruments	Rs. in Million	Percentage
1.	Ordinary shares	3760.29	37.56
2.	Right share	3697.91	36.93
3.	Common share*	7458.20	74.49
4.	Preference share	236.10	2.36
5.	Debenture	1903.18	19.01
6.	Mutual fund / Unit scheme	414.64	4.14
Total		10012.12	100

** Includes ordinary shares and right shares.*
Source: SEBO annual report 1998 to 2007/08

In the history of last twelve years, common stock was the mostly used instrument in the security market to raise the capital. 74.49% of total issue was observed by common stock.

If we see the government securities of Nepal, there are Treasury bills, and Bonds of several types like Development Bonds, National saving Bond, Special Bonds and IMF Promissory Notes. The following Table 3.1 shows the total amount of Bonds and Bills issued, in the period of last ten years (from 1998/99 to 2007/08).

Table 1.3

Government Bonds and Treasury Bills.

S.N.	Instruments	Rs. in Million	Percentage
1.	Treasury Bills	330076.10	49.92
2.	Development Bonds	104971.93	15.88
3.	National Saving Bonds	95239.00	14.41
4.	Public Saving Card	5679.23	0.86
5.	Special Bonds*	125116.50	18.93
Total		661082.76	100

** Includes IMF Promissory Notes.*
Source: NRB Quarterly economic Bulletins and Economic report 2007/08

In the period of ten years from 1998/99 to 2007/08, in total government issued the securities amounting RS.661082.76 millions. Among them 49.92% was covered by the Treasury bills and remaining 50.08% was covered by different types of bonds. Government bonds are generally owned by NRB, Commercial banks, financial institutions, provident fund corporations, government business enterprises, private business enterprises, individual and dome non profit organization.

1.2 Focus of the Study:

The main focus of the study is to explore the investor's preference in choice of financial instrument in the Nepalese securities market, how and why investor selects the best financial instrument or securities. There are various alternatives of investment to the investor, so one of the alternatives which alternative is the best to analyzed, thus the study helps to the investors in an efficient and effective manner.

Security market effects the whole economic environment of the nation. It is one of the prominent sources for the economic development. Existing and potential investors are the biggest asset of the nation. So this study focuses to explore the investor's preference in choice of financial instrument in Nepalese securities market, how and why investor selects the best financial instrument or securities in the focal point under.

There are lot of investment alternatives to the investors in the field of investment, some want to invest in real assets, some on different ventures, some start their own business or

company and so on. This study mainly focuses on the investment in financial instruments, which are available in the context of Nepal only. We have already mentioned above in table about the instrument available in Nepal. This study basically concerned with the investor's preference toward different type of financial instruments and their attitude toward various aspects of investments.

1.3 Statement of the Problem:

It is true that after the establishment of Nepal Stock Exchange, the capital market has grown rapidly with in a very short period of time. However, the attitudes, thoughts and knowledge of most of the investors and firms are not changed. Most of the investors are least familiar with financial activities; they do not have good idea of risk and return. Awareness regarding the financial activities, investment policy, making portfolio etc is very little. Without having sufficient theoretical knowledge or risk associated with investment on stock, which is very wrong and bad trend.

Nepal's capital market is very lean in providing investment alternatives to the investors. Among possible various investment alternatives like common stocks, government bonds, corporate bonds, preference share, right, option, warrants, convertible etc, very few are available for Nepali investors. It can be said the present capital market is almost monopolized by the equity shares. For those investors who are risk seeker and want to invest in the variable income securities the present capital market offers sufficient but for those who are risk averse and want to invest in fixed income securities, there are very few avenues available (Bhattrai; 2003:148)

Nepalese security market is in the growth stages. The government is still unable to create favorable and proper investment environment to develop the security market; as well as to encourage investors to invest in this field. Nepalese investors lack proper knowledge and confident because of which they are loosing their hard earnings. Problems are identified into two topics i.e. a) Instrument related & b) Investor related.

The problems of under-subscriptions and failure of issues arise due to the mismatch between the preferences of investors and issues made by the companies to raise the capital. Sometimes the issuer also face the condition of huge over-subscription, it happens due to the over expectations and over estimations made by investors toward the

issuer. There should be a match between preference and instruments, which can only lead to the better performance of the financial markets of the country. Capital market shows that there is the dominance of common stock in the capital market as the prominent financial instruments. In comparison to this other instruments are not growing significantly. Problems of Nepalese investors are they take decision on the basis of noise, rumors and whim. They do not do have any type of technical analysis. Proper information is not gained by the investor. The lack of professional analysts and consultant, ineffective flow of information are also one cause of this problem.

The problems of Nepalese investors are identified in following ways:

Instrument related problem:

Analyzing past data of capital market, it seems ordinary shares are the only instruments through which company can go to public for capital. The use of common stocks alone covers 76.77% of total issues. It reveals, no body has even thought about other types of instruments. No one had made researches to see what the investors really think about other instruments; are the other instruments as well as preferences of investors really ineffective to be ignored totally then why our market is unable to welcome other securities. It seems, market of derivative securities like option, convertible, warrants etc, has not been developed neither their exit any provision in the present law about selling and buying these securities.

In the Nepalese capital market instruments are purely limited to common shares and preferred shares, which are traded on the stock exchange. The shares of commercial banks in Nepal are heavily traded in the stock market and, therefore, these shares play vital role in the determination of stock exchange indicator. Why only commercial bank's shares stand as the most preferred instrument, why securities of other sectors are not preferred to this extent by the investor; this is also one of problem which necessitates the study.

Investor related problem:

Investors are not well informed and aware about the different financial instrument. Much of them have never thought in depth while applying for the shares. Some have become

investor without knowing anything, just in a hunch, or by accident. In some cases a head of the family applies for the shares allotted. On the other hand participation of individuals in government securities is also not as expected. Institutional investors also seem very passive in Nepalese financial market. The intrinsic or theoretical price of the stock today can be ascertained by analyzing publicly disclosed financial statements, however, investors, in most cases, do not analyze published financial statements before they make the investment in shares of a given company. *(Paudel; 2002:57)*

This study is focused on the following questions:

- Which financial instrument Nepalese investors prefer most?
- Which investment alternative is the most preferred alternative?
- How are the primary issues or IPO's in Nepal?
- Which sector the investors prefer most to invest?
- How is the attitude and awareness toward risk?
- How is the awareness and knowledge of financial derivatives and market among investors?

1.4 Objective of the study:

Objective is the ultimate goal of research. The main objective of the study is to analyze the financial instruments used in Nepal and to find out the investor's preference. The main objectives are as follows:

- To explore widely used financial instrument of Nepal.
- To examine the primary issues in Nepalese financial market.
- To analyze the preferences of the different investors of Nepal and to know what type of instruments the investor prefer the most.

1.5 Rationale of the study:

Very few studies were found attempted in this area, in Nepal, studies like Subedi (2003), Upadhaya (2004) and Maharjan (2004) have tried to explore investor's awareness however; almost none of the studies have attempted to explore the investor expectation, psychology and their preferences. This study has highlighted the several kinds of

financial instrument that are widely used in Nepalese business market. Moreover this type of research is very rare. So this is significant last but not least. The issues and problems, prevailing in Nepalese context, discussed in prior segments justify the necessity of this study. This study had addressed those problems and issues.

This research can surely be an effective guideline to the new investor, who wants to invest in securities. On the other hand this study will help the prospective investors, financial intermediaries, investment bankers, NEPSE, SEBO and other researcher in future, giving them the information about the Nepalese investors' preference and financial instrument of Nepal. I will also provide literature to researcher who wants to carry out further research in this field.

1.6 Limitations of the study:

Given below are the limitations of the study: -

- This study is based on primary and secondary data, methods of collecting data are questionnaire, interview, journals published by financial sectors etc.
- Study deals more with capital market instrument then money market instrument.
- Study focused on individual investors rather than institutional investors due to the limitation of time.
- The scope of study is limited with in the framework of financial instruments of Nepalese market.
- Lack of current information, time and financial resources might be the limiting factor.

1.7 Organization of the study:

Being a student of the management, overall efforts will concentrate in managing the things in a way so that it looks well organized and systematic. To meet the so called management, the thesis is tentatively organized in the following five chapters:

CHAPTER -I

Introduction:

This chapter deals with the subject matters of the study, consisting background of the study, statement of problem, objectives, rationale of the study and limitation of study along with focus of the study are presented in this very segment.

CHAPTER – II

Review of literature:

This chapter deals with review of literature. It includes conceptual framework along with review of major books, journals, articles, periodicals, reports other publication, research work etc. This chapter broadly consists of two segments- theoretical/conceptual review and review of related studies. Theoretical reviews are made for the conceptual clarity and to present the prevailing scenarios. Several, related articles are also review to present the glimpse of nature of Nepalese financial market and Nepalese investors.

CHAPTER – III

Research Methodology:

This unit present with research methodology. It is used to evaluate dividend practice of joint venture banks in Nepal. In consist of research design, sources of data, population and financial tools.

CHAPTER – IV

Data presentation, Analysis and interpretation:

This section is the main body of the research work. This section deals with presentation and interpretation of data using financial tools. It also includes the major findings.

CHAPTER – V

Summery, conclusion and recommendation:

This chapter deals with major findings form the research work, summary, conclusion and recommendation of the study. It states suggestion of the study. The appendices and bibliography are incorporated in the end of the study.

CHAPTER II

LITERATURE REVIEW

This chapter deals with the review of relating to "Investors preference in choice of financial instrument in Nepal" in more details and descriptive manner. For this purpose, various books, articles from journals and related studies have been reviewed. This chapter broadly consists of two segments-theoretical/conceptual review and review of related studies. Effort has been made to cover various aspects of the study so that the adequate feedback could be obtained to broaden the base and input to the study.

2.1 Conceptual Review

2.1.1 Investment

Investment is a present sacrifice for the sake of future benefits. The present is certain, but future is uncertain, therefore investment always involves risk. Investments are made in various sectors to gain more in future. Buying common stock, bonds, depositing money in to bank accounts, buying a piece of land, gold or valuable things are the examples of investment. In order to invest in any sector we should analyze how risky is that sector and how much return can we earn. The performance of investors determines investors invest their money when interest or dividend is ensured. Investors are presumed to have identical planning horizons and do have identical expectation regarding expected return.

We can make investment in real investment or financial investment. Investment in tangible assets like land and machinery is real investment. It has productive capacity. Investment in financial assets like common stock, bond and debenture is financial investment. It does not directly process productive capacity. Financial assets may also be viewed as claims to the income generated by real assets. In this sense the values of financial assets are derived from the values of the underlying real assets of the firms. Investment in real asset is also important. Investment may be defined as the purchase by an individual or institutional of financial or real assets that produce a return proportional to the risk assumed over some future investment period.

Investment is distinguished from speculation based on time horizon and risk return characteristics of investment. The true investor is interested usually in long term investment with good rate of return, earned on a consistent basis.

The following elements of investment are integral:

- Return: Investors may buy and sell financial assets in order to earn return on them. The return better known as reward from investment includes both current income and capital gains or losses that arise by the increase of decrease of the security price.
- Risk: Risk is inseparable from return. Risk is quantity in term of statistical terms. The investment process must be considered in terms of both aspects risk and return.
- Time: Time offers several different courses of action. Time period depends on the attitude of the investor who follows a "buy and hold" policy. As time moves on, analysts believe that conditions change and investors reevaluate expected return and risk for each investment.

2.1.1.1 Interest Rate and Investment

A higher interest rate lowers investment. There is negative relationship between interest rate and investment. Why does this negative relationship exist in the case of investment? When business decides to invest, they frequently borrow the funds to buy the new machines and equipment or to build a new factory. The higher the interest rate the more money must to pay barrow. Thus higher interest rate discourages borrowing. Less borrowing means fewer purchase of new equipment. Investment projects that would be undertaken at lower interest rate are postponed or cancelled when interest rate rise. However, when interest fall firms pay less to borrow. Thus, firms are willing to purchase more equipment or build factories that they would not build at higher interest rates. The negative relationship between the investment as the share of GDP and the interest rate is observed in the economy for many years and it makes sense. A higher interest rate discourages investment and lower interest rate discourages investment and lower interest rate encourages investment.

Factors other than the Interest Rates Determining Investment

There are various factors other than the rate of interest which affect the inducement to invest. They are as follows:

a. Level of Income: If the level of income rise in the economy, the demand for goods will rise which will in turn, raise the inducement to invest.
b. Consumer demand: The present and future demand for products greatly influences the level of investment in the economy. If the consumer demand is increasing rapidly, more investment will be made. Investment will be low if the demand is low and vice versa.
c. Existing stock of capital goods: If the existing stock of capital goods is large and it is working below its capacity, it would discourage potential investors.
d. Business expectation: If the business men are optimistic with regard to future returns from capital assts, they will invest more and if they are in depressed mood the rate of present investment will fall.
e. New product: The nature of the new products in terms of sales and cost may also influence the MEC and hence investment. If sale of new product is high and the expected revenue more than the cost, the MEC will be high which will encourage investment.
f. Liquid assets: The amount of liquid assets with investors also influences the inducement to invest. If they pose large liquid assets, the inducement to invest is high. This is especially the case with those firms which keep large reserve funds and undistributed profits. On the contrary, the inducement to invest is low for investors having little as liquid assets.
g. Political climate: Political condition also affects the investment. If there is political instability in the inducement to invest, may affect adversely. In the struggle for power, the rival parties may create unrest thought hostile trade union activities thus creating uncertainty in business. On the other hand a stable government creates confidence in the business community where by the inducement to invest raised. Similarly the danger of a revolution of a war with some other country has an adverse effect on the inducement to invest, where as peace and prosperity tends to raise it.

h. Growth of population: A rapidly growing population means growing market for all types of goods in the economy. To meet the demand of increasing population in all brackets, investment will increase. On the other hand a declining population results in a shrinking market for goods there by lower.
i. State policy: The economic policies of the government have an important influence on the inducement to invest. If the state leaves heavy progressive taxes on corporation the inducement to invest is low, and vice versa. Heavy indirect taxation tends to raise the price of the commodities and adversely affect the demand there by lowering the inducement to invest. If government follows the policy of nationalization of industries, the private enterprises would be discouraged to invest. On the other hand, if the state encourages the private sectors by providing credit, power and other facilities, inducement to invest would be high.
j. Inventions and Innovations: "Inventions and innovations tend to raise the investment. The invention and technological improvements lead to more efficient method of production that reduces costs, the marginal efficiency of new capital assets will rise. Higher MEC will induce firms to make large investments. The absence of new technology will mean low inducement to investment. An innovation also includes the opening it new arrears. This requires the development of means of transport the construction etc leading to new opportunities. This inducement to invest raise." (*Jhingan; 1984:187*)

2.1.1.2 Investment Process

The investment process describes how an investor should go about making decision with regard to what marketable securities to invest in how extensive the investment should be and when the investment should be made.

A decision of an investment process deals with:
How to make an investment process decision?
What marketable securities to invest in?
When to invest?

The investment process includes on analysis of the following five steps:

- Set investment policy
- Perform security analysis
- Construct a portfolio
- Revise the portfolio
- Evaluate the performance of the portfolio

Set investment policy

The initial step in setting an investment policy involves determining the investment objectives and the amount of one's invest able wealth. Investment is always related with risks and returns. Making money alone cannot be an appropriate objective. It is appropriate to state that the objective is to make a lot of money by recognizing the possible losses. Therefore, investment objectives should be stated in terms of both risks and returns. Setting a clear investment policy also involve the identification of the potential categories of financial assets for consideration in the ultimate portfolio. The identification of assets depends upon many things, such as investment objectives; invest able wealth, tax consideration etc.

Perform security analysis

The second stage of an investment process involves the analysis of securities, which are identified in the previous state of the process. The main purpose of analyzing securities is to find out the price securities. Many approaches can be used to analyze the securities. These approaches, in a broad sense can be classified into two types. One is technical analysis and the other is fundamental analysis.

Technical Analysis: Technical analysis of the security prices involves the study of market price in an attempt to predict the future price movement. This analysis, first, examines the past trends in the price and compares them with the recently emerging trends. This matching of emerging trends or patterns with the past ones is done in the belief that these trends or patterns repeat themselves. By identifying the emerging trends, the analyst hopes to predict accurately the future price movements.

Fundamental Analysis**:** Fundamental analysis, the second approach to security analysis, tries to identify the real or true value of financial assets. The real value of any kind of financial assets is the present value of the future cash flow given by the assets or expected by the holder. The fundamental analyst attempts to forecast the timing and size of there cash flows, and then converts them into their equivalent present value by using an appropriate discount rate. Once the real value is calculated, it is, thereby, compared with the current market price per share to identify whether the security is under priced or over priced.

Construct of Portfolio

Portfolio means a collection of securities. Investing in portfolio rather than in single security reduces risk. Therefore, portfolio construction is an important step in investment process. Portfolio construction involves selecting specific securities in which to invest and how much to invest in each security. Portfolio construction is a difficult task; hence, it requires knowledge of the different types of securities. Investor can use active portfolio strategy or passive portfolio strategy. An active portfolio strategy is a process of security management that involves buying and selling securities with the objectives of earning high positive returns. A passive portfolio strategy is a process of buying and holding a well diversified portfolio. It is concerned with the proportion of stocks and bonds. The appropriate 'stock-investor' mix depends mainly on the risk tolerance and investment horizon of the investor. The investor peruses an active stance with respect to security selectivity, timing and diversification needs to be addressed. These are sill not yet developed in Nepalese capital market.

Portfolio Revision

The fourth step in an investment process is portfolio revision; it concerns the periodic repetition of the previous three steps. That is over time the investor may change his/her investment objectives which, in turn, may cause the currently hold portfolio to be less than optimal. Perhaps the investor should form a new portfolio by selling certain others that are not currently held. Another motivation for revising a given portfolio is that

overtime the prices of securities change. Meaning that some securities that initially were not attractive may become attractive and others that were attractive at one time may no longer be so. Thus the investor may want to add the former to his or her portfolio while simultaneously deleting the letter. Such a decision will depend among other things, the size of transaction cost incurred in making these changes and the magnitude of the perceived improvement in the investment outlook for the revised portfolio.

Evaluate the Performance of the Portfolio

Investor should evaluate the portfolio performance periodically. It involves determining periodically how the portfolio is performing in terms of the return and risk. Thus, the important dimensions of portfolio performance evaluation are rate of return and risk. Performance evaluation is an integral part of the investment process. Evaluating and control mechanism can make this process more effective. “In evaluating performance of the portfolio is superior or inferior and second decide whether the performance portfolio is because of chance or talent.” (*Shrestha, Poudel and Bhandar; 2003:38*)

2.1.1.3. Investment Objectives and Preferences of Investors

People invest for one or more of four general reasons:

i) To increase income
ii) To have funds available during retirement years
iii) To achieve specific financial goals and
iv) To gain a feeling of financial security.

People report these kinds of reasons for investing

- I have too much money just sitting in the bank
- I want to get rich quickly
- I want to get rich slowly
- I want to buy a Mercedes-Benz automobile
- I want to retire with a secure income
- My parents have to depend on me financially after their retirement
- My children should not have to support me in my old age and so on.

Ability had to do with knowing alternative investments finding investment fund and making intelligent investment decisions. And 'discipline' describes the courage to act responsibly in financial matters.

More recently, the monetarist Milton Friedman proposed his portfolio theory as to why people hold different financial assets. This suggests that people will satisfy their cash demands before considering any other assets. They will then fulfill their need for highly liquid account, then less liquid but potentially higher return assets. While making savings and investments, people are driven by various stimuli. These vary according to personnel needs and preferences, as well as factors such as attitude to risk, liquidity requirements, life cycle hypothesis etc.

