

**DEVELOPMENT OF STOCK MARKET
AND
ECONOMIC GROWTH IN NEPAL**

A THESIS

Submitted By:

BIPIN KHADKA

SHANKER DEV CAMPUS

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RECOMMENDATION

This is to certify that the Thesis

Submitted by:

BIPIN KHADKA

Entitled:

Development of Stock Market and Economic Growth in Nepal

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

.....

Prof. Sneha Lata Kafle

(Thesis Supervisor)

.....

Prof. Bishweshor Man Shrestha

(Head of Research Department)

.....

Kiran Thapa

(Thesis Supervisor)

.....

Prof. Dr. Kamal Deep Dhakal

(Campus Chief)

Date:

VIVA VOCE SHEET

We have conducted the viva-voce examination of the thesis presented

Submitted by:

BIPIN KHADKA

Entitled:

“Development of Stock Market and Economic Growth 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's Degree in Business studies (M.B.S.)

Viva-voce Committee

Head of Research Department:.....

Member (Thesis supervisor):.....

Member (Thesis supervisor):.....

Member (External Expert):

Date:.....

TRIBHUVAN UNIVERSITY

Faculty of Management

SHANKER DEV CAMPUS

DECLARATION

I hereby declare that the work reported in this thesis entitled "Development of Stock Market and Economic Growth 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 Prof. Sneha lata Kafle and Kiran Thapa of Shanker Dev Campus.

.....

Bipin Khadka

Researcher

Shanker Dev Campus

TU Registration No: 7-2-366-2-2004

Campus Roll No: 623/064

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ABBREVIATIONS

AGM	Annual General Meeting
APT	Assets Pricing Theory
BOD	Board of Director
CIT	Citizen Investment Trust
CMB	Capital Merchant Banking and Finance limited
CRO	Company Registrar Office
EPF	Employee provident Fund
FDI	Foreign Direct Investment
FY	Fiscal Year
GDP	Gross Domestic Product
GNDI	Gross National Disposal Income
IPO	Initial Public Offering
MCR	Market Capitalization Ratio
NEPSE	Nepal Stock Exchange Limited
NRB	Nepal Rastra Bank
NYSE	New York Stock Exchange
OTC	Over The Counter
ROC	Registrar of Companies
Rs	Rupees
RTS	Registrar to Share
SEB	Securities Exchange Center
SEBON	Security Board, Nepal
SEC	Stock Enchage Center
SMC	Securities Market Center
TO	Turnover
V	Volatility
VT	Value Traded

CHAPTER –I

INTRODUCTION

1.1 General Background

An organized and managed stock market stimulates opportunities by recognizing and financing productive projects that lead to economic activity, mobilize domestic savings, allocate capital efficiently, help to diversify risk and facilitate exchange of goods and services (Mishkin, 2001). Undoubtedly, stock markets are expected to increase economic growth by increasing the liquidity of financial assets, possibility of diversification in global market for world –be international and domestic investors, promoting wiser investment decisions by saving surplus units based on available information, influencing corporate governance (i.e. saving agency problem by way of increasing share holder's interest value) and enhancing more saving to corporation (Victor, 2005 and Ahmed, Ali and Shahbaz, 2008).

Upliftment of nation's economic growth and solving the problem of underdeveloped economy is widely depending on the nature of its economic infrastructure. One of the basic elements in achieving a self-reliant growth of the economy and far sustaining the desired level of economic development is an accelerated rate of investment or capital formation in the economy. The rate of investment or capital formation depends upon the efficiency of the financial system. A developed financial system is a hallmark of any free enterprises of mixed economy. The markets, instruments and institutions that comprise this system facilitate the efficient production of goods and services and thereby contributing the society's well being. The financial systems or markets perform this function by channeling the nation's saving into best uses. It does this by bringing together those who have surplus funds to lend and those who wish to borrow to finance their expenditure. The trading of shares of stocks takes place in the stock market on one hand, it directly provides liquidity to the investors who provides funds for the establishment of the productive enterprises, and on the other encourage savers to save more and enterprising economic units to start productive ventures. Nepal, the capital deficient economy, requires a huge amount of investment in productive activities for her rapid economic development. The stock market play a vital role by encouraging and challenging the market on one hand, it directly provides liquidity to the investors who provides fund for the establishment of the productive