Investors, as buyers of financial product, expect to obtain three characteristics from the financial instruments. They are the expected return, security and liquidity. The principal objective is making investments is to earn a return that compensates investors for the risk of the investment. To be more specific, the investment objectives are related to:

a) Safety
b) Growth of principal
c) Regular return
d) Liquidity

2.1.2. Financial Markets and Instruments

Financial instruments are traded in the financial market. Investors can buy or sell all securities immediately at a price that varies little from the financial markets and facilities 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. It plays a significant role in bridging the gap between the deficit and surplus unit of society. The common stock, preferred stock, warrant, convertible and government securities are mainly used in terms of securities.

The major purpose of financial markets is to transfer funds from lenders to borrowers. They are the intermediary link in facilitating the flow of funds from savers to investors. By providing an institutional mechanism for mobilizing domestic savings and efficiently channeling them into productive investments, they lower the cost of capital to investors and accelerate economic growth of the country.

Participants in the financial market economy distinguish between the "capital market" and "money market." Former referring to borrowing and lending for long term investment purposes, and the latter term generally referring to borrowing and lending for periods of a year or less. In sense, money market is to invest in short term funds where as capital market in long term.

2.1.2.1. Money Market Instruments

Instruments that are traded in the money market have the characteristics like:

- They are all debt obligation; they have maturities ranging from one day to a full year.
- They exhibit typically a high degree of safety of principal (they are subject to negligible interest rate risk and issued by generally high credit standing borrowers like: central bank) and
- They have high degree of liquidity.

Some popular instruments of money market are:

a) Treasury bill
b) Commercial paper
c) Certificates of deposit
d) Banker's acceptance
e) Repurchase agreements
f) Short- term Municipal securities
g) Other instruments

a. Treasury Bills or T-bills

T-bills have very short maturities with a maximum of one year. It is government securities. These securities are bought at a discount from its promised payment in maturity period. T-bills have no coupon or stated interest. The interest on the investment is represented by the different between the promised payment and purchase price. The size of discount is determined in an auction, which will depend on the term of the bill and the prevailing market conditions.

The bills go to the bidders offering the highest price, thereby resulting in the lowest implied interest cost to the treasury. Because of the low risk and short maturity of these instruments, T-bills are attractive investments for many financial market participants' individual corporations' state and local government and money market mutual funds having large holdings. To individual and commercial investors, T-bills have the added attraction of being exempt from state and local taxes.

In Nepal, T-bills are issued by with a maturity period of 364 days, 182 days, 91 days and 28 days. Investors by T-bills for a price less than their minimum value of Rs.25000, and when they mature, the government pays the face value to the investors. If an investor bought 91 days T-bill at Rs.24,800 and held it until it maturity investor's interest will be Rs.200. New issues of Treasury bills are sold at an auction. The auctions are organized by Nepal Rastra Bank. The amount, maturity and face values of are new issue are announced in the every issue. There is weekly (Every Monday) action of T-bills.

b. Commercial Paper

Commercial paper is an emerging source of financing working capital requirement of corporate enterprise. It is a short-term debt obligation (money market instrument) and is issued by a private sector or government sponsored financial and non-financial companies. It consists of a fixed maturity period and is usually issued on discount. The paper has a life time of one year or less and the maturity is dictated by regulations. Generally, the terms of the commercial paper are not negotiable but issuer can pre-pay the amount if necessary. Commercial paper is usually unsecured, only highly reputed and

credit- worthy companies is able to take advantage of this source of fund. The commercial paper can be sold directly by the issuing company or through commercial paper dealers. “Investors in commercial paper earn competitive market-determined yield in notes maturity and amounts can be tailored to their specific needs.” (*Hahn; 1998:275*).

So far no Nepalese companies have issued commercial paper the credibility of companies in Nepal doesn't exist as per expectations of investing public so as yet market for commercial securities has not developed to the required extent.

c. Certificates of Deposit (CD)

A certificate of deposit is a document evidencing a time deposit place with a depository institution. The certificates states:

- the amount of the deposit
- the date on which it matures
- the interest rate and
- the method under which the interest is calculated

“A CD can be legally negotiable or non-negotiable, depending on certain legal specifications of the CD. Negotiable CDs can be sold by depositors to other parties who can in turn resell them.” (*Walter; 1998: 457*).

d. Banker's Acceptance (BA)

A BA was invested to suit the needs of a party requiring temporary finance to facilitate the trading of specific goods. The party needing finance would approach investors for this temporary finance. The investors or lender would then lend a certain amount to the borrower in exchange for a document stating that the debt would be paid back on a certain date in the short-term future. The redemption of the loan would have to be guaranteed by a bank, called the acceptance by the bank making the arrangement. Thus the name is "bankers' acceptance.

Importers to secure trade credit from exporters use it. The accepting bank guarantees payment by the importer. In general, an acceptance is a promise to pay. The promise is

made by the person or entity that will actually make the payment- the promissory-to the person or entity who will receive the payment-the payee or beneficiary. The promise to pay document is called a draft. Payment of the draft will be made on a specified future date, so the draft is called a time draft. To seal the promise, the promissory sign the draft and stamps or writes the word "Accepted" above his signature and adds the date on which he will pay the amount written on the draft. The draft had now been formally accepted by the promissory, and the commitment to pay the beneficiary on the due date has become a legal obligation. If the acceptor is a bank, the acceptance is called a Banker's Acceptance. A bank may accept a draft on behalf of either one of its customer or a note holder (payee). In either case, the promissory then becomes obligated to pay the bank the amount financed in full with interest on or before the maturity date, and the bank becomes the primary entity obligated to pay the amount due to the payee. Banker's acceptances are used in international trade. For the most part, banker's acceptances are used in the trade of goods.

e. Repurchase Agreements

“The terms repurchase agreement (REPO) and reverse repurchase agreement refer to type of transaction in which a money market participant acquires immediately available funds selling securities and simultaneously agreeing to repurchase the same or similar securities after a specified time at a given price, which typically includes interest at an agreed upon rate. Such a transaction is called a REPO when viewed from the perspectives of the supplier of the securities (the party acquiring funds) and reverse REPO or matched sale purchase agreement when described from the point of view of the supplier of funds.” (*Lumpkin; 1998:258-268*).

f. Short term Municipal Securities

“Local government or municipal governments often have temporary needs for cash to finance their own expenditures, to provide funds to some tax-exempt entities such as colleges and non-profit hospitals and to a limited degree, to provide funds to private firms and individuals. To meet such needs they often issue short term municipal securities. These securities are issued in two forms: Interest-bearing notes and discount notes. The

interest earnings and the capital gains in the case of municipal securities are generally exempted from the taxes, provided that the investor is a resident of the state or city that issues the debt instrument. Individuals' mutual funds, banks and other corporations are the major types of investors in municipal securities."
(Walter; 1998:185)

g. Other instruments

There are various instruments, poplar in money markets of different countries. If we see the American money market money market instruments besides above mentioned like: federal funds, federal agency discount notes Eurodollars are very popular.

Table 2.1

Money Market Instruments – At a Glance

Money market instrument	Principal borrowers	Principal investors	Duration (common maturities)	Credit risk	Liquidity	Timing of payment risk
Treasury bills	Government	Individuals non financial and financial corporations money market funds etc.	1.6 and 12 months	Assumed to be none	Very active secondary market	Known
Commercial paper	Financial and non financial corporations	Non financial corporation's money market funds.	20-45days	Medium to very low rated by credit agencies	Limited secondary market	Known
Certificates of deposit	Large banks and thrifts	Non financial and financial corporations money market funds governments	1,2,3 and 6 months	Low to high not guaranteed against default	Active secondary market	Known
Bankers' acceptances	Financial and non financial corporation	Non financial corporations and financial institutions	1-9 months	Very low major banks are guarantors	Active secondary market	Known
Repurchase agreement	Banks, securities dealers, other owners of government securities	Insurance companies individuals	1 day , 1 week 3-6 months flexible term	Low risk collateralized by treasury securities collateral price risk	High liquidity but no secondary market	Flexible
Municipal notes	State and local government		1-12 months	Rated by credit agencies	Moderately active secondary market for large issues	Known

(Source: Santomero and Babbel; 1997:258-259)

Table 2.1 gives a bird's eye view of the money market instrument. It has listed the features of money market instruments in international perspectives.

2.1.2.2 Capital Market Instruments

Capital market provides a channel for the borrowing and lending of long-term funds. This is designed to finance long term investments by business government and households. Trading of funds in the capital market makes possible the construction of huge establishment like: factories, schools and highways. Financial instruments in the capital market have original maturities or more than one year. The principal suppliers and demanders of funds in the capital market are more varied than in the money market.

Popular instruments traded in capital market are:

a) Equity or stocks (ownership instruments)

b) Bonds (Debt instruments)

c) Mortgage Loans

d) Options an Futures-derivative financial instruments

a) Equity / Stock

Equity share or common stock gives several rights to the shareholders. Shareholders enjoy right to vote, right to dividend and right to right shares. As owner of the company, the equity shareholders not only bear the greatest risk but also enjoy corporate success in the form of higher dividends and capital gains. Common stock is suitable for investors who like investing for longer period gains. Equities or stocks are basically the contract that establishes an on-going relationship between "borrower" and "lender" and almost always bundling some combinations of "control rights" and rights to be a "residual claimant". In the establishment of corporations of small and medium sizes, stock sales to the incorporators are usually the principal source of cash and other assets.

There are two main types of equity ownership or stock or shares prevalent in the market:

I. Common Stock II. Preferred stock

I. Common Stock

An investor in common stock receives certificates or ownership, stating the number of shares and par value share. Common stock holder have the voting rights they can vote for a board of directors and vote on major issues that may be presented before them. Dividend is not fixed for common stocks; some pay it but not all. Companies in early growth stages typically pay low or no dividends; rather they retain as much earnings as possible to finance rapid growth. As companies become more established they may pay a high percentage of profit as dividends.

Common stock investment alternatives is a popular investment alternative in Nepal. Common stocks are traded in Nepal Stock Exchange (NEPSE). Only the listed companies' common stocks are traded in NEPSE.

II. Preferred Stock

Preferred stock is also quite similar to common stock as well as also debt, but it has its own features and characteristics. Preferred stockholder received a fixed dividend every year. Usually preferred stockholders have priority over common stock in dividend and liquidation right. However, they do not enjoy strong legal position of a bond to pay return and refund the principal amount at maturity date. Preferred stock is suitable for investors who require fixed return on their investment. Basically there are two types of preferred stock; cumulative and non cumulative. In case of cumulative preferred stock if the firm does not pay dividend in any year no dividend can be paid to common stocks until that dividend and any other dividends on the preferred stocks have been paid in full. The arrear dividend goes on cumulating. Nevertheless in case of non-cumulative preferred stocks if the firm skips the dividend on the preferred in any given year it can pay dividends on the common as long as it pays the dividend on the preferred in the same year.

Bond like features:

Promise to pay fixed dividend.	Fixed maturity
No voting rights	High priority in payment. Call ability
No control	Tax deductible

Stock like features:

Non- payment of preference dividend does not force the company to insolvency

No specified maturity

No tax deductible

Residual claim

Preference dividend is discretionary. Failure to pay such dividend will not result in a default of a company's obligation or insolvency of the company. Hence if needed, the board of directors may postpone or omit such dividend because treatment of preferred stock dividend as fixed obligation increases the explicit cost of the company. Hence, Preferred stocks are less risky than the bonds from a corporation's point of view because:

- Dividends do not have to paid if profit is not earned
- Non payment of preferred dividend will not bankrupt the firm.

However, from an investor's standpoint preferred stock are riskier than bonds because:

- Firm are more like to omit preferred dividend than to pay interest
- Bonds have priority over preferred stock in the event of bankruptcy.

The market of preferred stock in Nepal is very lean. Just few companies have issued preferred stock. Nepalese companies have issued only redeemable preferred stocks. Preferred stocks are traded in Nepal stock exchange. Preferred stock issued by Nepal Bank Ltd. Necon Air Ltd, Birat Shoe Ltd., Jyoti spinning Mill Ltd. and Yak and Yeti Hotel Ltd. are redeemed and only two preferred stock are trading in NEPSE.

b. Bond

"Bond represents the debt instruments, which represent borrowing. Bond exists in a wide variety of form the corporate bonds (debenture) government bonds, municipal bonds etc. The firm, which wants to raise a few million- amount prints, up fancy pieces of paper called bonds and try to sell them. Many individual and financial institutions are interested in buying these papers. This paper states that the issuer (the borrower) promises to pay whoever owns the bond (the lender) certain interest payments at specified dates in the future. The paper also states when the bond will mature the date when the loan will be paid off to a whomever own the bond at that time. Some bonds have an original maturity of only a few years while others have twenty or thirty years." (*Ritter and Silber; 1993:28*).

Nepal Rastra Bank (NRB) issues long-term government securities. Development bonds, national savings bond are the long-term bond securities issued by NRB on behalf of the government. Long-term government bonds are going to be listed in Nepal Stock Exchange. Local government securities have not yet been issued in Nepal.

Table 2.2

Comparison of common stocks preferred stocks and Bonds

	Common	Preferred	Bonds
Cannot force firm into bankruptcy for failure to pay dividends			
Provides dividends			
Permanent source of financing with no maturity date			
Dividends are partially tax-exempt to corporate investors			
Have a par value			
No participation in firm profit beyond stated dividend or contractual interest			

No voting right			
May be convertible			
May have a sinking fund			
May have a call feature at par or a slight premium above par value			
Cumulative dividend provision			
Provides interest			
Payments by issuer are tax-deductible expenses			

(Source: Santomero and Babbel; 1997:347)

Note:

In rare cases, a preferred stock has a maturity date

Debt has a stated maturity with two exceptions perpetual annuities and perpetual floaters

Some convertible preferred issues allow for voting right if dividends are skipped.

The table 2.2 compares the three major instruments of capital market, common stock, preferred stock and bond on various features.

Bond Ratings

"Corporate bonds offered to investors in public markets are rated according to their perceived risk. Standard & Poor's Corporation and Moody's investors service Incorporation are the two principal rating agencies. The greater the risk lowers will be the ratings. Expected yields increases as the rated risk increases. The bonds are rated as the ratings like AAA (Highest grade as per Standard & Poor's), BBB (Medium grade), CCC (very speculative bonds) and likewise." (*Richaards et al; 1984:376*).

c. Mortgage loans

"Loans granted for the purchase and construction of real property that is land and buildings are called 'mortgage loans ' because in almost all instances the borrower is required to pledge the property to the lender as security for the loan. For the average

consumer a mortgage loan is a multi-year loan obtained from a retail lender that uses the value of the real property as collateral." (*Santomero and Babbel; 1997:297*).

Mortgage is classified in different ways like: one to four families home mortgages multifamily residential mortgages (apartment houses) and commercial (including farm) mortgages. Mortgages are also classified by whether or not they are insured by government agency. Traditionally mortgages were normal fixed rate securities with the interest rate fixed over the life of the loan. But in the early eighties they led the movement to variable rate or floating rate debt with the interest rate adjusted periodically to reflect the changes in financial environment.

"Today most of the homes are purchased with little more than a 20% down payment, and the rest is deferred and is converted into long term debt. Fixed payment mortgages are in States since 1930s. Over the past 25 years the diversity of mortgage instruments in the residential and commercial mortgage market has proliferated. There are adjustable-rate mortgages graduated payment mortgages and graduated equity mortgages to name just a few. In fact, the largest market for private debt in the United States is the mortgage market. Commercial banks saving institutions insurance companies mortgage pools and the individual investors are the major investors of mortgage." (*Santomero and Babbel; 1997:468*).

d. Rights

"A right is a legal instrument offered to a stockholder to purchase a proportionate number of shares of now company stock at a specific price during a limited time period. Rights have intrinsic financial value because they are normally offered at price somewhat lower than the current market value of the stock. Consequently, a market exists for the buying and selling of rights and once again we enter the world of the speculator. An especially, attractive speculative investment is using margin to buy rights with the hope that the value will rise." (*Garman; 1985:232*)

e. Derivatives

Derivatives are given their name as derivatives because their value is derived from the underlying asset with which they are associated. These instruments provide investors with the confidence that a degree of liquidity is maintained.

Options and Futures

"Options and futures are often lumped together because they both represent contractual agreements between two parties concerning some third asset. Thus both options and futures are often called derivative financial instruments because they derive their value from an underlying asset. Options and futures are also similar in that they are both traded on organized securities exchanges. Options and futures are not used by corporations or individual to raise funds." (*Ritter and Silber; 1993:548*). But the differences between these two instruments far outweigh their similarities.

Futures

"A future deals in both right and obligations regarding the underlying commodity. The buyer of futures also called the long has the right and obligation to receive the underlying commodity at some future date. The seller of the futures also called the short has the right and obligation to deliver the asset on a specific date in the future. Futures are written on commodities such as gold silver and agricultural products as well as on various financial contracts such as treasury bills, treasury bonds pass-through and even stock. The market for financial futures is currently exploding in terms of types of contracts traded volume of trading and investor interest." (*Haugen; 1997:627*).

Options

An option is a contract between two investors in which one investor grants the other the right to buy or sell a specific asset at a specific price within a specific time period. The option entitles you to buy certain number of shares of that corporation at fixed price within specified date. Call option gives its holder the rights to buy an asset a particular price (called the strike price). A put option gives its holder the right to sell at a particular price. Put and call options are examples of secondary securities. They are not issued by

the firms and the net supply of these securities is zero. Options are written and sold by individual investors. If one sells a call option, he gives someone the right to buy a share of stock from you at a stated price. He receives cash upon its sale and he can carry the obligation as a liability. If one guys a call option he purchases the right to buy the stock. He pays cash upon purchase and carries the option as asset. The seller of these options called option writers has the obligation as a liability. If one buys a call option he purchases the right to buy the stock. He pays cash upon purchase and carries the option as asset.

Warrants

Warrant is a primary security. It is issued by a firm and it is a claim on the assets of the firm. A warrant is in all other respect identical to a call options. A warrant gives its holder the right to purchase shares of stock in the firm at a particular price before a particular date. If the warrant is exercised the firm must issue new shares of common stock to the holder of the warrant. Thus the effect of exercise is to dilute the per share value of the stock. Warrants are often given to executives as part of their compensation. They are also frequently attached to other securities such as bonds and preferred stock offerings. When originally issued to make the issue more attractive to investor.

A distinction between a right and a warrant is that rights are issued as a pre-emptive right to current stockholders whereas warrants are issued attached to other securities. Some of these warrants are detachable and some are not; a trading market exists for detachable warrants. Warrants are sometimes called purchase warrants and each has a speculative value until the expiration date, at which time it may be worthless**.**

Swaps

The swaps markets has been in existence since the early 1980s and the introduction of standardized contracts and dealing mechanisms through the International swap Dealers Association has lowered the transactions costs and made operations more accessible to users. Currency and interest rate swaps are the most common types in the market. A currency swap transfers the obligation for payment in another currency. The difference

between the two types of swaps is that an interest rate swap only involves the exchange of interest payments while the principal remains the obligation of the initial borrower. Therefore the riskiness of the loan is still associated with the writer of the debt and not transferred. Swaps are default risk and earn a fee from both participants dependent on the level of that risk. Swap prices are negotiated by a auction, usually conducted on the telephone and are very much under the control of the market make." (*Piesse et al; 1995:454*)

2.1.2.3 Securities Innovation

Engineers apply scientific principles to design new products and services, financial engineers apply principles of financial economics for the purpose of structuring pricing and managing the risk of financial contracts. Financial engineering involves the design development and implementation of innovative financial instruments and processes and the formulation of creative solutions to problems in corporate finance. Innovative instruments make financial markets more complete and efficient. For instance, greater efficiency could be achieved by reducing transaction costs. Financial markets can be made more complete by designing a new security whose contingent after-tax returns cannot be replicated by any combination of existing securities. Financial engineering involves three types of activities design of new financial instruments development of new financial processes and providing creative solutions to problems in corporate finance. Index linked bonds on line trading of securities and project finance are examples of the three activities respectively**.**

- **2.1.3 Guideline to Investor in Nepal** (*NEPSE; 2005:35*).

Several problems and facts need to be taken in to account before buying and selling securities. So they are:

- Placement of orders: The investors must submit written buy and sale orders to the brokers to conduct the trading of proposed securities in prescribed formats.
- Points to be included in the order: The buy and sale orders the investors must consist the name of securities, its type, quantity price (i.e. fixed/maximum/minimum or as deemed appropriate by the brokers) and the validity of the order in prescribed formats. If the tenure is not specified in the order it will be valid for 15 days only.

- Obtaining receipts for the registration of orders: The investors must obtain receipt against the deposit of orders in which the broker members must state date, time and registration number.
- To obtain notification for the purchase and sale of securities: After the transactions as per the order are done the brokers must acknowledge the clients either on the same or next day in prescribed format.
- To submit either purchase values or certificates: The investors after getting the notification from the brokers must submit total amount required, in case of purchase and certificate of securities. In case of sale, the concerned seller must handover to the brokers the share certificate along with the signed documents (i.e. transfer deeds, bonds deeds) and the buying investors must submit the total required amount. Both the brokers have to submit those documents to the stock exchange. It is the duty of stock exchange to cross verifies the certificate deposited with the amount deposited.
- Commission of the brokerage: The commission for his/her service ranges from 1 to 1.5 percent based on volume of trading.
- To receive the amount or share certificate: The brokers have to submit the amount of share certificate within five working days from the date of 8^{th} days. On the 6^{th} days stock exchange will do the crossing of documents and prepares bill and makes payments to the brokers on 7^{th} day.
- If both the amount and number of share and company matched with each other the amount will be transferred to the selling brokers' account and the certificates along with documents will be handover to the buying brokers.
- It is the investors who have to make decision whether to send those documents to the concerned company for the name transfer or to register it as blank transfer for resale purpose.
- The tenure for the blanks transfer: The decision of the investor need to be executed through the brokers. If the investors make decision to register the purchased securities as blank transfer it will be wise to continue this decision before the closure of fiscal year or before the book closure whichever is earlier. In order to send it to the concerned company the investor must fill and the required forms which are signed by

the selling brokers and need to handover to the concerned brokers. The investors himself/herself cannot send those documents for transfer.

- Receiving and making payments through cheque: The invertors must make payments or receive payments from brokers either by bank transfer or through cheque.
- Trading of the shares of the company can take place at different prices: The investors must be aware that the share of the same company can be traded at different prices or the buying and selling price of the shares of the same company can be different from one transaction to another transaction.
- If the investors are in doubt regarding the purchase and sale of the securities they can contact to the concerned authority of stock exchange with notification receipts.
- To be careful in risks involved in securities transactions: Investing in securities is not gambling. Certain principles are there and the investors must be aware of the existing risks involved in trading and investing in securities. So before making investment decision the investors must consult financial statements of the concerned company and price study. The speculators may create rumors in the market and if investors run after that it will be his/her fault but not of the brokers. The fund is as well as the investment decision is of investors. So the wise investment decisions will be productive and also supportive to the markets.
- Compensation from the deposit of the broker: Each and every broker has to submit the bank guarantee and cash deposit in stock exchange. The stock exchange will make payments if stock exchange identify any fraud committed by brokers an also incase of default of the brokers or in any other case of like nature. If the deposited amount becomes short the investors himself/herself recover the balanced from the brokers.
- My world is my bond: The service of the brokers' base on the principles "My world is my bon". The brokers should not be deviated from the principle. The investors must support the principle of their brokers. If any unseen able events take place the broker must notify the stock exchange and reverse the transactions either by buy or sale according to the nature of transactions. If the investors suffer any loss that should be borne by the investors himself or herself.
- Transitions based on mutual faith or trust: It is the mutual faith and trust between the brokers and investors whether to do transaction without getting certificates or amount

in advance. But as short sale and forward trading are not permitted once the transactions are done according to the orders the documents and amount need to be deposited in any case. But if the client is new to the brokers they can ask certain amount in advance or also can ask share certificate along with signed and verified order in advance.

- Investors if have doubt can contact to the concerned authority for finding the reality: The investors if have any doubt about he purchase and sale of securities, their quantity, prices and any other facts related with particulars transactions or transactions can contact the concerned authority of the stock exchange and clarify the doubt at any time after the transaction is over.
- To have knowledge about trading, settlement and clearing procedures: The investors must have through knowledge about trading, clearing and settlement procedures. If they do not through idea about these procedurals aspects different confusion, conflict and dilemma may take place. So it right of the investors to obtain detail information about these procedures either with the brokers or from published materials by stock exchange.
- Duty and right of the investors: It is the right and duty of the investors to inform the stock exchange authority about the problems faced by him while making investment. It is his right to get the problem solved and it is also his duty to protect other investors from facing the same problem. So do not hesitate to contract concerned authority of stock exchange with any problem either with brokers or listed companies.

2.2 Review of Related Studies

2.2.1 Review Of International Journals

Viceira (2001) has made a study in *"Optimal Portfolio choice for Long- Horizon Investors with Nontradable Labour Income."* The paper examines how risky labor income and retirement affect optimal portfolio choices.The optimal allocation to stocks is unambiguously larger for employed investors than for retired investors. Consistent with the typical recommendations of investment advisors. Increasing idiosyncratic labor and

income risk raises investors' willingness to save and reduces their stock portfolio allocation towards the level of retirement and death play an instrumental role as events that exogenously fix the individual's investment horizon. When future labor income is certain, it is optimal for employed investors to hold proportionally more stocks in their portfolio than it is for retired investors.

This paper shows employed investors have an additional source of income they can afford more aggressive portfolio than retired investors.
Financial advisors typically recommend that their customers invest more in stocks than in safe assets when they retire. By contrast, Samuelson (1969) show that retirement is irrelevant for portfolio decisions if investment opportunities are constant and human capital is tradable.

Grinblatt and Keloharju (2001) have conducted a study on "*Monitor Buys, Sells & Holds*" of individuals and institutions in the Finish Stock Market on a daily basis. They have tried to explore the motivations for trade. With the variety of tests, the study lists several factors like: past returns, reference price effects volatility, life cycle size of holding period capital gain or loss and selling. These all are determinants of investment decisions.

Past returns are the most important factor for less sophisticated investors households general government and non profit institutions they are more predisposed to sell than to buy stock with large past returns. Such investors tend to be contrarians and foreign investors are opposite they show momentum behavior. Life – cycle consideration also account for investment decisions. Investors tend to sell (primarily inherited stock) early in life, purchase stocks in the prime earning years of middle age and then sell stocks in old age. The youngest investors buy more Investors begin net sales of stocks at an old age that is later in life.

So far as volatility is concerned high volatility increases the propensity of households to buy rather than sell a stock.

These all biases can lead to under or over reliance on new signals people seem to make judgments differently in different situations.

Benartzi and Thaler (2002) have conducted a study on “Investors Preference” to find the effect of investors' autonomy over the selection of portfolios. This study basically focuses on retirement plans.

There is worldwide trend towards defined contribution savings plans, where investors are often able to select their own portfolios. How much is this freedom of choice worth? We present retirement investors with information about the distribution of outcomes they could expect to obtain from the portfolios they picked for themselves, and the same information for the median portfolio selected by their peers. A majority of our survey participants actually prefer the median portfolio to the one they picked for themselves. We investigate various explanations for these findings and offer some evidence that the results are partly attributable to the fact that investors do not well-defined preferences.

Few years ago there were very limited choices to the investors. Considering retirement plan only a decade ago most plans offered very few choices, often just a money market fund, a bond fund, a stock fund, and stock in the company. However, now there are wide choices. Where the financial stakes are quite high, and choices made infrequently, many would argue that more choices are unambiguously a good thing.

This paper hand attempted to find how the participants rate the attractiveness of the portfolios based on the projected range of income. The result discovered that investors tend to use 'avoid extremes' heuristic. When individuals were presented with three choices, was found. People viewing choices A, B and C will often find B more attractive than C. However, those viewing choices B, C and D will often argue that C is more attractive than B. Simonson and Tversky (1992) illustrate similar behavior in the context of consumer choice, which they dubbed extremeness aversion. This shows that they really don’t have stable, well-defined preferences or coherent preferences. Many psychologists believe that people do not have well formed preferences, but rather construct preferences when choices are elicited.

Goergen et al; (2006) carried out a study on, "*The Strategy of Going Public: How UK Firms Choose Their Listing contracts.*" The study carried tow objectives: The first objective was to derive potential factors that may influence the choice of IPO listing contracts from the few theoretical papers and empirical studies in the fields. The second objectives were to test how well those factors explain the choice of the listing contract for the case of UK IPO's. The study was focused on 240 flotations', which were listing on the official list of London Stock Exchange during the period of 1991-1995. They used a binomial profit model to measure the impact of the variables on the contract choice. As the study proposed that three types of factors essentially influence the choices of contract; ex-ante uncertainty, certification and the visibility of the issue, they found that the higher the firms choose a placing contract. They also found strong evidence that the sponsor and creditors screening signals the quality of the IPO's firm. Hence, the firms, which use highly reputable sponsors and those with high debt to assets ratios usually, choose public offer contracts. They also found that firm that make small issues find it cheaper to use placing contracts. Finally, they concluded that in general the decision to choose a placing rather than an offer or vice -versa is taken by the firm within the framework of rational behavior.

Derrien and Kecskes (2007) observe there is a two stage mechanism in his study on "*Pricing Modules*" prevalent in the UK in which under pricing has been found to be reduced by 10% to 30% in comparison to the traditional under pricing in which IPO's are made at first and then the share are listed in the secondary market. First time public financing through equity is proceeded in two stages i.e. a firm lists and lets a public market develop in the firm's existing shares in the first stage, and sells new shares to the public in the second stage.

2.2.2 Review of Related Nepalese Articles.

Ghimire (2002) in his article on " *Investor's Perspective Buy Finance Companies* " remarks, that it is obvious to investors or general savers are main wheels of securities market to run. Both individual and institutional investors mean a lot to security market.

But, in our context we lack the active institutional investors. Despite the lack of institutional investors, the stock market in Nepal has good confidence of the general investors. This is provided by the responses that the public offering by some companies received during the recent past. The public has the interest and capacity to subscribe the shares in primary market. Shree Investment Finance Company Ltd., Janaki Finance Company, Gorkha Finance, Sri Lanka Merchant Finance Limited, SBI (right shares), Himalayan Bank (debentures), Everest Bank (Preference Shares) etc. were offered to the public and all of them were oversubscribed.

Subedi (2003) has aimed in his study on "*Investors Awareness in Security Market*" to find out whether the investors are aware or not in the stock market. It had attempted to dig-out the major factors that affect the investor' decisions.

A Significant portion of investors (24.54%) responded that there are better opportunities for investors in non-securities sector, however, majority group (75.46%) believe that securities sectors provide better opportunities. Among those investors, responded the banking, finance and insurance are the best alternatives. Those who choose non-securities sector responded the bank fixed deposits, fixed assets, business venture and other sectors are suitable alternatives. Investors feel that investment in common stock is popular since it provides sufficient return in comparison to other field of investment. He also found majority of investors dissatisfied with security market. 81.95% were dissatisfied with the grievance handling and 76.39% found dissatisfied with the present level of return from stock investment. This study also states that dividend and capital appreciation were the most inspiring factors to attract the investors. Most of the investors responded that their level of awareness is at low and moderate level while some of them responded that their level of awareness at very and high level.

Bhattarai (2003) has published an article "*Debentures are Welcome*" discusses the future prosperity of debenture. Bhattarai recognized that debenture have good future market potentiality, though its market size is small in the present context. Followings are the significant results of his article.

- The bond market in Nepal is very lean. Very few companies have issued bond in the market.
- Bottler's Nepal Ltd. made the first issuance of corporate bond issue. When it issued 18% rate coupon rate bond in 1986/87. Since, then time gap between the issues of corporate bonds is as high as five years.
- Though the government bonds are not available in the stock exchange floor, corporate bonds are being made available. The issuance if the 8.5% Himalayan Bank Ltd. 2009 bond and it's listing in the secondary market with separate trading system become a milestone in his regard.
- Corporate bond issued by the bank is highly over-subscribed where as bond issued by the manufacturing is heavily under-subscribed.
- Overall debentures have good future prospects.

Shrestha (2004) in his article "*VIP Shareholders: Emerging Concept and Implication*." Remark, when we see the share market, more than 90 percent of the transactions that take place in the share market relate to the securities of the institution. We can count the active industrial and trading sector units on our finger this shows that the securities market in Nepal is essentially the financial sector securities market. This also implies that the financial sector has transformed itself into the most dynamic and also most attractive sector of investment actually goes to bank and financial sectors. But challenge in this regard is that the industrial and trade sector have not been able to fulfill the expectation of the investor.

Adhikari (2004) in his articles "*Securities Market in Nepal*" remarks, there are very few issues of corporate bonds and mutual funds in the markets. Corporate bonds, the corporate bonds issue practice is yet to be popular due to lack of benchmarking interest

rate provided by government securities and lack of incentives to the issuers. There are no clear provisions regarding the entry and exit process of securities businesspersons in the securities markets. The membership of stock exchange and transaction Bye Laws, 1998 states that companies interested to operate as securities businesspersons can apply for membership only when NEPSE publishes a notice for the same. Whereas, the securities exchange act, 1983 states that the stock exchange can only grant membership to those companies registered as securities businesspersons in SEBO. Full-fledged brokerage firms are yet to be developed in the markets. There are two securities dealers but are not working. The markets lack market makers and investment advisor. Institutional investors such as employee provident fund, insurance and pension funds and citizen investment trust etc. can play role in stabilizing market prices of securities. However, their participation in the market is virtually lacking due to lack of incentives and the present level of securities markets. These are some of the major issues of Nepalese securities markets that need to be addressed to make it important alternatives for capital mobilization.

Vaidya and Parajuli (2004) in their article on "*Public Offering of Securities*" remarks, if we see the scenario of instruments Equity issuance formed a significant potion of total issue in the capital market since fiscal year 1993/94 till fiscal year 2002/03, which accounted for more than 76% of public issues. The issuance of such securities is a viable opportunity for risk bearing investors who wish to take greater risk for higher return. The risk adverse investors on the other hand would seek to invest on securities like bonds issued by corporations and government, debenture, preference shares etc., which would provide them fixed return over a period of time with very little on their investment. The corporate bonds/debentures of only four institutions viz. Sri Ram Sugar Mills Ltd., Bottlers Nepal Ltd., Himalayan Bank Ltd., and recently that of Nepal Investment Bank Ltd., have been issued in the capital market till date. Of these debentures, those of Bottlers Nepal and Sri Ram Sugar Mills have already matured. This speaks for the need to increase the issuance of more viable risk-averse investment opportunities to cater for that category of investors.

Kafle (2005) in his article "*Primary Market Development in Nepal*: *Issues and Challenges"* conclude, Nepalese financial system is at a critical stage of transformation. While banking sector is being consolidated under the umbrella Bank and Financial Institution Act, the responsibility of financing long-term projects including infrastructure and potential hydroelectric projects fall on securities market. In this context, there is an urgency of consolidated development of Securities Market. This consolidation not only accommodates the present need but also contributes to the growth process through the development of equity and debt markets.

With the implementation of newly securities ordinance 2005, the SEBON will be better placed to regulate the integrity of disclosures in the securities issue. Some efforts mentioned here could broaden the primary market, resulting in the entry of new companies, issuance of new instruments, entry of new investors (especially institutional) and competitive services of intermediaries. The attraction of the primary market depends on an efficient stock exchange coupled with efficient clearing and settlement system. This is why the stock exchange modernized with governance reform and automation should be priority. With the modernized stock exchange the primary market is bound to increase manifold, providing a reliable and sustained alternatives for raising capital.

Dahal (2007) carried out a research study on "*The Performance of Nepalese IPOs*." The study was based on 107 IPOs from the FY 1993-2006. The study mainly focused on subscription times of securities on IPO and IPOs return.

After the completion of study, he asserted that Nepalese IPOs had been heavily oversubscribed. The study showed that the investors have very high degree of attraction to the IPOs. It was noticed that Nepalese IPOs in terms of issue and subscription had been bumpy during the study period. It also noticed that the investors make 53.25% market adjusted return leading to conclusion that Nepalese IPOs has highly under priced. On other hand, it showed that due to higher under pricing, higher wealth loosed by the promoter. On the study it is found that IPOs return had been affected mainly by the subscription times of issue and general returns of stock market. The study also revealed

that the firm size expressed as the size of total assets affects the subscription times of issued positively and the debt equity ratio affects the same negatively.

2.2.3 Review of Thesis

Sharma (2001) has studied on "*Public Debt: System and Practice in Nepal.*" to find the interest of investors in Government Securities. It finds out that the interest of investors on government security and their educational background is completely independent both the educated and uneducated people are equally interested on government security. The study also draws the conclusion – both poor and rich people are interested to government security. These mean that government is efficacious to draw the attention of rich and poor, educated and uneducated people whom the government sells its securities which are the means of borrowing the loan internally. The study, however, states that the persons with the academic background of economics finance and management are more aware to the government security.

Study also draws the result that the people in rural area are less aware to the government security. Study concludes that those people who have not sufficient time to run their own business, who are able to grab the opportunity of market; and who are unskilled for good entrepreneurship are more interested in government security.

Conceptual review made in this chapter has basically dealt with investment; its objectives and preferences, financial instruments. Instruments, which are prevailing in this chapter discussed for the wider view of financial instruments although Nepalese Financial Market lacks most of them. Review of journal have given the insight of investors psychological and behaviors expects like the biases of their decisions, factor which effect investor psychology, general tendency of investors and so on. The article reviewed in the letter segment gives us the view of experts regarding Nepalese financial market and investors. The Nepalese unpublished dissertations present the responses of Nepalese investors on various grounds concerned with financial market and financial instruments. These all

materials are fragmented nature some are related investor's decision, behavior and psychology. These all are related to investors preferences.

Subedi (2003) has aimed to find out in his study on "*Investors Awareness in Security Market.”* whether the investors are aware or not in the stock market. It had attempted to dig-out the major factors that affect the investors' decisions. A significant portion of investors (24.54%) responded that there are better opportunities for investors in non-securities sector, however majority group (75.46%) believe that securities sectors provide better opportunities. Among those investors, who choose securities market as better sector for investors respondent the banking finance and insurance are the best alternatives. Those who choose non-securities sector responded the bank fixed deposits fixed assets business ventures and other sectors are suitable alternatives. Investors feel that investment in common stock in popular since it provide sufficient return in comparison to other field of investment.

It is found, majority of investors dissatisfied with security market. 81.95% were dissatisfied with the availability of information, 87.5% were dissatisfied with the grievance handling and 76.39% found dissatisfied with the present level of return from stock investment. This study also found that majority of investors doesn't think regulatory measures are adequate. This study also states that dividend and capital appreciation were the most inspiring factors to attract the investors. Most of the investors responded that their level of awareness is at low and moderate level while some of them responded that their level of awareness at very low and very high level.

Investors are found very highly affected by whim and rumor related to share price. "I too" approach was found among the investors. No-one bothers to analyze before they invest in shares. They just follow the trend, and buy the shares of the company whose demand is high. This is because of lack of awareness and educational and technical qualifications. Programs to educate investors; to identify public awareness; to train market professionals need to be increased.

Upadhaya (2004) studied on "*Investor's Preference and Financial Instruments*". Study had aimed to examine and analyze the preferences of the Nepalese investors in selecting securities. The survey made him resulted that the majority of the Nepalese investors (55.8% of respondents) preferred the equity shares for investment. They preferred government securities after common stocks (by 28.8% respondents). The preferred stocks and debentures were least preferred (by 7.7% respondents for each). Majority of investors (53.6%) preferred banking sector for the investment. 69.2% agreed that they prefer common stock rather than other instruments due to the dividends. Those who prefer government securities agreed that risk free return is the main attraction behind this alternative. Among the options of profit marketability social status and the entire majority of investors (73.1%) vote for profit. When investors were asked whether they were satisfied with the return from investments, 57.1% of them replied they are not satisfied. 55.8% of respondents agreed that investors lack awareness regarding security market. Likewise 69.9% stated that they are not getting the sufficient and timely information regarding the investment from the companies. He has found out option of investors regarding their protection, in which 80.8% stated the existing rules and regulation of the government are not sufficient and effective.