enterprises, and on the other, encourage savers to save more and enterprising economic units to start productive ventures. Nepal, the capital deficient economy, requires a huge amount of investment in productive activities for her rapid economic development. The stock market can play vital role by encouraging and channeling the saving to provide the entrepreneurs for investment in profitable projects in the Nepalese economy. The development of economy requires the productive activities, which in turn is the result of the investment ventures in productive enterprises. The establishment of these enterprises needs a huge amount of funds. There are mainly two sources of financing the productive enterprises the internal and external sources. The internal financing has the limited scope because of the limited resources and risk associated with investment so now a days, the external financing the method of financing an enterprises through the financing market, has become the most important and popular sources of financing for fostering the productive activities in the economy. Now all the economic units including the householder and government have to rely on external financing also. The introduction and developments of financial assets is the most important attributes of the external financial. Thus, stock market is the most important component of productive activates. The basic functions of stock marker are still to provide and allocate capital funds to firms with profitable investments opportunities and to offer an avenue of liquidity for individuals to invest current income or borrow against future income and there by achieve there preferred time pattern of consumption. Because investing involves uncertainty, capital market also provides a means for transferring risk among the parties to this transaction. The stock market and economic activity move in similar cyclical patterns. In the Nepalese economy, the creation of liquidity many profitable investments require a long - term commitment of capital, but investors are often reluctant to relinquish control of their saving for long periods. Liquid equity demand for and supply of funds for investment in productive enterprises is low due to the absence of mechanism for transferring risk which, in turn, may be attributed to the absence of well developed stock market.

Although, some analyst view stock marker in developing countries as "casinos" that have little positive impact on economic on economic growth, recent obedience suggest that stock market can give a big boost to economic development for the developing country like Nepal.

Stock market may affect economic activity through the markets make investment less risky and more attractive. They allow savers to acquire an assets (equity) and to sell it quickly and cheaply if they need access to there savings or want to alter there portfolios. At the same time, company enjoys permanent access to capital raised through equity issuance. By facilitating longer term, more profitable investment, liquid markets improve the allocation of capital and enhance prospect for long term economic growth. Further by making investments less risky and more profitable, stock market liquidity can also lead more investment. But succinctly, investors will come if they can leave. Nepalese stock market is least developed from these points of view. There is a virtual absence of liquidity, which discourages further investment in economy. Nepalese capital market, which has a number of institutional bodies like securities Board Nepal (SEBON) Nepal stock exchange (NEPSE), shareholders association Nepal (SAN) and listed companies are in existence. In Nepalese capital market twenty four brokers, nine issue managers and two securities declares for the fiscal year 2006/07. Only 135 companies listed to NEPSE, in the fiscal year 2006/07 and most of the listed companies are inactive and rarely their share is traded on the floor. Nepalese stock market in infancy stage but it is growing slowly. However there is also a marginal mental development. It is so, because market is mostly concentrated over banks & finance companies. Nepalese capital market is very small as compared to other neighboring countries.

However, in many developing countries like Nepal, the underdeveloped capital market is still prevailing in the economy.

1.2 Introduction of NEPSE

The concept of stock market in Nepal is very new. It is still in fancy stage through Nepal Bank Limited (NBL) and Biratnagar jute mills limited (BJM) began it with the issue of shares in 1937 under the company act 1936. At that time, the participation in the ownership structure of the corporate sector was restricted mostly to Rana family. Consequently, the expansion of the capital market to the desired level had been restricted. NO significance attempt had been made in fourth five years plan to reform the capital market. The establishment of securities Exchange Center (SEC) in 1976 was the first and most important attempt made by the government to develop the stock market. Initially, the SEC serves to promote the primary as well as secondary market from the fiscal year 1984/1985. Although the growth of stock market is high relative to the growth of the economy, the share of corporate sector in national economy any is still very low due to the negligible size of the corporate sector. The

incorporation of the Securities Board Nepal (SEBON) under the Securities Exchange Act 1993 and conversion of SEC into the Nepal Stock Exchange (NEPSE) under the government policy of capital market reform has greatly contributed to the development of primary as well as secondary market of the corporate securities. Security Exchange centre was established with an objectives of facilitating and permitting the growth of the capital market institution undertaking job of brokering, underwriting, Managing public issue, market making for government bonds and other financial services.