Study recommends as there are no professional firms providing the financial assistance and advice to the existing as well as prospective investors, the government should arrange for creating such environment for the development of financial professionalism. Similarly, the concerned authorities should appropriate means. Market makers, brokers concerned public limited companies and other concerned bodies should launch programs to increase investors' awareness regarding security market.

He tried to reveal the preferences of Nepalese investors but contains the error on selection of samples of the study. Use of NEPSE and SEBON staffs and Brokers as categories is the questionable matter.

Maharjan (2004) has studied on the "*Investor's Preference and Financial Instruments in Nepal*." Following were the objectives of his studies:

- To study the investors preference in financial instruments of Nepal.

- To analyze the past trend of financial instruments used in Nepal.
- To give new understanding of financial derivations.

The study was mainly based on the primary analysis. This study was conducted by pooling the views of different groups by applying survey method. Taking groups were listed companies, Experts and investors. Total responded were only 60. The period cover under the study was fiscal year 1993 to 2003. Following were the major findings of his study.

- Investor prefer equity share than any other securities.
- Current rules and regulations regarding securities market are not sufficient.
- Investor prefers the banking sector securities for investment whereas other securities like finance, insurance, manufacturing, processing and other are least preferred.

He has tried to find investor preference. His study was only concerned to the general investors he neglects institutional investor preference in his study.

Dahal (2008) have carried out a research on topic "*Subscription Of Corporate Securities In Initial Public Offering in Nepal*." He found that Nepalese capital market is in developing stage. Most of the public in Nepal do not have sufficient information regarding the primary market but sill they have interest to invest their money in primary market so the most of the securities are issued in oversubscription. It is the good sign to the expansion primary market. Due to this, most of the companies are issued only common stock where bond, preference share and convertible are rarely in practice but option and warrants are still not in practice. This shows that the securities market is dominated by common stock.

Research Gap

The research topic "*Investors preference in Choice of Financial Instruments in Nepal*" is practically useful and appreciated by various related persons including investors, academies, shareholders and general public. This topic helps to remove the problems that are internally and externally presented in Nepal related to financial instruments.

Very few studies were found attempt in this area in Nepal. Those researchers have tried to find out investors awareness and some knowledge about instruments used for investment in Nepalese security market. But none of studies have attempted to explore the investors' expectations, psychology and their preferences. On the other hand none of the study have attempt to the institutional investors preferences toward government securities and corporate securities also. Here in this research study, an impact has been made to do further research which remained unexplored in previous research work.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

Research Design is the plan structure and strategy of investigation conceived so as to research question and to control risk. This study describes and explores the scenarios of issues of financial instruments as well as tries to analyze the investor's preference toward the instruments so descriptive, exploratory and analytical methods are combined as the study demands for the best output.

3.2. Population and Sample

The total population of investors is very large in small number of investors, which are analyst and professional investors were taken as subjects on judgment sampling basis. 85 investors were taken as respondents for this study including all types of investors like: male, female, less informed, informed and well informed and so on. Survey was conducted on various points like: NEPSE floor, broker's office and other several places, descriptive features of samples taken are presented in Appendix 2. for the analysis of institutional investors 6 samples each from two sectors commercial books and finance companies are taken randomly.

Investors are surveyed as per the accessibility i.e. those which are in Kathmandu valley only irrespective to their native. 100 questionnaires were circulated whereas just 85 responses could be collected. Some of the left were dropped out and some were incomplete. Institutional investors are selected judgment from among those who have invested in government securities and shares of other companies. Name of sampled institutional investor are liked in table 3.1 presented below.

3.2.1 Number of observations

Five year data of six commercial banks and financial companies each were taken for the study. The amount of investments made on government securities and common stocks, from fiscal year 2003/2004 to 2007/08 are taken for this study.

Table 3.1

Names of sampled institutional investors

Commercial Banks

1) Standard chartered Bank Nepal Ltd.
2) Everest Bank Ltd.
3) Bank of Kathmandu
4) Nabil Bank Ltd.
5) Nepal investment Bank
6) Himalayan Bank Ltd.

Finance Companies

7) Goodwill Finance company
8) Kathmandu Finance company
9) Lalitpur FinanUnited company
10) Alpic Everest Finance company
11) United Finance company
12) Universal Finance company

3.2.2 Period covered

- To study financial instrument issuance of corporate securities and issuance of government securities from 1998/99 to 2007/08 is taken
- To study sector wise securities transaction the period covered was from fiscal year 2003/2004 to 2007/2008.
- To study IPO subscriptions, the issuances of securities made since 1998/1999 to 2007/08 are taken.
- To study institutional investor preference over corporate and government securities: by selected finance companies and commercial Banks, the period covered from fiscal year 1998/99 to 2007/08.

3.3 Source of data

To know about the financial instruments the historical data are used, for this the secondary, sources like: NEPSE reports, NRB reports of issue managers, SEBON etc. are used. Various annual reports and other publications are used to collect the data concerned with institutional investors. On the other hand, to know about the preferences of the investors primary data are collected. Thus, both- primary and secondary sources are used for the data collection. The study heavily depends upon the primary source, since the main objective of research is to know about the preferences of investors over financial instruments.

3.4 Data collection Techniques

To collect the primary data questionnaire survey has been done along with some interviews and observations. Structured questionnaires are used, in this regard, and some unstructured interviews are also taken as per necessity. Discussions, interviews and informal talks were held to know much about the investors' psychology, with investors, brokers and analysis so as to improve the effectiveness of the study. For relevant sources like: NRB, NEPSE, SEBON etc are used, along with the annual reports of sampled institutes.

3.5 Data Analysis Tools

Different relevant statistical tools are used to find out the best appropriate results as per the designated objectives of the study. Several hypotheses are also formulated during the course of study and analysis. The study has used the mix of statistical tools, from simple percentage analysis to the hypothesis testing tools as per the requirements and their suitability. Different software and technologies are also used for the efficiency of study. The statistical tools that are applied in this study are:

3.5.1 Non parametric statistical tools

a. Median Analysis

Median gives the middle value in the set of numbers. It divides the total observation into two halves. One half comprising the values greater than median and other half comprising smaller values than median. This tool has been selected to find the preferences of investors. Median has been calculated on the basis of rank-sums, so those observations which have rank-sums more than median are the preferred observations and vice versa. Median has the desirable property of being insensitive to extreme scores. In the distribution of scores, median distribution would remain exactly the same if the lowest score is simply 1.

Formula to calculate median is given below.

Median = value of $\left(\frac{N+1}{2}\right)^{th}$ item

Where,

N= Number of items

b. Chi-square test ¡ ^{2}

It is a test which describes the magnitude of difference between observed frequency and expected frequency under certain assumptions. It has been used to check whether there is assumption between two independent variables as well as to check the uniform distribution of the investors' responses toward various options.

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

Where,

$\Re^2$ = chi square

O = observed frequency

E = expected frequency

n = number of observation

Degree of freedom (d.f.) = n – 1

c. Crammer coefficient C

Cramer coefficient C has been used as the supplement to chi-square test. It has been used to test how significant relation is there between two attributes. There is not any tabulated value to test Cramer's C. Its difference from C represents the association in variables. Higher the difference better is the association.

$$C = \sqrt{\frac{\chi^2}{N(L-1)}}$$

Where,

χ^2 = chi square

N = Number of observation

L = Minimum of the number of rows or columns in contingency table.

d. Friedman Two-way analysis of Variance by Ranks ¡ $^{r\,2}$

During the analysis the options or the object are ranked as per their rank-sum. Those with highest rank-sum are given the first rank to denote the best one. To test the ranks assigned to them, Friedman chi – square has been calculated. Hypothesis is tested on the basis of comparison of calculated and tabulated value on the desired level of significance and required degree of freedom. Null hypothesis is accepted if the calculated value is less than tabulated value. Its formula is presented below.

$$\chi^{r\,2} = \frac{n(t-1)\,SS_{condition}}{SS_{people}}$$

$$SS_{condition} = \frac{\phi\, T^2}{\mathbf{n}} - \frac{G^2}{\mathbf{t}n}$$

$$SS_{people} = \phi\, X^2 \;\_\; \frac{G}{\mathbf{t}n}$$

Where,

$\chi^{r\,2}$ = Freidman's chi-square

$\phi\, x^2$ = Summation of squares of rank

n = number of subjects

t = number of condition

G = ϕ T

T = total rank/ rank sum

e. Kendall Coefficient of concordance W

During the course of analysis, the preferences of different types of investor (on different basis) are analyzed. To check whether there is any agreement of similarity between the preferences of different groups of investors, Kendall's W has been calculated. It gives us the degree of agreement among the judges who ranks the objects. Value of W ranges from 0 to 1, higher W means the higher agreement.

$$\Re^2 = \frac{12\ \phi R^2_i - 3k^2\ N\ (\ N+1)^2}{k^2\ N\ (N^2 - 1\ )}$$

Where,

W= Kendall coefficient of concordance

R = sum of the ranks

K = number of cases who ranks

N = number of conditions or objects being ranked

Test null hypothesis is rejected if calculated value is greater than critical value.

f. Mode analysis

Mode gives the highest frequency of the data. It has been for the conclusion of the propositions where 5 – points Likert scale has been used. Mode analysis is taken as the best tool to interpret the Likert the Likert scales.

3.5.2 Parametric statistical tool

a. t- test

T –test is used to see whether there is any difference in the average investments made in government securities and common stock by commercial banks and financial companies. Given below is the formula to find the value t.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where,

$\bar{x}_1$ = Arithmetic mean of first sample $\bar{x}_2$ = Arithmetic mean of second sample

n_1 = first sample size n_2 = second sample size

$S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}$ = standard error where $S = \sqrt{\frac{\phi(x_1 - \bar{x}_1)^2 + \phi(x_2 - \bar{x}_2)^2}{n_1 + n_2 - 2}}$

Test: if calculated t–stat greater than the critical value H_0 is rejected.

3.5.3 Financial tools

a. Subscription ratio

Subscription ratio is calculated to see the subscription scenario in the primary issue. Basically, this tool has been used to see sector wise subscription to finds out which sector has better performance, which will reflect the preference of investment primary market over those sectors.

$$\text{Subscription ratio} = \frac{\text{Number of shares applied}}{\text{Number of shares issued}}$$

b. Growth rates

Growth rates are used to see how the investment on government securities and common stock are growing in commercial banks and finance companies. This help to reflect the investments made on those financial instruments and preferences over them.

$$\text{Growth rates} = \frac{V_1 - V_0}{V_0}$$

Where,

V_1 = value of new year

V_2 = value of pervious year

3.5.4 Graphs

Pie charts are used to show the sector wise coverage in total trading volumes Line charts are used to show the trend of issues of instruments. And line chart is used to show the trend of corporate securities.

3.5.5 Index of perceived Areement (IPA)

IPA was used to find the perceived level of agreement for the responses obtained in the Likert Scale. IPA was calculated as follows (Pandit, 2003)

$$\text{IPA} = \frac{\text{SD (0.10)} + \text{D (0.33)} + \text{IND (0.55)} + \text{SA (1.0)}}{\text{N}}$$

Where,

IPA = Index of perceived agreement

A = Agree

SD = Strongly disagree

SA = Strongly agree

D = Disagree

N = Number of subjects

IND = Indifference

Since, study uses the 5- point Likert scale IPA is concluded on the basis of Index divided in 5 equal parts ranging from 0 to 1.

CHAPTER IV

DATA ANALYSIS AND PRESENTATION

The basic objective of this chapter is to analyze and evaluate the collected data obtained from the various sources. Analysis is based on both primary as well as secondary data. The chapter starts with the analysis of secondary data concerned with the issuance of financial instruments corporate and governmental. Primary subscription and the trading volumes, then starts analysis of primary data collected through questionnaire survey. Finally the chapter ends with the analysis of secondary data concerned with the institutional investors. The study heavily depends upon the analysis of primary data.

4.1 Financial Instrument in Nepal

4.1.1. Corporate Securities.

Table 4.1

Issues of Corporate Securities (*Source: SEBON; 1997-2008)* *(*Rs. In Million)

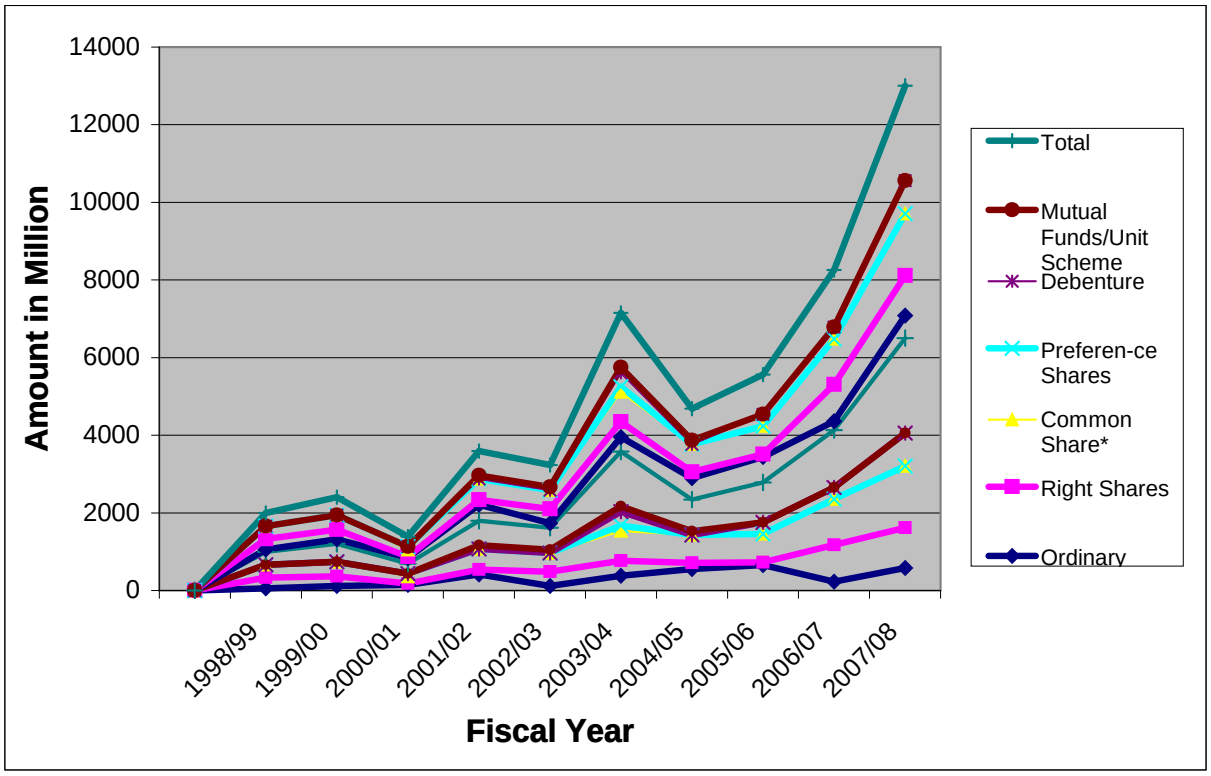
Fiscal Year	Ordinary Shares	Right Shares	Common Share*	Preference Shares	Debenture	Mutual Funds/Unit Scheme	Total
98/99	57.00	275.20	332.20	0.00	0.00	0.00	332.20
99/00	119.40	249.96	369.36	0.00	0.00	0.00	369.36
00/01	148.00	30.00	178.00	80.00	0.00	0.00	258.00
01/02	412.46	124.60	537.06	0.00	0.00	93.25	630.31
02/03	118.50	365.79	484.29	0.00	0.00	82.91	567.20
03/04	378.76	387.87	766.63	140.00	360.00	138.48	1,405.11
04/05	551.50	162.24	713.74	0.00	0.00	100.00	813.74
05/06	657.50	70.00	727.50	0.00	300.00	0.00	1,027.50
06/07	227.43	949.34	1,176.77	0.00	300.00	0.00	1,476.77
07/08	579.83	1,013.45	1,593.28	0.00	850.00	0.00	2,443.28
Total	3,250.38	3,628.45	6,878.83	220.00	1,810.00	414.64	9,323.47
%	47.25	52.75	73.78	2.36	19.41	4.45	100.00
Rank			1st	4th	2nd	3rd	

*Includes both ordinary shares and right shares.

Table 4.1 shows that the amount of different corporate securities that are issued from fiscal year 1998/99 to 2007/08 in Nepalese financial market. The total amount figure Rs.9,323.47 Millions. Table shows that right shares have that largest share in the total amount i.e.52.75 %, and then comes ordinary shares, debenture, mutual funds and preference shares. Instruments are ranked in terms of their coverage in total amount. The ranks show that common stock is in the first rank with 73.78%, debenture in the second rank with 19.41%, mutual fund in the third rank with 4.45% and preference shares in fourth rank with 2.36% coverage in total amount of public issue.

Fig 4.1

Trends of Corporate Securities Issuances.



The Figure 4.1 shows the trends of issues of corporate securities in capital market of Nepal from fiscal year 1998/99 to 2007/08. Line representing common stock is the only line that follows and increasing trend. Whereas other have very up and down as well as frequently reach the zero position. On the basis of past data, we conclude that the common stocks are the most widely used instrument. Similarly, preference share is a least used instrument with rank 4, in Nepalese financial market. It means the capital market of

Nepal is heavily dependent up on the equity instruments. Is a prominent financial instrument other instruments are still very small as compared to equity shares.

4.1.2 Government Securities

Table 4.2

Issues of Government Securities. *(Rs. in million)*

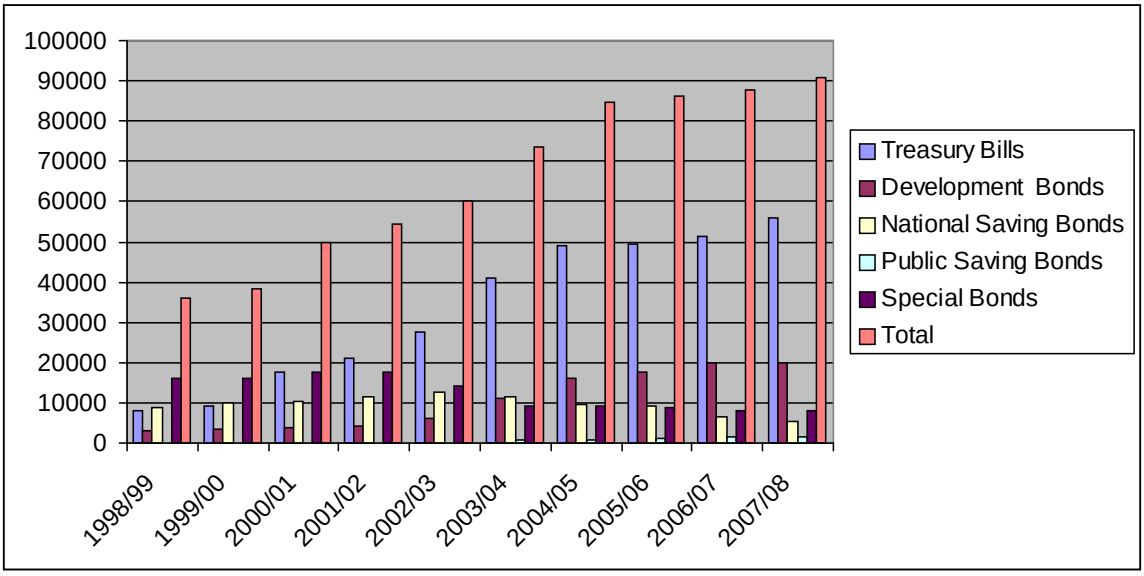
Fiscal year	Treasury Bills	Development Bonds	National Saving Bonds	Public Saving Bonds	Special Bonds	Total
98/99	8092.50	3042.20	8736.50	0.00	16019.60	35890.80
99/00	9182.50	3302.20	9886.40	0.00	16035.50	38406.60
00/01	17586.90	3872.20	10426.40	0.00	17784.20	49669.70
01/02	21026.90	4262.20	11526.50	0.00	17541.40	54357.00
02/03	27610.80	5962.30	12476.40	0.00	13994.30	60043.80
03/04	41106.50	11090.70	11536.10	628.10	9259.30	73620.70
04/05	48860.70	16059.20	9629.80	931.10	9164.50	84645.30
05/06	49429.60	17549.20	9029.80	1178.90	8946.20	86133.70
06/07	51383.10	19999.20	6576.80	1428.90	8176.30	87564.30
07/08	55796.60	19832.53	5414.30	1512.23	8195.20	90750.86
Total	330076.10	104971.93	95239.00	5679.23	125116.5	661082.76
%	49.92	15.88	14.41	0.86	18.93	100
Rank	1st	3rd	4th	5th	2nd	

**Includes IMF promissory Note.*
Source: NRB quality economic Bulletin (App-2007) and Economic report 2007/08

The table 4.2 shows the amount of different government securities that were issued from fiscal year 1997/98 to 2007/08. The total amount in figure is Rs.661082.76 millions. Table shows that treasury bills have the largest share in the total amount. In the same way special bonds, Development bonds, Notional Saving bonds and public saving bonds. Similarly treasury bills come in first rank with the coverage 49.92% of total amount of government securities issued, then special bonds come in second rank with 18.93%, development bonds come in third rank with 15.88%, national saving bonds come in fourth rank and public saving bond come in fifth rank with 0.86% of total issue of last ten

year. To be more specific about the various government securities the given bar graphs helps to explore it more clearly.

Fig. 4.2



Trend of government securities

The fig 4.2 shows the trend of issues of government securities in Nepal from fiscal year 1998/99 to 2007/08. In the figure we can see that the Treasury bill is the only instrument which has followed a rapid increasing trend. Development Bond is in increasing trend. National saving bonds and Special bonds are in decreasing trend whereas public saving bond is very low level bout it is increasing slowly. From this analysis we can conclude that Treasury bills, Development bonds and special bonds are most widely used government securities.

4.2 Sector Wise Transactions

To be clear in the preference of general investors, this study has analyzed the sector wise transactions. According to the transaction volumes of different sector in NEPSE trading floor, we can see that the greater coverage is given commercial banks then comes finance, manufacturing, insurance, other sectors and least transaction of hotel sector. Following table shows the sector wise transaction of securities.

Table No. 4.3

Sector Wise Transaction Of Securities

Sector / Details		Commercial Banks*	Finance	Insurance	Maf. & Process.	Hotel	Trading	Others
2003/04	Share in Units (000)	2074.63	637.39	101.72	1833.09	1316.95	4.35	36.55
	Rs. in Million	1174.89	170.80	28.45	21.44	138.44	4.25	2.56
	%	76.25	11.08	1.85	1.39	8.98	0.28	0.17
2004/05	Share in Units	1022.62	804.34	391.63	48.00	121.29	22.42	17.59
	Rs. in Million	358.41	129.69	64.59	4.00	6.68	11.84	0.66
	%	62.23	22.52	11.21	0.69	1.18	2.06	0.11
2005/06	Share in Units	2950.32	1202.27	256.37	1977.82	61.04	8.64	11.72
	Rs. in Million	895.74	165.09	36.86	1031.62	2.84	11.83	0.29
	%	41.78	7.70	1.72	48.11	0.132	0.55	0.014
2006/07	Share in Units	6552.19	1443.34	328.13	7602.89	98.17	10.41	2398.4
	Rs. in Million	4043.84	216.37	67.62	114.90	4.48	7.99	52.48
	%	89.71	4.80	1.50	2.55	0.1	0.18	1.16
2007/08	Share in Units	5912.16	1957.49	574.93	59.80	392.18	15.22	3301.15
	Rs. in Million	2779.04	305.85	129.90	17.19	19.77	15.80	183.88
	%	80.52	8.86	3.76	0.50	0.57	0.46	5.33
Total transactions		9251.92	987.8	327.42	1189.15	172.21	51.71	239.87
%		75.71	8.08	2.68	9.73	1.42	0.42	1.96

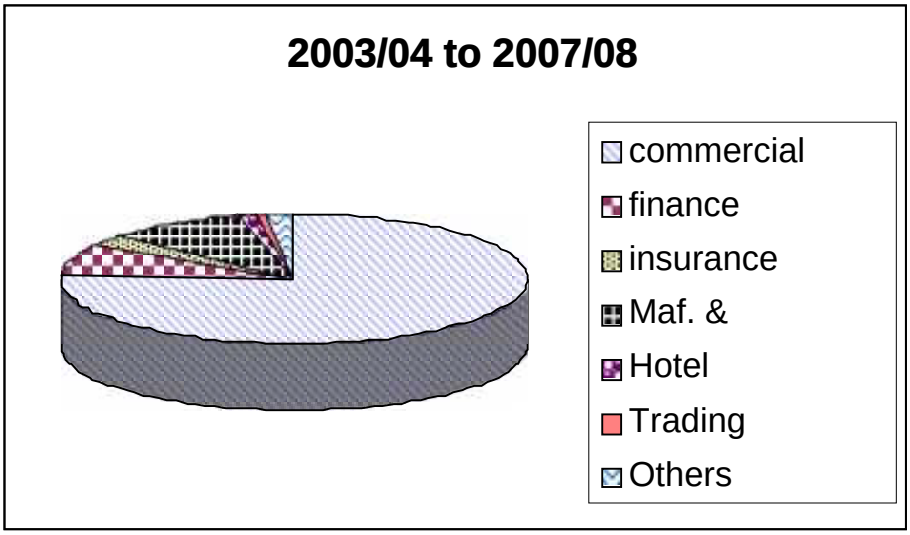
** Includes Development Banks.*
Source: NEPSE trading report 2003/04 to 2007/08

If we see the above table of sector wise transaction of securities, we conclude that commercial banks securities transaction is very high during the fiscal year 2003/04 to 2007/08; this shows that it covers 75.71% of total transaction manufacturing and processing companies is in next position. Very few percentages just. 1.39%, 0.69%, 2.55% and 0.50% made transaction in fiscal year 2003/04, 2004/05, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. But in the fiscal year 2005/06 it covers 48.11% of annual transaction. The main cause of it was a trading company's (Bottlers Nepal co. Balaju) share was traded with huge amount (i.e. 1050.60 million), that's why this figure pullout the whole sector. In reality very few numbers of shares are traded in NEPSE floor

of this sector. If we see the subscription ratio (in table 4.4) it is just 0.57% so it comes in very least preferable sectors then other sectors. To be specific pie char is shown as follows.

Fig.4.3

Pie charts showing sector wise transaction volumes.



The above pie chart shows that the percentage of total transaction in various seven sectors. As per above chart we can say that out of total transaction commercial banks cover 75.71%. It is huge attraction towards Commercial Banks. Commercial Banks provide high dividend and bonus shares to the investors and investors also can get more capital gain by selling securities of commercial Bank. That's why commercial Bank's security is very much preferred among general investors. So this sector is most preferable sector.

4.3 Primary subscription.

In the course of exploring investor's preference toward primary subscription this study had analyzed the subscription rations to see which sectors instruments the investors welcome most.

Table 4.4

Sector Wise Subscription Ratios.

Sector	No. of issuing companies	No of shares Approved	No. of shares applies	Subscription Ratio
Finance companies	61	7811800	76430240	9.78
Insurance	14	2752000	30342720	11.03
Development Banks	15	1385600	16543660	11.94
Commercial Banks	16	13455000	93231042	6.93
Hotels	3	3500000	13475867	3.850
Maf.& processing	18	10889400	6206542	.570
Others	5	2374100	12107910	5.10
Total	132	42167900	248337981	

Source: Several reports of SEBON, NIDC.

Table 4.4 shows that the total number of shares approved and the total number of shares applied (during the period of 1998/99 to 2007/08) of each sector, along with their subscription ratios. Details of subscription ratio are presented in appendix 1.

By analysis of primary subscription it is found that the issues of shares made by finance companies are most preferred by the investors in the primary market and then comes insurance companies, development banks, commercial banks, hotels, manufacturing and processing companies and other. The numbers of issuing finance companies is greater than the issuing commercial banks. However, in the market investors prefer commercial banks to finance companies. The issues made by commercial banks are highly oversubscribed in primary market. If we see the subscription ratio of manufacturing and processing companies it is just 0.57 which shoes that the issues of this sector suffer from under subscription. Whereas issue of financial institutes, development banks, insurance and commercial banks are highly over subscribed. From the analysis it is found that banking, financial and insurance sectors are the most preferred sectors whereas manufacturing and processing, hotel and other are least preferred sectors.

4.4 Primary Data Analysis

This is the major section of the study. This section includes the presentation and analysis of Primary data collection from different respondent. Questionnaire survey was made among investors of different nature randomly. The collected data have been presented in the table and then analyzed. The main purpose of Primary data analysis is to achieve the objective of study. The total no of respondent is 85. Details of the descriptive statistics are shown below.

Table 4.5

Primary Data-Descriptive Statistics.

Age	**Nos.**	**Percentage**
Below 35	30	35.29
35 and above	55	64.71
Sex		
Male	65	76.47
Female	20	23.53
Education		
Up to graduation	57	67.06
Post graduation and above	28	32.94
Category		
Less informed	30	35.29
Informed	35	41.18
Well-informed	12	14.12
Analyst (professional)	8	9.41

Source : Questionnaire survey, 2009

Age

Among total respondent, 35.29% were below 35 year and rest were 35 and above group.

Sex

Among total respondent 76.47% were male and only 23.53% were female.

Education

On the basis of education investors are categorized in two groups up to graduate and postgraduate and above. Among them majority were graduate i.e. 67.06% and rest 32.94% respondent were postgraduate and above.

Category

On the basis of category investors are divided into four groups i.e. less informed, informed, well informed and analyst (professional). In survey period those investors which were found in NEPSE, CIT, SEBO and broker's office were informed and analyst. They were around 25%. Similarly majority were informed i.e. 41.18% and 35.29% were less informed investor.

As mentioned in the objective, this study explores different investor's preference over different financial instruments in Nepal. So in this study primary data analysis investor's preference has been studied in terms of financial instruments. Investment alternatives, Investment, Investment sector, Investment objective, consideration of investor while Investment, Investor's attitude toward derivative securities. Government securities, awareness toward securities, risk and return etc were studied. The main purpose of this section is to achieve the objective of the study.

4.4.1 Preference Over Major Financial Instrument.

This study has considered common stock, preference share, government bonds, debentures, mutual funds and treasury bills as the major financial instruments.

Table: 4.6

Ranks Of Major Financial Instruments.

Financial Instruments	Rank sum	Rank
Common Stock	209	1st
Preference shares	114	2nd
Government bonds	77	3rd
Debenture	47	4th
T-Bills	35	5th
Mutual Funds	28	6th

Source: Questionnaire survey, 2009, (Q.No.1) Details in appendix 4

Table 4.6 list down these financial instruments as well as it present the rank sums and ranks. Greater ranks sum means better. Here we can see common stocks, have the highest rank, preference share just lower then comes government bond, Debenture, T-Bills lower accordingly and mutual fund have got the lowest ranks sum.

$$\text{Median} = \text{Value of } \frac{N\,\Gamma 1}{2} \text{ item} = \text{value of 3.5th item} = \left(\frac{77+47}{2}\right)^{th} = 62$$

Calculated median 62 has been calculated on the basis of rank sum. As per median the stock which has rank sum more then 62 is the preferred instruments in comparison to other with less rank sum. So common stock, preference shares and government bonds are most preferable instruments in comparison with debentures, T- bills and mutual funds.

Hypothesis Testing

Rank given by different respondent is valid only if the difference of rank sum is statistically significant. A suitable test that can establish the significance of differences of the ranks sums is Friedman test. It consists of computing a test statistic called Friedman chi-square. Before computing the test statistic, we have to accept the assumption that each individual respondent prefer all financial instrument.

The hypothesis to be tested is that all financial instruments are equally preferred, against the alternative that at least one instrument is preferred more than the other remaining instruments.

H_0: There is no significance difference of the preference of investors among the different Financial Instruments.

H_1: There is significance difference of the preference of investors among the different Financial Instruments.

Table 4.7

Calculation of Friedman test-statistic

Details	Major financial instruments.						
	Common stock	Preference share	Debenture	T-Bills	Government Bonds	Mutual Funds	Total
T	209	114	47	35	77	28	510
T^2	43681	12996	2209	1225	5929	784	66824
x^2	571	274	79	63	153	50	1190
		Sum of Square					d.f.
Between Instruments		$SS_{instruments} = \frac{T^2}{n} - \frac{G^2}{tn} = 276.165$					t – 1 =5
With in subjects.		$SS_{people} = x^2 - \frac{G^2}{tn} = 680$					n(t-1)= 425

Notations:

T = Total rank, rank sum, (rank weight)
n = No or subjects (Respondent)
ϕx^2 = Summation of square of rank
t = Number of instruments.
G = T
Now,

$$\Re^2 = \frac{n(t\ Z1)SSalternative}{SSpeople} X172.603$$

Since, tabulated critical value of chi-square at 0.05 level of significance (5 d.f.) = 11.070, the calculate value of chi-square (172.603) exceeds the tabulated value (11.070). The null hypothesis is rejected and alternative hypothesis is accepted. It means all alternatives statistically valid. So, must prefer instrument is the common stock and very least preferred alternative are T-bill and mutual fund.

4.4.1.1 Preferences as per Types of Investors.

Preference over financial instruments may differ with the types of investors. To test whether ranking of different types of investors are similar or not, investors were categorized as less informed, informed, were informed and analyst. Table 4.8 shows ranks (weight) of financial instruments given by different investors.

Table 4.8
Preference as per Types of Investors

Investors	Financial Instruments					
	Common stock	Preference Share	Debenture	T-Bill	Govt. bonds	Mutual Funds
Less informed	6	5	3	1	4	2
Informed	6	5	3	2	4	1
Well informed	6	5	3	2	4	1
Analyst (Professional)	6	5	3	2	4	1
R	24	20	12	7	16	5
Mean	6	5	3	1.75	4	1.25
R^2	576	400	144	49	256	25

Source: Questionnaire survey, 2009(Q.No.1), Details in Appendix 5.

Above table 4.8 summarizes the ranks given by all types of investors to the six different types of financial instrument. Greater ranks means better from the table it can be seen that common stock appears as the most preferred instrument for all types of investor since it has got the highest rank from all categories of investors. T-Bills and mutual funds are less preferred instrument among various categories of investor.

Hypothesis Testing

To test whether there is some agreement in the preference of these four categories of investors, or preference of four category of investors are similar nature or not. A test statistic Kendall coefficient of concordance W has been used. Kendall W shows the agreement the preference of these four categories of investors. Hypothesis to be tested in this regard are

H_o: The ranking made by four types of investors are independent and their preferences are not similar.

H_1: The ranking made by four types of investors are not independent and their preferences are similar.

$$W = \frac{12 \quad R^2_i - 3\,k^2\ N\,(N+1)^2}{k^2\ N\,(N-1)^2}$$

Where,

W= Kendall coefficient of concordance

R = Sum of the ranks (weight)

K = Number of cases who ranks (category)

N = Number of conditions or objects being ranked.

Now,

$$W = \frac{12(1450) - 3\,4^2\ 6\,(6+1)^2}{4^2\ 6\,(6-1)^2} \qquad = 0.979$$

Calculated Kendall's W for the above case is 0.979. It means that the preference of all types of investors match to each other i.e. they all are similar in nature. To test significant at 0.05 lever of significance, tabulated value of W can be referred, which equals 0.512 at K = 4 and N= 6. It means that null hypothesis is rejected since calculated value (0.979) is greater than critical value (0.512).

Now, we can conclude that the rankings made by different categories of investors are in high degree of agreement. Their preferences are highly similar. The preferences over these instruments of less informed, informed, well informed and analyst (professional) investors are not very different.

4.4.2 Preference over Major Investment Alternatives.

In this study, corporate securities, government securities, real estate and bullion are taken as major investment alternatives. Following table 4.9 shows rank assigned by investors.

Table 4.9

Ranks of investment Alternatives

Investment Alternatives	Rank Sum	Rank
Corporate Securities	239	1st
Government Securities	228	2nd
Real estate	219	3rd
Bullion	184	4th

Source: Questionnaire survey, 2009 (Q. No. 2) Details in appendix 6

Median = Value of $\frac{n\Gamma 1}{2}$ th item = value of 2.5^{th} item = $\left(\frac{228 + 219}{2}\right)^{th}$ = 223.50

Value of median is 223.50 it means the investment alternatives which have the rank sum of more then 223.50 are preferred alternatives and those with less rank sum are the less preferred alternatives. On this basis it can be say that corporate securities and Government securities are most preferred investment alternative, whereas real estate and billion are less preferred investment alternatives. Total respondent were 85 taking response of total respondent, Investment alternatives are ranked as per their rank sum. It shows that corporate securities are the most preferred alternatives, government securities is second preferred alternative and then come real estate. The bullion falls in the least preferred category.

Hypothesis testing:

To test statistically validity of ranks given by different investor Friedman test is used. Hypothesis to be tested are:

H_0: Corporate securities, government securities, real estate and bullion all are equally preferred by the investors.

H_1: Corporate securities, government securities, real estate and bullion all are not equally preferred by the investors, any of them is more preferred.

Friedman test statistic 28.57 (details in appendix 7). Tabulated value of Chi-square at 0.05 level significance (3 d.f.) = 7.815. Since, calculated value of Chi-square is higher than the tabulated value so the null hypothesis is rejected and alternative hypothesis is accepted. So, it can be said corporate securities, government securities, real estate and bullion are not equally preferred by investors. The ranks given to the sector are valid. It means that the most preferred alternative for investment is the corporate securities and least preferred alternative is the bullion.

4.4.2.1 Preference as per Types of Investors.

Investors are categorized as four categories (details in appendix 2)

Table 4.10
Ranks Given By Different Investors.

Investors Category	Investment alternatives			
	Corporate securities	Government securities	Real estate	Bullion
Less informed	3	2	4	1
Informed	3	4	2	1
Well informed	4	3	2	1
Analyst (professional)	4	3	2	1
R	14	12	10	4
Mean	3.5	3	2.5	1
R^2	196	144	100	16

Source: Questionnaire survey 2009 (Q.No.2). Details in appendix 8

Above table summaries the ranks given by all types of investors to the investment alternatives. Greater ranks means better from this table it can be seen that almost all investor prefer corporate securities and bullion is least preferable alternatives. Less informed, well informed and analyst have shown their preference toward government securities with highest rank similarly, they ranked equal to corporate securities and real estate.

Hypothesis Testing

A test statistic Kendall coefficient of concordance W has been used. Hypothesis to be tested in this regard are:

H_0: The ranks made by four categories of investors are not in agreement they are completely

independent.

H_1:The rank made by four categories of investors are in agreement they are not independent.

Now,

$$W = \frac{12 \quad R^2 - 3\,k^2\,N\,(N+1)^2}{k^2\,N\,(N-1)^2} \quad = 0.70$$

In above calculation Kendall's W is 0.70, this represents the degree of agreement among the four types of investors ranking the four investment alternatives. Tabulated value of Kendall's W at 0.05 level of significance at N= k = 4 is 0.169. The computed value (0.70) is greater than tabulated value, (0.169). In this case we reject the null hypothesis and accept alternative hypothesis and conclude that the ranks of four types of investors are in agreement they are not independent or preference of these investor are highly similar nature.

4.4.3 Response toward choice of instruments

To be clear about investor's attitude toward choice of instruments this statement was made as question, details in appendix 3.

Table No. 4.11

Response towards choice of instruments.