Nepal government under a programme initiated to reform capital markets, converted security exchange center into Nepal stock exchange in 1993. NEPSE is a non profit organisation operating under security Exchange Act 1983. The basic objectives of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through members, market intermediaries, such as broker, dealers market maker etc. NEPSE open its trading floor on 13th January 1994.

Nepal stock exchange limited is the only stock exchange in the country. The governing Board of NEPSE comprises 9 members representing various Governments and non government sectors. The nine members board includes. Ministry of finance security Board, Nepal Rastra Bank (NIDC) representative of license holder stock broker, general Manager of NEPSE.

Nepal government, Nepal Rastra Bank, NIDC and its members are the shareholders of NEPSE and their ownership in NEPSE are 58.67%, 34.60%, and 0.62% respectively

A total of 34 public limited companies raised funds amounting to Rs 2,295.5 million by floating securities in the fiscal year 2006/07. In the fiscal year 2005/06, a total of 29 public limited companies had raised funds amounting to Rs. 2,443.3 million. In the fiscal year 2006/07, the total number of listed companies remained 135 as equal to 135 listed companies in the fiscal year 2005/06 due to listing of additional 12 companies. In the fiscal year 2006/07, the market capitalization of the listed companies increased by 92.53 percent to be Rs. 1,86,301.3 million as compared to the market capitalization of Rs 96,763.7 million in the fiscal year 2005/06 where are the market capitalization results to 376871.37 in 2009/10 and the percentage of market capitalization on nominal GDP remains to be 37.86 percentage., which comprises listed 176 companies, 23 stock brokers, 10 issue managers and two securities dealers (SEBON, 2009/10).

1.3 Historical Perspective of Nepalese Capital Market

The history of capital market in Nepal dates back to 1936 in which year shares of Biratnagar Jute Mills Ltd. were floated. In 1937, Tejarath was set up to facilitate the loans to the government employees and later converted into Nepal Bank Ltd (Gurung, 2004). The then HMG Nepal introduced the Company Acts in 1964 and first issue of government bonds made in the same year through Nepal Rastra Bank to collect the developmental expenditures. It carried 6 percent of rate of interest and has maturity period of five years (Shrestha 2038; Gurung, 2004). GON announced the Industrial Policy in 1974 and under this policy an institution named Securities Marketing Center (SMC) was established to deal in government securities- development bonds and national saving bonds and corporate securities of a few companies. The government had virtual monopoly over the security market. Then Securities Exchange Center (SEC) was established in 1976 with the objectives of facilitating and promoting the growth of capital market. It was only capital market institution in Nepal. Securities Exchange Acts came into force in 1984. Since then, SEC started to operate under this act. The purpose of this act was to provide systematic and favorable market environment for ensuring securities and protecting the interest of individuals and institutional investors as well as to increase the public participation in various firms and companies (Gurung, 1999). SEC had provided facilities to trade the government securities and a few corporate securities like share and debentures. Only the shares of ten companies were listed in SEC and there was no involvement of the brokers and dealers in securities market. So, SEC itself was undertaking the job of brokering, underwriting, managing public issue, making marketing for government bonds and other financial services. Apart from this there was the absence of effective secondary market to ensure liquidity to the securities. Then, the interim government of 1990 initiated financial reform program and two indirect investment vehicles-Citizen's Investment Fund and NIDC Capital Markets Ltd. – were established with the collective investment schemes in the corporate sector. Then due to world whim of privatization and economic liberalization, the operation of SEC was felt to be changed to make it compatible with the changing economic system, as a result, GON brought about change in the structure of SEC by dividing it into two distinct entities – Securities Board of Nepal (SEBON) and Nepal Stock Exchange Ltd. (NEPSE) at the policy level in 1993. Since then they are operating as the main constituent of securities market in Nepal (Gurung, 2004). SEBON was established on June 7, 1993 with its mission to facilitate the ordinary development of a dynamic and competitive capital market and maintaining its credibility, fairness, efficiency,

transparency and responsiveness under the Securities Exchange Act 1983 (SEBON, 2002; Gurung, 2005). It is an apex regulator of securities market in Nepal. Since January 14, 2007, Securities Related Act, 2006 has been enacted replacing the Securities Ordinance, 2006 with the provision of making more securities market competitive, transparent and credible. Under the provision of Securities Related Act, 2006 section 116, SEBON drafted the following regulation, in the fiscal year 2006/07.