In Nepalese Capital Market, there is not wide choice of instruments, so we are complete to buy whatever floats in market show your opinion				
Strongly Agree	Agree	Indifference	Disagree	Strongly Disagree
15	50	13	4	3
17.65%	58.82%	15.29%	4.71%	3.53%
IPA = 0.72 **Mode : Agree**				

.Source: Questionnaire survey, 2009 (Q.No.3), details in appendix 9.

Since, Index of perceived agreement (IPA) is 0.72 and mode in this case is "Agree", so, we can conclude that investors agree with the given statement. It reflects our capital market really lacks the choice of new instruments from investor's point of view. Financial innovation or the issuances of the new securities are lacking Nepalese financial market.

4.4.4 Preference over Investment Sectors.

NEPSE has categorized the listed companies in 8 sectors as commercial banks, finance companies, insurance companies, development banks, manufacturing and processing, trading, hotel and others.

Table 4.12

Ranks given to investment sectors.

S.N.	Investment sector	Rank sum	Rank
1.	Commercial banks	199	1st
2.	Finance companies	145	2nd
3.	Insurance companies	80	3rd
4.	Development banks	49	4th
5.	Manufacturing and processing company	16	5th
6.	Hotels	7	7th
7.	Trading companies	4	8th
8.	Others	10	6th

Source: Questionnaire Survey, 2009(Q.No.4), details in appendix 10.

Table 4.12 lists the investment sectors of Nepalese financial market and summaries the ranking made by investors. Calculated mean = 32.50(detailed in appendix 10). Median has been calculated on the basis of rank sum. As per median calculated the sectors which have the rank sum more than 32.50 are the preferred sectors and the sectors which have less rank sum than 32.50 are the less preferred sectors.

According to this result, commercial banks, finance companies and Insurance companies are found to be most preferred sectors where as the manufacturing and processing, hotels, trading and others are less referred sectors. Among them commercial banks are most preferred and trading companies are least preferred sectors for investment.

Hypothesis testing

On the basis of rank sum ranks were given to the investment sectors as shown in table 4.12. To test statistical validities of those ranks Friedman test is used. Hypothesis to be tested in this regard are;

H_0: All investment sectors are equally preferred by the investors.

H_1: All investment sectors are not equally preferred by the investors some sectors are more preferred than other sector.

Calculated Friedman test statistic $\Re^2$ = 325.26 (details in Appendix 11) where as tabulated value at 0.05 level of significance and 6 d.f. = 12.592. Since the calculated value of chi-square is exceeds the tabulated value of chi-square. So, the null hypothesis is rejected. That is all investment sectors are not equally preferred. The ranks given to the sectors are significantly valid. It means commercial bank is the most preferred sector of investment then comes finance company, insurance companies, developments banks, manufacturing and processing companies, hotels, trading and others companies respectively.

4.4.5 Preference over investment objectives.

Different investors might have different objectives such every investor has some objective over the investment. In this regard major investment objectives are the regular return, price increment, safety (less risky) and marketability. Here the study has tried to know the preferences of investors over these objectives.

Table 4.13

Ranks of investment objectives.

Investment objectives	Rank sum	Rank
Regular return (dividend)	219	2nd
Price increment (capital gain)	282	1st
Less risky (safety)	132	4th
Marketability (easy to buy and sell)	197	3rd

Source: Questionnaire Survey, 2009(Q.N.5), details in appendix 12.

Table 4.13 shows the frequency of ranks provided by respondents to those objectives, ranks sum and ranks. Calculated median is = 208 (details in Appendix 12). Calculated median means that the investment objective which has the rank sum of more than 208 is the preferred objectives and vice versa. It means, price increment (capital gain) and regular return (dividend) are the preferred objectives in comparison to marketability and less risk (safety).

Hypothesis testing

Friedman test is used to test whether the rank we have assigned is statistically valid or not. In this regard Hypothesis is:

H_0: Investors equally prefer all the investment objectives.

H_1: Investors don't prefer al the investment objectives equally.

Calculated Friedman test statistic $\Re^2$ = 83.08 at d.f. 3 (details in appendix 13). The tabulated value of chi-square at 0.05 significance limit with 3 d.f. is 7.815. Since calculated value of chi-square (83.08) is greater than tabulate value (7.815) so the null hypothesis is rejected. This means that the alternative hypothesis is accepted which represent the investors do not prefer all the objectives equally. Price increment and regular are the preferred objectives, marketability and less risky are less preferred objectives.

4.4.5.1 Preference as per types of investors.

The objectives of investment may differ with the types of investors. Table 4.14 summaries the ranks made by different investors to the four major investment objectives.

Table 4.14

Ranking made by different investors over Investment objectives.

Investors	Regular Return	Price increment	Less Risky	Marketability
Less Informed	2	4	1	3
Informed	3	4	1	2
Well informed	3	4	1	2
Analyst (Professional)	3	4	1	2
R	11	16	4	9
Mean	2.75	4	1	2.25
R^2	121	256	16	81

Source: Questionnaire survey 2009, (Q.No.5), Details in appendix 15.

In above table, it can be seen that all investor preferred most price increment objective than other, similarly, less risk objective is least preferred investment objective. In above table greater rank means better. Less informed investor have shown quite different investment objective in first position with its rank four then comes marketability with rank 3, Regular return with rank 2 and less risk is least preferable investment objective.

Hypothesis testing

H_0: The ranking made by different categories of investors for investment objective are independent, they are not in agreement.

H_1: The ranking made by different categories of investors for investment objective are not independent.

Calculation Kendall's W is 0.93 (Details in appendix 15). This represents the degree of agreement among the four types of investors in ranking the four investment alternatives. Tabulated value of Kendall's W at 0.05 level of significance at N = K= 4 is 0.619. Since calculated value (0.93) is greater than tabulated value (0.619). It means that we reject null hypothesis and conclude that the ranking made by four categories of investors for investment objective are not independent. Calculated values (0.93) represent high degree of agreement over investment objectives.

4.4.6 Preference on share investment factor.

Following table shows the preference of investors on share investment factor.

Table 4.15

Investor's preference on share (Stock) investment factor.

Dividend	Capital gain	Bonus share	Voting rights	Total
13	50	20	02	85
15.29%	58.83%	23.53%	2.35%	100%

Source : Questionnaire survey 2009, (Q.No.6), Details in appendix 3.

In above table, maximum frequency lies on capital gain (58.83%). It means most of the investors prefer capital gain on their share investment. Bonus share is next preferred factor of stock investment with (23.53%) responses then only come Dividend with (15.29%) very few investors (2.35%) considers voting rights as the preferred factor of share investment.

Hypothesis testing

Weight given by different respondent is valid only if the differences of frequency are statistically significant. A suitable test that can establish the significance of differences of the frequency is chi-square test. Before computing test statistic, we have to accept the assumption that each individual investor prefers all share investment factors. Hypothesis testing in this regard are:

H_0: Dividend, Capital gain, Bonus share and voting rights all are the equally preferred investment factors.

H_1: Dividend, Capital gain, Bonus share and voting rights all are not equally preferred investment factor some of them are more preferred then other.

Calculated $\Re^2$ = 59.612, Degree of freedom = 3 (Details in appendix 16). Since, tabulated value of chi-square at 0.05 level of significant (3d.f. = 7.815) the calculated value of chi-square (59.612) exceeds the tabulated value (7.815) the null hypothesis is rejected and

alternative hypothesis is accepted. Which means that Dividend, capital gain, Bonus share and voting rights all are not equally preferred investment factors? So we conclude, capital gain is high preferred, than comes Bonus share and Dividend, voting rights is very least preferred share (stock) investment factor.

4.4.7 Consideration For Investment Decisions.

To analyze investor's preference over major consideration factors before making investment decision, major 6 factors are taken. Table 4.16 shows major consideration factors and their responses.

Table 4.16

Consideration for investment decisions.

Consideration factors	Frequency
Companies Forecasted Profit	53
Companies goodwill	82
Companies advertisement	45
Suggestion of friends or relatives	35
Taxation	10
Expected risk factor	30

Source: Questionnaire survey, 2009 (Q.No.7), Details in Appendix 3.

After studying the frequency we can say that company's goodwill is the factor which majority of investors considers before making investment decisions, then comes companies forecasted profit, and the companies' advertisement comes in third place of consideration. Similarly suggestion of friends or relatives, expected risk factor and taxation are less consideration factors.

Hypothesis testing

Hypothesis testing in the regard are:

H_0: The responses of investors toward all consideration factors are similar.

H_1: The responses of investors toward all consideration factors are not similar, some most important.

Calculated Chi-square = 69.871 (details in appendix 17)

Degree of freedom (d.f.) = 5

Tabulated value of chi-square at 0.05 level of significance and 5 d.f. is 11.170. Since the calculated value exceeds the tabulated value null hypothesis is rejected. So, it can be said that investors prefer the factors like company's goodwill, forecasted profit and advertisement to consider before making investment decisions in comparison to the factors like suggestion of friends, risk factor and taxation.

4.4.8 Awareness of financial derivatives

Financial derivatives option warrant and convertible are taken in this study. In Nepal none financial derivatives have been practice yet.

Table 4.17

Attitude toward financial derivatives.

<table>
<tr><td colspan="6">Are you familiar with the derivative securities?</td></tr>
<tr><td rowspan="6">Yes</td><td rowspan="6">35</td><td rowspan="6">41.18%</td><td colspan="2">If yes which one?</td><td>Respondent</td></tr>
<tr><td colspan="2">Option</td><td>12</td></tr>
<tr><td colspan="2">Warrants</td><td>7</td></tr>
<tr><td colspan="2">Convertible</td><td>13</td></tr>
<tr><td>Are you willing to invest on them?</td><td>Yes</td><td>No</td></tr>
<tr><td></td><td>25</td><td>10</td></tr>
<tr><td>No</td><td>50</td><td>58.82%</td><td colspan="3" rowspan="2"></td></tr>
<tr><td>Total</td><td>85</td><td>100</td></tr>
</table>

Source: Questionnaire survey, 2009, Question No. 8.

In above table, majority of investors (58.82%) were found to be unaware of financial derivatives. Only 41.18% of investors were found to be aware of financial derivatives. Among them, most of them know about convertible (since it has got the largest frequency 18). Then comes option with 12 frequencies. Few investors (7) know about warrant. Among those who were familiar about financial derivatives were asked whatever they willing to invest on them if they got opportunity, for that questions among 35 investor 25 of them said yes where as remaining 10 investors said they just know about derivatives but don't want to invest on that securities.

4.4.8.1 Education and knowledge of financial derivatives.

Maximum frequency 58.82% of investors was unaware of financial derivatives as the investment opportunity only 41.18% of investors are aware of financial derivatives. To

know how education of investors affect knowledge of derivatives or not. To know about derivatives but don't want to invest on that securities.

Level of education	Are you familiar with derivatives?		
	Yes	No	Total
Up-to graduation	12	43	55
Post graduate and above	23	7	30
Total	35	50	

Source : Questionnaire survey. 2009 (Q.No.8).

In the above table it can be seen that very few respondent (35) out of 85 were familiar with derivatives securities. Among them 23 were post graduate and above, where as only 11 respondent (up to graduation) were familiar with derivative securities.

Hypothesis testing

H_0: There is no relation between the level of education and knowledge of derivatives.

H_1: There is relation between the level of education and knowledge of derivatives.

Calculated value of chi-square 24.11 (d.f. = 1) (Details in appendix 18). The tabulated value of chi-square at 0.05 level of significance limit with 1 d.f. is 3.841. Since, calculated value is higher than the tabulated value so, we accept alternative hypothesis (reject null hypothesis). This means that there is association between level of education and knowledge of derivatives. The rejection of null hypothesis means that there is some relation between these two attributes Cramer coefficient C has been calculated.

$$C = \frac{\Re^2}{N(L-1)}$$

Where

$\Re^2$ = Chi square
N= Number of observations.
L= Minimum of the number of rows or column in contingency table.

Calculated Carmer's C = 0.53

Cramer's =0.53 also shows that those two variables have a significant relation (since C is significantly different from zero). Now we can say that knowledge of derivatives different with the level of education. Most of the investors with high level of education were aware of derivatives.

4.4.9 Whim and Rumor

In this regard some statements were forwarded as question in a 5-point Likert scale to know the perception of the investors.

Table No. 4.19

Attitude towards whim and rumor.

Nepalese investors do not have defined preferences they just follow the whim and rumor.				
Strongly Agree	Agree	Indifference	Disagree	Strongly Disagree
16	40	12	11	06
18.82%	47.06%	14.12%	12.94%	7.06%
IPA = 0.678 **Mode : Agree** **Overall response: Agree**				

.Source: Questionnaire survey, 2009 (Q.No.9).

Since, index of perceived agreement is 0.678 and mode in this case is "Agree". Mode and IPA both show that investors themselves believe they are guided by whim and rumor. Most of them were saying that since our market itself is very much affected by whim and rumor, they also cannot be separate from it. They have to make trade or hold decision on the basis of those whim and rumor.

Table No. 4.20

Analysis before investment

Nepalese investors do detailed analysis before investing in financial instruments.				
Strongly Agree	Agree	Indifference	Disagree	Strongly Disagree
07	15	16	35	12
6.02%	19.28%	18.07%	40.96%	15.66%
IPA = 0.472 **Mode : Disagree** **Overall response: Disagree**				

.Source: Questionnaire survey, 2009(Q.No.9).

Since IPA is 0.472 and mode is "Disagree" there for overall response in this case is "Disagree", so we can conclude that investors disagree with the given statement. It means Nepalese investors don't analyze before investing in financial instruments. This result supports that majority of Nepalese investors are guided by whim and rumor.

4.4.10 Attitude toward Government securities:

Table 4.21

Investment on government securities.

	Frequency	Percentage
Investors who invested in government securities	55	64.71
Investors who have not invested in government securities	30	35.29
Total	85	100
For those who invested in government securities , what factor mode them invest on government securities?		
No risk/safety	43	78.18%
Liquidity (Marketability)	07	12.73%
Your friends and relatives	02	3.84%
NRB Notices	03	3.77%
Total	55	100%

.Source: Questionnaire survey, 2009(Q.No.11).

Maximum frequencies 64.71% of investors have invested in government securities and rest 35.29% investors have not invested in government securities. Who invested in government securities, 78.18% of them have invested in government securities due to

safety or no risk. 12.73% have invested because of the liquidity of the securities and very few investors 3.84% and 5.45% have invested in government securities with the force of their friends and relatives as well as NRB notices respectively.

Table 4.22

Attractive of government securities

(Those who have not invested in government securities)

Do you believe, government securities yield less than corporate securities, so they are not choice of individual investors?					
Strongly Agree	Agree	Neither Agree nor disagree	Disagree	Strongly Disagree	Total
2	11	8	6	3	30
6.66%	36.67%	26.67%	20%	10%	100
IPA = 0.56 **Mode : Agree** **Overall response: Agree**					

.Source: Questionnaire survey, 2009(Q.No.11).

Table 4.22 shows that only 8 investors neutral for this statement, besides them all of the investors agreed on this statement. Calculated mode for this statement is "Agree" and IPA in this is 0.56. This means investors agree that the government securities yield less than corporate securities so they are not choice of individual investors. Majority respondents (11) among 30 are in agreeing position so it reflects given statement.

4.4.11 Preference toward varying risk-return alternatives

Table 4.23
Varying risk-return and preferences of investors.

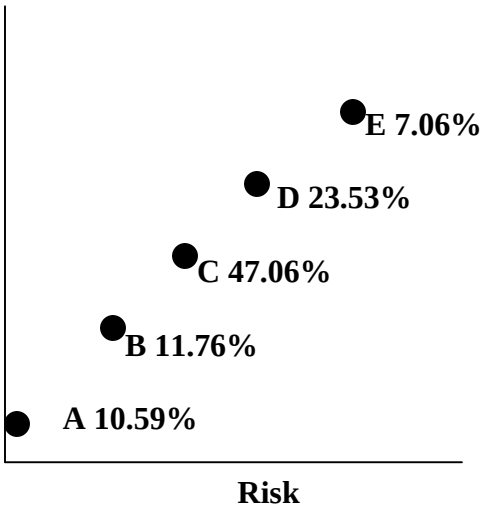
S.N.	Varying risk-return alternatives	Frequency	Percentage
A	Normal return no risk	9	10.54
B	Small return moderate risk	10	11.76
C	Moderate return moderate risk	40	47.06
D	High return greater risk	20	23.53
E	Super return maximum risk	6	7.06
	TOTAL	85	100

.Source: Questionnaire survey, 2009 (Q.No.10).

Frequencies as well as percentage shows that maximum response is toward C alternative which shows moderate return and moderate risk. Then next is alternative D with response of 23.53% with high risk and greater return.

Fig 4.4

Investment preference incase of risk and return



Above figure 4.4 Shows A, B, C, D and E in risk return level, along with the percentage of response. Maximum investors were found moderate risk bearer with high frequency 40. Where as, since the study is mainly focused on financial instruments, so significant portion of the investors 20 were found to be taking high risk. However, there was very little number of investors (6), who preferred the most risky alternatives with super return.

Mirror shows maximum respondent (47.06%) were toward C, them comes (23.53%) D and (11.76%) B. Very few respondent were toward (10.59%) A and (7.06%) E.

4.5 Institutional Investor Preferences.

This study is mainly focused on the institutional preferences towards government securities and corporate securities by various six Commercial Banks of Nepal.

Table 4.24

Investment of Finance Companies in Government securities and common stocks.

(Rs in million)

Investment in Government securities						
Details	2003/04	2004/05	2005/06	2006/07	2007/08	Average
Total	15258.710	17820.52	21891.87	21282.149	24819.92	20214.634
Average	2543.118	2970.087	3648.645	3547.025	4136.653	3369.106
Growth(%)	-	16.789	22.846	-2.785	16.623	13.368
Individual samples (average growth in investment in government securities)						
Standard Chartered Bank Nepal Ltd.			11.25%			
Everest Bank Ltd.			28.06%			
Bank of Kathmandu Ltd.			62.43%			
Nabil Bank Ltd.			-12.40%			
Nepal Investment Bank Ltd.			126.25%			
Himalayan Bank Ltd.			17.63%			
Investment in common stocks						
Total	136.680	136.680	121.48	623.688	143.601	232.426
Average	22.780	22.780	20.247	103.948	23.934	38.738
Growth (%)	-	0	-11.119	413.400	-0.7698	100.378
Individual samples (average growth in investment in government securities)						
Standard Chartered Bank Nepal Ltd.			8.55%			
Everest Bank Ltd.			3.96%			
Bank of Kathmandu Ltd.			68.20%			
Nabil Bank Ltd.			446.88%			

Nepal Investment Bank Ltd.	6.90%	
Himalayan Bank Ltd.	4.13%	

Source: Respective Finance Companies Annual Report (2003/04 to 2007/08)

Table 4.25 shows that the total investment made in government securities by the six commercial banks, growth rates along with the growth rates of same investments of each sample. Similarly the lower segment of the table shows the same figures concerned with the investments made in common stocks of other companies by the commercial banks.

Table 4.25
Investment of Finance Companies in Government securities and common stocks.

(Rs in million)

Investment in Government securities						
Details	2003/04	2004/05	2005/06	2006/07	2007/08	Average
Total	233.233	254.483	156.457	164.697	122.701	186.314
Average	38.872	42.414	26.076	27.450	20.450	31.052
Growth(%)	-	9.112	-38.520	5.269	-25.501	-12.41
Individual samples (average growth in investment in government securities)						
Goodwill Finance			-6.03%			
Kathmandu Finance			-25%			
Alpic Everest Finance			-8.15%			
United Finance Company			-25%			
Universal Finance			-12.6%			
Lalitpur Finance			-28.60%			
Investment in common stock						
Total	133.867	132.159	106.276	95.454	133.363	120.224
Average	22.311	22.027	17.713	15.909	22.227	20.037
Growth (%)	-	-1.273	-19.585	-10.185	39.713	2.168
Individual samples (average growth in investment in government securities)						
Goodwill Finance			-24.18%			
Kathmandu Finance			-18.78%			
Alpic Everest Finance			-1.45%			
United Finance Company			-			
Universal Finance			29.78%			
Lalitpur Finance			20.80%			

Source: Respective Finance Companies Annual Report (2003/04 to 2007/08)

All individual samples of finance companies growth rate in investment in government securities are positive. It implies that their investment in government securities is growing negatively. On the other hand the growth of investment in common stock of finance companies is little good (2.168%), so it can be say that no one finance company prefer to invest in government securities, the growth rate figure (-12.41%) defines itself: (Detail calculation is shown in appendix 20)

For both sectors (commercial banks and finance companies), we can see that huge investments are made in government securities in comparison to common stocks. When we see the average growth rates for the commercial banks growth rate of investment in common stock is higher, whereas also in finance companies growth of investments in common stock was found higher.

Hypothesis Testing

Whether the attitude of two samples, commercial banks and finance companies are same toward the government securities or not, to test this t-test has been used. Hypothesis testing
in this regard are:

H_0: The average investments on government securities by commercial banks and finance companies are not significantly different.

H_1: The average investment on government securities by commercial banks and finance companies are different.

Calculated t-test is (8.727) at 4 d.f. and tabulated value of t at 4 d.f., 0.05 level of significance (two tails) is 2.776. Since calculated t (8.727) is greater that the two tailed critical value of t (2.776). So, in this case H_0 is rejected. It implies that the investment on government securities by commercial banks and finance companies are significantly different.

Above results of growth rates and the rejection of this hypothesis say that government securities are more preferred by commercial banks than the finance companies. The result was so, because of the difference in the size of the two samples also; size, in the sense of

their total capital, total investment and so on. Commercial banks are the giant companies in comparison to the finance companies. So their average investment on government securities will definitely difference from those of the finance companies.

4.6 Major Findings of the Study

4.6.1 Finding based on Secondary Data

- Total amount issued through corporate securities in the period of fiscal year 1998/99 to 2007/08, shows that 73.05% of total issue is covered by common stock. It has highest coverage in total corporate issues, which represent that common stock is the most widely used corporate securities than other. Debenture is next security with coverage of 19.22% of total issues; preference share is in very low level with 2.34%.

- Through the analysis of Government securities it is found that Treasury Bills covers 49.92% of total issues. Special bonds and Development bonds have also significant coverage 18.93% and 15.88% respectively. In the same way National Saving bonds also covers 14.41% of total issues. But public saving cards only cover 0.86%, it is a new concept so it is in low level but increasing.

- According to the sector wise transaction of securities it is found that banking sector is the most preferred. Secondary data obtained from NEPSE trading floor of last five year trading volume shows that commercial banks covers 75.71% of total transaction. In the fiscal year 2007/08 trading shows that 89.38% of total trading was covered by commercial banks and finance companies.

- By the Analysis of primary subscription ratio we found that the issues of banking and financial institution are highly over subscribes. Issue made by manufacturing and processing companies suffers from under subscription. It shows that in the primary market also preference is up on banking and financial sector. No new

primary issues are held in the fiscal year 2007/08 by Hotels and Manufacturing & Processing companies.

- Institutional investors: Commercial banks and financial companies were taken. Huge investments were made in government securities in comparison to invested in common stocks. Commercial bank's average growth rate of investment in common stock is higher than the finance companies. Where as finance company's growth of investments in government securities were found higher.

4.6.2 Findings based on Primary data

- As per the primary data Nepalese capital market heavily depends up on common stock. The issuance of other instruments in comparison to common stock is very poor. To supplement these finding, investors were asked is the capital market lacks the choices. This was agreed by the majority of investors since IPA: 0.72. It means that there is not wide choice of instrument in Nepal.

- Nepalese investors are more attractive towards Banking and financial sectors they preferred most to these two sectors in comparison to other sectors like, manufacturing & processing, trading, hotel and others. Commercial banks, finance companies, development banks, and insurance companies were found most preferred sectors.

- In regard to corporate securities, government securities, real estate and bullion, almost all investors prefer corporate securities most and least to bullion. Less informed, well informed and analyst have shown their preference toward government securities. Those who are less educated and less informed are found to be unaware of securities market. So they want to invest only small portion of their saving in financial instruments.

- Major investment objective Regular return, price increment, less risky, marketability was presented to the investors to see what type of objective they

prefer most? Less informed investors have shown quite different they choose marketability objective in second rank and regular return in third rank. But in overall price increment appeared as most preferred objectives. Less risky is least preferred investment objectives.

- In the context of Nepalese financial market we see that the market is lacking of analyst/ professional investors. Investors have agreed that they are guided by whim and rumor (IPA: 0.687), and investors disagree (IPA: 0.472) that they do detail analysis before investing on financial instruments. This result that the majority of the Nepalese investors are guided by whim and rumor.

- Our study shows that the Nepalese investors are found very poor towards the awareness of derivatives. 58.82% of respondent replied that they have not ever heard about derivatives. Only some educated and professional investors were found to be aware of derivative securities. Before making investment in financial instruments the various factors like goodwill, forecasted profit, company's advertisement etc are also considered.

- In the case of risk, we found that the majority of investors (47.06%) were found moderate risk bearer, significant portion of investors (23.53%) were found to be taking high risk. Very little number of investors (7.06%) was toward the super return with maximum risk. But some investors (10.59% and 11.76%) was normal return with normal risk and small return with less risk respectively.

- As per the primary data we found that 35.29% of respondent have not invested in government securities. Majority of those who have invested said that they have invested due to safety. Government securities yield less than corporate securities so they are not choice of individual investor.

- Nepalese capital market really lacks the choice of investment in new instruments. From the investors point of view 58.82% of respondent were agreed they are

oblige to buy what ever floats in market. So we can say that there is not wide choice of financial instrument in Nepal.

- Before making investment decision Nepalese investors considers Good will is the most important factor, likewise companies' forecasted profit is ranked as second place. Advertisement is in third place. Similarly suggestion of friends or relatives, risk factor and taxation are least considerable factors.

CHAPTER V

SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1. Summary

Nepalese capital market consist of ordinary shares, right shares, preference shares, debentures, mutual funds and unit scheme as major corporate securities. T-bills and several types of bonds like: Development Bonds, National Saving Bonds, Special Bonds and IMF Promissory notes are government securities. Treasury-bills for the first time was issued in 1962 and Development Bonds in 1964. Biratnagar Jute mill is the first manufacturing organization which was issued common stock in 1936. The first security exchange centre was established in 1976, before it there was no institutional arrangement to understand & manage the new issues of securities. Nepal Government converted Security exchange centre into Nepal Stock Exchange (NEPSE) on 16th May, 1993. SEBO was also established to regulate and control the financial market. It also works in the field of policy making regarding the financial securities.

Nepalese financial market consists varied of investors. There are those investors who were completely unaware of market mechanism on the other hand, there are professional players of security market (although in few number) also. However, the institutional investors seem very much passive in secondary market although their participations in IPO are very significant. This study focuses more on general investor's preferences in terms of financial instruments, Investment alternatives, investment sectors, investment objectives etc. Response of 85 subjects, selected on the basis of judgment is taken for the study.

Among the major financial instrument common stock, preference share, government bond, debentures, T-bills and mutual fund were presented to the investors, to see what they prefer most? Here common stock appeared as the most preferred financial instrument. Preference share appeared in second most preferred instrument. Response toward government bonds were found in third most preferred instrument. Those investors who are more aware and educated have also welcoming attitude toward government

bonds. Preference of different categories of investors (less informed, informed, well informed and analyst) were also found similar. Government issuance shows that treasury bills are most widely used instruments since it alone covers 49.92% of total issue during the analysis period of fiscal year 1998/99 to 2007/08.

Commercial banks, financial companies and insurance companies were found to be most preferred sectors. All types of investors preferred commercial banks at the most preferred sector to invest. Last year (2007/08) trading of securities show that 80.52% of total trading volume was covered by only the shares of commercial banks. Corporate securities, government securities, real estate and bullion were taken as major investment alternatives. Almost all investor prefer corporate securities most, government securities are also quite preferable sector.

There are various categories of investors and they also have the own investment objectives. The main investment objectives are regular return, price increment, safety and marketability, but investors don't prefer all the objectives equally. Price increment and regular return are the preferred objectives similarly marketability and less risk objectives are less preferred objectives. Nepalese investors prefer to get regular return form their investment.

The awareness toward the financial instrument of Nepalese investors is very poor. Investor themselves believe that they are guided by whim and rumor. Most of them were saying that since our capital market itself is very much affected by whim and rumor. They usually make trade of hold decision on the basis of whim and rumor. Similarly they don't analyze before making investment decision.

5.2 Conclusion

The history of Nepalese capital market shows that only three types of securities are issued at various periods. Nepalese securities market is completely dominated by common stock. Investors do not have more choices of investment securities so they are compel to invest on money on limited investment opportunists. Commercial banks, finance companies and insurance were found to be the most preferred sectors. All types of investors preferred commercial banks at the most preferred sectors to invest where as, sector like hotel and trading are least preferred sectors.

There are very less numbers of professional giant individual investors, we can almost count them easily. However there is large number of tiny investors who holds little no. of share of one or two companies. A dualism can be found if we see the scenario of investors, there are very large investors (although in less number) and their small investors too, in very large number. The awareness level of those large professional investors is really good, but small investors seldom know about the market mechanism. Many of them, who have just invested due to the influences of friends and relatives, even they don't know how the transfer of share ownership takes place and what its process is. The awareness level of genera investor is really poor. They just follow the whim and rumor of the market. Thos who don’t know about the financial market and investment scenario prefer real estate where capital gets stuck for the long time in hope of rise in their price. Such investment will not help in the capital mobilization for the economy of the nation.

Commercial banks, finance companies, insurance, pension funds, investment trust etc are the major institutional investors of any economy. In Nepal, all of these are passive and not taking actively in the capital market, especially in secondary market it seems stock market liquidity needs to improve seriously. The defective’s services of market intermediaries, conductive and realistic policies of regulating authorities, awareness programmer etc is major felt needed.

Some positive aspects are that the few analysts are providing training about the financial securities and in significance in securities market. They are trying to increase the number

of new investors. It is found that the Nepalese capital market is lacking of new investors. Limited numbers of investors are involving in this sector. Market trends are not flowing in a right path whim and rumor is totally affected the market.

5.3 Recommendations

- Nepalese capital market is lacking of financial innovations. To attract different investors and their savings towards financial system, new securities of different nature are to be introduced. Hybrid type of instruments like future, options, warrants, convertible, swaps etc can be some of the examples.
- Holding of government securities by general investors is in low level. To increase participation of individual investors toward government securities new types of bonds, saving cards, municipal bonds etc should be issued.
- Rules and regulation relating to security market and transaction are not sufficient. So regulating bodies (SEBON) should amend the existing rules and regulation to make the trading transparent and scientific.
- The "open out cry" system is not effective. So, trading mechanism needs improvements to the new technologies and procedures like electronic trading this will make security transaction very easy and attract more savings towards financial instruments.
- The Banking sector seems as the only attractive sector for investment. The major cause of this is possibility of dividend as well as the disclosure practice. The listed companies of other sectors should have effective disclosure practice so as to gain the trust of investor over them.
- Awareness Programme should be launched to pull out potential investors towards financial markets. This will help to increase the number of smart investors who will not just gamble on the basis of whim and rumor.
- The secondary market of Nepal should be opened outside the Kathmandu Valley. Some of government corporations are progressing after the privatization. Hence NEPSE should be privatized to conduct fluently.

- Authorized consultancy or firm should be established to provide information and adequate advices to the existing and potential investors. Effectively council by the consultancy provides confidential to investor regarding the investment.
- During the survey period many of the investors were found in confused stage. So, investors should always be clear about their preferences and investment objectives. This helps them easily to choose the investment objectives.
- Investors should develop the habits of studying related publications, periodicals and reports. They should try to well inform of the alternatives prevailing in the investment environment. They should not carry away by the whim and rumor.

To avoid the passiveness in secondary market of the institutional investor some flexibility in the directive should be brought. The limitation of directives can be loosed to make investment on the financial instruments.

Bibliography

Adhikari, N.R.(2004). "*Security Market in Nepal*", SEBO Journal, Kathmandu: SEBO, 1(4):7

Benartzi, S. and Thaler, R.H. (2007). "*Investor Preference*" The Journal of Finance**,** New York: American Finance Associations, 57 (7): 14

Bhattarai, P. (2007). "*Capital Market in Nepal",* Kathmandu: Ashmita Books Publication.

Bhattarai, S. (2003). "*Debentures are Welcome*", New Business Age, Kathmandu, 2 (5): 29.

Bhattarai, R. (2005). "*Investment-Theory and Practice",* Kathmandu: Buddha Academic Publication and Distribution.

Bodie, Z., Kane A. and Marcus A.J. (2000). "*Investments"***,** New Delhi: McGraw Hill Publishing Company Ltd.

Cheney, J.M. and Moses, E.A. (1999). "*Fundamentals of Investments"***,** New York: West Publishing Company.

Dahal, D.R. (2007). " *The Performance of Nepalese IPOs* " SEBO Journal, Kathmandu SEBO, 2 (5): 15.

Dahal, K. (2008). " *Subscription Of Corporate Securities In Initial Public Offering in Nepal*." Unpublished Masters' Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Garman, E.T., Eckert, S.W. and Forgue, R.E. (1985). "*Personal Finance"***,** Boston: Houghton Mifflin Company.

Ghimire, A. (2002). "*Investor's Perspective Buy Finance Companies*" New Business Age, Kathmandu, 2(7): 29.

Goergen, S., Hahn, T.K. and Hirshleifer, D. (2006). "*The Strategy of Going Public: How UK firms Choose Their Listing contacts,*" The Journal of Finance, New York: American Finance Association, 57 (7): 23.

Grinblatt, M. and Keloharju, M. (2001). "Monitors Buys, Sells & Holds." "The Journal of Finance, New York: 56 (6): 13.

Haugen E, (1997). "Non-parametric statistics-for the Behavioral Science**",** Singapore: Mc Graw Hill International Editions.

Jhiangan, M.L. (1984). "*Advance Economic Theory"*, New Delhi: Vani Educational Books.

Kalfe, D.R. (2005). "*Primary Market Development in Nepal: Issues and Challenges*" SEBO Journal, Kathmandu: SEBO, 2 (5): 18.

Lumpkin, S.A. (1998). "*Repurchase and Reverse Repurchase Agreements"*, Virgina: Federal Reserve Bank of Richmond.

Maharjan, J. (2004). "*Investors' Preferences & Financial Instruments*" Unpublished Masters' Degree Thesis, Faculty of Management, Tribhuvan University, Kathmandu.

NEPSE (2007). "Annual Report 1998/99 – 2007/08", Kathmandu: NEPSE

NEPSE (2008). "Trading Report 2002/03 – 2007/08", Kathmandu: NEPSE

NRB (2008). Annual Report, Kathmandu: NRB

NRB (2008). Economic Report, Kathmandu, NRB

NRB (2008). Main Economic Indicator.

NRB (2008). Quarterly Economic Bulletin – April 2008, Kathmandu: NRB

Pandit, K. (2003). "*Investors Preference and Financial Instruments in Nepal*" Unpublished Masters' Degree Thesis, Kathmadu: Faculty of Management, Tribhuvan University.

Piessee, J. Stevenson, R. A. and Jennings, E. H. (1995). "Investment Management" New York: The Dryden Press.

Richards, S. M. Coper S. K. and Fraser, D.R. (1984)."Personal Finance', Illionois: Scott-Foresman & Co.

Santomero, A.M. and Babbel D.F. (1997). "*Financial Institutions Management"* **– A** Modern Perspective**,** Boaton: The McGraw Hill Companies Inc.

Sears, R.S. an Trennepohl, G.L. (1993). "*Investment Managemen"*, New Work: The Dryden Press.

SEBO (2008). "*Annual Report 1998/99 – 2007/08"***,** Kathmandu: SEBO

Sharma, D.R. (2001). "*Public Debt: System and Practice in Nepal*" Unpublished Masters' Degree Thesis, Faculty of Management, Tribhuvan University, Kathmandu.

Shrestha, M.K. (2004). "*VIP Shareholders: Emerging Concept and Implication*" Journal of Management, Kathmandu: Central Department of Management T.U.

Shrestha, M.K. Poudel, R.B. and Bhandari, D.B. (2003). "*Fundamentals of Investments*", Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Stevenson, R.A. and Jennings, E.H. (1984). "*Fundamentals of Investments*", New York: West Publishing Company.

Subedi, B. (2003). "*Investors Awareness in Security Market*" , Unpublished Masters' Degree Thesis, Faculty of Management, Tribhuvan University, Kathmandu.

Upadhyaya, S. (2004). "*Investors' Preferences & Financial Instruments*" Unpublished Masters' Degree Thesis, Faculty of Management, Tribhuvan University, Kathmandu.

Vaidya, D. and Parajuli, P.R. (2004). "*Public offering of securities*" SEBON Journal, Kathmandu: SEBO, 1 (7): 17.

Viceira, L.M. (2001). "*Optimal Portfolio choice for Long- Horizon Investors with Nontradable Labour Income* "The Journal of Finance, New York: American Finance Association, 56 (6): 17.

Walter, S.T. (1998). "*Short Term Municipal Securities 89-104 in instruments of the Money Market*"**,** edited by Cook T.Q. and Laroche R.K. Richmond, Virginia, USA Federal Reserve Bank of Richmond, [Electronic Version] Retrieved January 5, 2004 from http://www.rich.frb.org/pubs/instruments/

Weston, J.F. Basley, S. and Brigham, E.F. (1996). "*Essentials of Managerial Finance*", New York: Dryden press- Harcourt Brace College Publishers.

Websites

http://www.investopedia.com; May 14, 2009

http://www.jestor.org/egi_bin/jstor; June 04, 2009

http://www.nepalstock.com; July 28, 2009

http://www.nrb.org.np; June 14, 2009

http://www.rich.frb.org/pubs/instruments/; July 28, 2009

http://www.sebonp.com; June 14, 2009

http://media.wiley.com/productdata/excerpt/22/04712209.pdf; June 20, 2009

http://128.8.56.108/irisdata/docs/np.pdf; June 20, 2009

Appendix 3:

Questionnaire and their responses towards Financial Instruments

Dear Respondent

With due respect would like to request you to kindly fill up the following form (questionnaire) design for collecting your information as precious data input for my research work. This questionnaire is created to explore different Investor's Preferences over different financial instruments like common share, preference share, debenture, bonds etc. The data provided by will be used only for this research study as a partial fulfillment of MBS degree of Tribhuwan University. Your information and views plays an important role for this research work. In this regard it will help to explore actual scenario in this context.

Thanking you,
Kamal Pokhrel
Researcher
MBS, Shankhar Dev Campus, TU

Put tick mark [Ě] in the suitable bracket.

(A) Respondent Profile

Age:	Below 33 year	[ ]	33 years and above	[ ]
Sex :	Male	[ ]	Female	[ ]
Education:	Up to graduation	[ ]	Post graduate and above	[ ]

Select appropriate from the given alternatives, that describes you.

a) Less informed [ ]
b) Informed [ ]
c) Well informed [ ]
d) Analyst (professional) [ ]

(B) Responses toward Financial instruments.

1. What type of financial instrument do you prefer? Please mark best three as per your preferences.

(Mark 1 to best, 2 to the just lower and 3 to lower).

Ranks Weight	1	2	3
a) Common share (stock)	[ ]	[ ]	[ ]
b) Preference share	[ ]	[ ]	[ ]
c) Debenture	[ ]	[ ]	[ ]
d) Treasury bills	[ ]	[ ]	[ ]
e) Government bonds	[ ]	[ ]	[ ]
f) Mutual funds	[ ]	[ ]	[ ]

2. In which security do you prefer to invest? Please rank these alternatives, (Mark 1 to best, 2 to the just lower and follow accordingly).

Ranks / Weight	1	2	3	4
a) Corporate securities	[ ]	[ ]	[ ]	[ ]
b) Government securities	[ ]	[ ]	[ ]	[ ]
c) Real state	[ ]	[ ]	[ ]	[ ]
d) Bullion (Gold, Silver)	[ ]	[ ]	[ ]	[ ]

3. In Nepalese capital market, there is not wide choice of instrument, so we are compel to buy whatever float in markets. Show your opinion by putting tick on bracket.

a) Strongly Agree [ ]
b) Agree [ ]
c) Indifference [ ]
d) Disagree [ ]
e) Strongly disagree [ ]

4. Which sector do you prefer to invest? (Mark 1 to best, 2 to the just lower and 3 to lower).

Ranks / Weight	1	2	3
a) Commercial Banks	[ ]	[ ]	[ ]
b) Development Banks	[ ]	[ ]	[ ]
c) Finance Companies	[ ]	[ ]	[ ]
d) Insurance Companies	[ ]	[ ]	[ ]
e) Manufacturing Companies	[ ]	[ ]	[ ]
f) Trading Companies	[ ]	[ ]	[ ]
g) Hotels	[ ]	[ ]	[ ]

5. What do you prefer in your investment? Please rank these as per your preference. (Mark 1 to best, 2 to the just lower and follow accordingly).

Ranks / Weight	1	2	3	4
a) Regular return (dividend)	[ ]	[ ]	[ ]	[ ]
b) Price increment (Capital gain	[ ]	[ ]	[ ]	[ ]
c) Less risk (safety)	[ ]	[ ]	[ ]	[ ]
d) Marketability (easy to buy & sell)	[ ]	[ ]	[ ]	[ ]

6. Which is most preferable in your choice among given alternatives? Please put tick mark on it.

a) Dividend [ ] c) Bonus Share [ ]
b) Capital Gain [ ] d) Voting rights [ ]

7. What factor do you consider most, before making investment decision? (Select one from the given alternatives)

a) Companies forecasted profit [ ]
b) Companies goodwill [ ]
c) Companies advertisement [ ]
d) Suggestion of friend or relatives [ ]
e) Taxation [ ]
f) Expected risk factor [ ]
g)

8. Are you familiar with the derivatives securities like: warrants, convertible and options?

Yes [ ] No [ ]

If 'Yes' which one do you prefer?

Option [ ] warrants [ ] convertible [ ]

If you know about derivatives, are you willing to invest on them, if there is opportunity?

Yes [ ] No [ ]

9. Give your opinion regarding following statement.

Nepalese investors do not have defined preferences they just follow the whim and rumor.

Strongly Agree	Agree	Indifference	Disagree	Strongly disagree

Nepalese investors do detailed analysis before investing in corporate securities.

Strongly Agree	Agree	Indifference	Disagree	Strongly disagree

10. In case of risk and return what is your preference?

Normal risk	Less risk less return	Moderate risk, moderate return	High return high risk	Super return maximum risk

11. Have you ever invest in government securities?

Yes [ ] No [ ]

If yes, what made you buy government securities?

a) No risk/safety [ ] c) Your friends and Relatives [ ]
b) Liquidity (marketability [ ] d) NRB notices [ ]

If No: Do you believe, government securities yield less return than corporate securities, so they are not choice of individual investors? (Tick in your option)

Strongly Agree	Agree	Indifference	Disagree	Strongly disagree

❁❁❁❁ Thanking you very much, for your kind responses and your valuable time. ❁❁❁

Appendix: 4 Frequency Table for the ranking of financial instruments.

Financial Instruments							
Rank	Weight	Common Stock	Preference Share	Debenture	T-Bill	Government Bonds	Mutual Fund
3	1	12	14	21	10	19	09
2	2	16	20	10	11	20	08
1	3	55	20	2	01	06	01
Rank Sum (Weight x No. Of Investors)		209	114	47	35	77	28

Appendix: 5 Frequency table for the ranking made by different categories of investors.

Less Informed: 30

Financial Instruments							
Rank	Weight	Common Stock	Preference Share	Debenture	T-Bill	Government Bonds	Mutual Fund
3	1	2	3	12	2	8	3
2	2	7	8	01	3	9	2
1	3	20	7	0	0	2	1
Rank Sum (Weight x No. Of Investors)		76	40	14	8	32	10

Informed: 35

Financial Instruments							
Rank	Weight	Common Stock	Preference Share	Debenture	T-Bill	Government Bonds	Mutual Fund
3	1	4	9	8	3	6	5
2	2	7	6	4	7	9	2
1	3	22	12	1	0	0	0
Rank Sum (Weight x No. Of Investors)		84	57	19	17	24	9

Well Informed: 12

Financial Instruments							
Rank	Weight	Common Stock	Preference Share	Debenture	T-Bill	Government Bonds	Mutual Fund
3	1	3	3	2	1	2	1
2	2	1	2	2	2	4	1
1	3	7	4	0	0	1	0
Rank Sum (Weight x No. Of Investors)		26	19	6	5	13	3

Analyst: 08

Financial Instruments							
Rank	Weight	Common Stock	Preference Share	Debenture	T-Bill	Government Bonds	Mutual Fund
3	1	2	2	1	2	1	0
2	2	1	1	2	1	2	1
1	3	5	2	0	0	1	0
Rank Sum (Weight x No. Of Investors)		19	10	5	4	8	2

Appendix : 6 Frequency table for the ranking of investment alternatives.

Investment Alternatives					
Rank	Weight	Corporate Securities	Government Securities	Rea l Estate	Bullion
4	1	10	16	18	41
3	2	23	15	27	20
2	3	25	34	13	13
1	4	27	20	27	11
Rank Sum (Weight x No. Of Investors)		239	228	219	184

Appendix : 7 Calculation of Friedman test statistic.

Details	Corporate Securities	Government Securities	Real Estate	Bullion	Total
T	233	238	216	163	850
T^2	54289	56644	46656	6569	184158
ϕx^2	751	724	612	409	2496
		Sum of Squares			d.f.
Between alternative		$SS_{alternative} = \frac{T^2}{n} - \frac{G^2}{tn}$ 41.56			t - 1 = 3
With in subjects.		$SS_{people} = x^2 - \frac{G^2}{tn} = 371$			n(t-1) = 255

Notations:

T = Total rank, rank sum (rank sum)

x^2 = Summation of squares of rank

G = T

n = No. of subjects (Respondent)

t = Number of instruments.

Now, $\Re^2 = \frac{n(t-1)SSalternative}{SSpeople} X 28.57$

Appendix: 8 Frequency table for the ranking made by different categories of investors.

Less informed: 30

Investment Alternatives					
Rank	Weight	Corporate Securities	Government Securities	Real Estate	Bullion
4	1	3	10	7	10
3	2	11	5	6	8
2	3	8	7	5	10
1	4	8	8	12	2
Rank Sum (Weight x No. Of Investors)		81	73	82	64

Informed: 35

Investment Alternatives					
Rank	Weight	Corporate Securities	Government Securities	Real Estate	Bullion
4	1	5	3	8	19
3	2	9	8	11	7
2	3	13	17	1	4
1	4	8	7	15	5
Rank Sum (Weight x No. Of Investors)		94	98	93	65

Well informed: 12

Investment Alternatives					
Rank	Weight	Corporate Securities	Government Securities	Real Estate	Bullion
4	1	1	3	1	7
3	2	3	1	7	1
2	3	3	5	3	1
1	4	5	3	1	3
Rank Sum (Weight x No. Of Investors)		36	32	28	24

Analyst: 08

Investment Alternatives					
Rank	Weight	Corporate Securities	Government Securities	Real Estate	Bullion
4	1	0	0	3	5
3	2	1	2	2	3
2	3	1	4	3	0

1	4	6	2	0	0
Rank Sum (Weight x No. Of Investors)		29	24	16	11

Appendix: 9

Response towards choice of financial instruments.

In Nepalese Capital Market there is not wide choice of financial instruments, so we are compel to buy what ever floats in market. Show your opinion.					
Strongly agree	Agree	Indifference	Disagree	Strongly disagree	Total
15	50	13	4	3	85
17.65	58.82%	15.29%	4.71%	3.53%	100%
IPA: 0.72 **Mode:** Agree **Overall Response:** Agree					

We have,

$$IPA = \frac{SD(0.01) + D(0.33) + IND(0.55) + A(0.77) + SA(1.0)}{N}$$

Where,

IPA = Index of perceived agreement. IND = Indifference

SD = Strongly disagree D = Disagree

A = Agree

$$IPA = \frac{3(0.01) + 4(0.33) + 13(0.55) + 49(0.77) + 15(1.0)}{N} = 0.72$$

Appendix: 10 Frequency table for the ranking of investment sectors.

Rank	1	2	3	Rank Sum	Frequency	Rank
Sectors / Weight	3	2	1			
Commercial Banks	53	15	10	199	78	1
Finance Companies	26	26	15	145	67	2
Insurance Companies	1	24	29	80	54	3
Development Banks	1	14	18	49	33	4
Maf. & Processing Co.	1	3	7	16	11	5
Trading Companies	1	0	1	4	2	8
Hotels	1	1	2	7	4	7
Others	1	2	3	10	6	6

Median = Value of $\left(\frac{N+1}{2}\right)^{th}$, Item = value of 4.5th item = 32.5

Appendix: 11, Calculation of Friedman test statistic.

Details	Commercial Banks	Finance Co.	Insurance	Dev. Banks	Mfg. & processing	Hotel	Trading	Others	Total
F	78	67	54	33	11	4	2	6	255
T	199	145	80	49	16	7	4	10	510
T^2	39601	21025	6400	2401	256	49	16	100	69848

x^2	547	353	134	79	28	15	10	20	1186
		Sum of Squares						d.f.	
Between alternative		$SS_{alternative} = \frac{T^2}{n} - \frac{G^2}{tn} = 439.24$						t - 1 = 3	
With in subjects.		$SS_{people} = x^2 - \frac{G^2}{tn} = 803.50$						n(t-1) = 595	

Now, $\Re^2 = \frac{n(t\ Z1)SSalternative}{SSpeople} X325.26$

Appendix: 12

Frequency table for the ranking of investment objectives.

Investment Objectives					
Rank	Weight	Regular return	Price increment	Less risky	Marketability
4	1	12	5	48	18
3	2	23	7	25	28
2	3	31	21	6	25
1	4	17	50	4	12
Rank Sum (Weight x No. Of Investors)		219	282	1	197
New Rank		2	1	4	3

Median = Value of $\left(\frac{N+1}{2}\right)^{th}$, Item = value of 2.5^{th} item = 208

Appendix : 13

Calculation of Friedman test statistic.

Details	Regular return	Price increment	Less risky	Marketability	Total
T	219	282	132	197	830
T^2	47961	79524	17424	38809	183718
ϕx^2	655	1022	266	547	2490
		Sum of Squares			d.f.
Between alternative		$SS_{alternative} = \frac{T^2}{n} - \frac{G^2}{tn}$ 138.47			t - 1 = 3
With in subjects.		$SS_{people} = x^2 - \frac{G^2}{tn} = 415$			n(t-1) = 249

Now, $\Re^2 = \frac{n(t\ Z1)SSalternative}{SSpeople} X325.26$

Appendix: 14 Frequency table for the ranking made by different categories of investors.

Less informed: 30

Investment Objectives					
Rank	Weight	Regular return	Price increment	Less risky	Marketability
4	1	6	2	18	4
3	2	10	4	8	8
2	3	11	7	2	10
1	4	3	17	2	8
Rank Sum (Weight x No. Of Investors)		71	99	48	82

Informed: 35

Investment Objectives					
Rank	Weight	Regular return	Price increment	Less risky	Marketability
4	1	4	2	20	9
3	2	12	2	13	8
2	3	13	9	1	12
1	4	6	22	1	6
Rank Sum (Weight x No. Of Investors)		91	121	53	85

Well informed: 12

Investment Objectives					
Rank	Weight	Regular return	Price increment	Less risky	Marketability
4	1	2	1	5	4
3	2	2	1	4	5
2	3	4	3	2	3
1	4	4	7	1	0
Rank Sum (Weight x No. Of Investors)		34	40	23	23

Analyst: 08

Investment Objectives					
Rank	Weight	Regular return	Price increment	Less risky	Marketability
4		0	0	6	2
3	2	1	0	1	6
2	3	3	4	1	0

1	4	4	4	0	0
Rank Sum (Weight x No. Of Investors)		27	28	11	14

Appendix: 15

Calculation of Kendall's W

Investors	Regular return	Price increment	Less risky	Marketability
Less informed	2	4	1	3
Informed	3	4	1	2
Well informed	3	4	1	2
Analyst	3	4	1	2
R	11	16	4	9
Mean	2.75	4	1	2.25
R^2	121	256	16	81

We have,

$$W = \frac{12 \quad R^2_i - 3 K^2 N(N +1)^2}{K^2 N (N - 1)} = 0.93$$

Where,

W = Kendall coefficient of concordance

R = Sum of the ranks (weight)

K = Number of cases who ranks (category)

N= Number of condition or objects being ranked.

Appendix: 16

Calculation of chi square

Investment Factors	**O**	**E = ġ O / n**	**O - E**	**(O – E)² / E**
Dividend	13	21.25	-8.25	3.2029
Capital Gain	50	21.25	28.75	38.8971
Bonus Share	20	21.25	-1.25	0.0735
Voting right	2	21.25	-19.25	17.4382
Total	85			**ġ (O–E)² / E = 59.6117**

Chi-square $\Re^2$ = $\dot{g}\frac{(O-E)^2}{E}$ **= 59.6117**

Where,

O = observed frequency

E = Expected frequency

N = number of observation

Appendix: 17

Calculation of chi square

Investment Factors	**O**	**E = ġ O / n**	**O - E**	**$\frac{(O-E)^2}{E}$**
Companies forecasted profit	53	42.5	10.5	2.594
Companies Goodwill	82	42.5	39.5	36.712
Companies advertisement	45	42.5	5.5	0.712
Suggestions of friends	35	42.5	-7.5	1.324
Taxation	10	42.5	-32.50	24.853
Expected risk factor	30	42.5	-12.50	3.676
Total	255			**ġ $\frac{(O-E)^2}{E}$ = 69.871**

Chi-square $\Re^2$ = **ġ $\frac{(O-E)^2}{E}$ = 69.871**

Where,

O = observed frequency
E = Expected frequency
N = number of observation

Appendix: 18

Calculation of chi-square

Education	**YES**	**NO**	**Total**
Up to graduation	12	43	55
Post graduation and above	23	7	30
Total	35	50	85

Where,

Calculated Chi-square $\Re^2$ = 24.11
Degree of Freedom (d.f.) = (r-1) (c-1) = 1

Appendix: 19

Investment on government securities and common stocks of selected commercial banks and their growth rates. (Rs. in million)

Commercial Banks	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**	**Average Growth**
Standard Charter bank ltd.						
Government sec.	5784.72	6722.83	7948.22	7203.07	8644.86	
Growth in Gov. sec.		0.162	0.182	-0.094	0.20	0.1125
Shares	11.19	11.19	11.19	13.35	15.343	
Growth in shares		-	-	0.193	0.149	0.0855

Others	3479.96	3623.66	3400.92	2486.13	1285.057	
Total investment	9275.87	10357.68	11360.33	9702.55	9945.26	
Everest bank Ltd:						
Government sec.	1538.90	1599.35	2466.43	2100.29	3548.62	
Growth in Gov. sec.		0.039	0.542	-0.148	0.690	0.2806
Shares	17.11	17.11	17.11	19.39	19.89	
Growth in shares		-	-	0.133	0.026	0.0396
Others	137.02	37.51	52.11	9.25	632.82	
Total investment	1693.03	1653.97	2535.66	2128.33	4201.33	
Bank of Kathmandu						
Government sec.	542.65	1510.70	2371.77	2146.619	2658.37	
Growth in Gov. sec.		1.784	0.570	-0.095	0.238	0.6243
Shares	38.00	38.00	22.81	93.02	23.16	
Growth in shares		-	0.40	3.078	-0.75	0.682
Others	96.80	267.44	82.83	358.97	696.60	
Total investment	677.45	1816.14	2477.41	2598.609	3378.13	
Nabil Bank ltd.						
Government sec.	4120.29	3588.77	3672.62	2413.94	2301.46	
Growth in Gov. sec.		-0.129	0.023	-0.343	-0.047	-0.124
Shares	22.22	22.22	22.22	440.28	27.56	
Growth in shares		-	-	18.815	-0.94	4.469
Others	4057	2420.18	2141.22	1415.44	3851.64	
Total investment	8199.51	6031.17	5836.06	4296.66	6180.66	
Nepal Investment Bank						
Government sec.	224.40	400.00	2001.10	1948.50	2522.30	
Growth in Gov. sec.		0.783	4.003	-0.026	0.29	1.2625
Shares	13.89	13.89	13.89	17.738	17.738	
Growth in shares		-	-	0.277	-	0.069
Others	1583.87	1291.35	1847.49	1967.95	3062.83	
Total investment	1822.16	1705.24	3862.48	3934.188	5602.87	
Himalayan Bank Ltd.						
Government sec.	3047.75	3998.87	3431.73	5469.73	5144.31	
Growth in Gov. sec.		0.312	-0.142	0.594	-0.059	0.1763
Shares	34.27	34.27	34.26	39.91	39.91	
Growth in shares		-	-	0.165	-	0.0413
Others	6075.09	6142.30	5826.11	6182.70	5706.15	
Total investment	9157.11	10175.44	9292.10	11692.34	10890.37	

Appendix: 20

Investment on government securities and common stocks of selected Finance companies and their growth rates.

(Rs. in million)

Commercial Banks	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**	**Average Growth**
Goodwill Finance Company						
Government sec.	41.820	46.500	25.905	35.475	25.60	
Growth in Gov. sec.		0112	-0.442	0.367	-0.278	-0.0603
Shares	23.925	22.038	11.856	7.567	7.079	
Growth in shares		-0.079	-0.462	-0.362	-0.064	-0.2418

Others	3.000	8.400	0.027	0.027	17.50	
Total investment	68.745	76.938	37.833	42.889	50.179	
Kathmandu Finance Company						
Government sec.	1.750	1.750	1.750	-	-	
Growth in Gov. sec.		-	-	-1.000	-	-0.25
Shares	4.961	4.936	4.976	1.722	1.549	
Growth in shares		-0.005	0.008	-0.654	-0.10	-0.1878
Others	20.50	13.50	14.50	29.50	76.50	
Total investment	27.211	20.186	21.226	31.222	78.049	
Lalitpur Finance Company						
Government sec.	5.730	3.734	0.238	0.703	0.003	
Growth in Gov. sec.		-0.348	-0.936	1.954	-0.996	-0.0815
Shares	54.904	54.920	51.429	50.583	51.424	
Growth in shares		-	-0.064	-0.011	0.017	-0.0145
Others	19.30	33.30	134.833	86.80	71.00	
Total investment	79.934	91.954	186.501	1380356	122.427	
Alpic Everest Finance Company						
Government sec.	0.05	-	-	-	-	
Growth in Gov. sec.	-	-1.00	-	-	-	-0.25
Shares	-	-	-	0.059	0.059	
Growth in shares	-	-	-	-	-	-
Others	9.525	10.60	16.00	20.304	28.526	
Total investment	9.575	10.60	16.00	20.363	28.585	
United Finance Company						
Government sec.	183.30	202.00	128.02	128.77	97.098	
Growth in Gov. sec.		0.102	-0.366	0.006	-0.246	-0.126
Shares	33.051	33.195	33.195	30.433	69.00	
Growth in shares		0.004	-	-0.083	1.27	0.2978
Others	-	5.00	37.50	62.50	5.428	
Total investment	216.351	240.195	198.715	221.703	171.526	
Universal Finance Company						
Government sec.	0.583	0.499	0.499	-	-	
Growth in Gov. sec.		-0.144	-	-1.00	-	-0.286
Shares	17.026	17.070	4.820	4.820	4.252	
Growth in shares		0.003	-0.718	-	-0.118	-0.208
Others	36.930	47.582	60.704	62.456	68.50	
Total investment	53.690	65.151	66.023	67.276	72.752	