- Securities Board of Nepal Regulation, 2007
- Stock Exchange Regulation, 2007
- Securities Business Persons (Broker, Dealer and Market Maker) Regulation, 2007
- Securities Business Person (Merchant Banker) Regulation, 2007
- Draft of Securities Registration and Issuance Regulation, 2008

Nepal Stock Exchange (NEPSE) is the only one exchange center for listed securities in Nepal. It was converted into stock exchange in 1993, with an objective to make it a full fledged organized market under the program initiated to reform the capital market. NEPSE is an organization operating under the securities ordinance 2005. The main objective of NEPSE is to impart free marketing ability and liquidity to government and corporate bodies by listing and facilitating transaction in its trading floor through licensed financial intermediaries. NEPSE started its trading floor on January 13, 1994 through licensed members. It has replaced "open out-cry" system by the automation system firm August 15, 2007. In Nepal, NEPSE is the only one stock market, which comprises listed 176 companies, 23 stock brokers, 10 issue managers and two securities dealers (SEBON, 2009/10).

1.4 Statement of the Problem

The study deals with the development of stock market and economic growth in Nepal. Being a landlocked country it is situated between two giant economies China and India. It has been going through a political and economic limbo in the recent times. Nepal's neighbor's china and India grew respectively by 11.4 percent and 9.2 percent in 2007 and are projected to record respective growth rates of 9.3 percent and 7.9 percent in 2008. South Asia, which attained a growth rate of 8.6 percent in 2007, is expected to rise by 7.5 percent in 2008, but growth rate of Nepal was 5.56 percent during the FY 2007/08. This was the highest during the last seven years. Favorable monsoon and good policy impact contributed to raise the growth rates both in agriculture and non- agriculture, which expanded by 5.65 percent and

5.57 percent respectively, compared to previous year's growth estimates of 0.9 percent and 4.1 percent respectively. But in FY 2001/02, 2002/03, 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08, 2008/09 the growth rate of Nepal was 0.2, 3.8, 4.4, 2.9, 4.1, 2.6, 4.7, and 5.6 percent respectively. Nepal's economic growth rate in the current FY 2009/10 is estimated to decline. In comparison to 4.0 percent GDP growth achieved at producers' prices in FY2008/09, is estimated to grow in this fiscal year only by 3.5 percent. NEPSE is only one stock market in Nepal. It opened its trading floor from 13th January, 1994 through licensed members. However, trading facilities is confined in Kathmandu valley which hindered wide public participation in stock market. A few companies are listed in the exchange market most of trading take place in share of financial institution and a few are multi national business entities such as Standard Chartered Bank(Nepal) Ltd., Bottlers Nepal, Uni Lever Nepal, Yak & Yeti Hotel, Soaltee Hotel, Bishal Bazar, Butwal Power Company, Chilime Hydropower etc.

However, there is a lack of institutional infrastructure and an absence of institutional investors. The market is dominated by individual investors. The potential institution that can invest as Citizen Investment Trust (CIT), Employees Provident Fund (EPF), NCM mutual fund and insurance companies and so on. However, except NCM mutual fund, the investment of other institutions is very nominal. Regarding the investment of CIT in securities market, out of the total investment only 4.58% investment was made in corporate securities in FY 2003/04, which was only 2.41% in FY 2002/03, and 4.20% in FY 2001/02. Similarly, regarding the EPF out of total investment only 1.19% was invested in corporate securities in FY 2002/03, 1.24% in FY 2001/02, 0.72% in FY 2000/01, and 0.41% in FY 1999/00. This shows that investment of EPF is very negligible portion of their huge fund. And investment of insurance companies in corporate securities was 1.30% in FY 2002/03, 2.13% in FY 1999/00 which is also a very small portion of their huge fund.

The diversity in securities market instruments attracts the investors of various risk performance providing choice in the investment alternatives. But in the case of Nepalese securities market, it is mostly dominated by risky instruments (equity share) which constitute more than 80% of the total paid up value of the securities listed in the exchange market and the rest comprises of consisting preference shares, debentures, bonds and mutual funds.

Concisely the study covers the following areas:

- What is the relationship between stock market and economic growth in Nepal.

- How can stock market influence the rate of economic growth.
- Does stock market affect overall economic growth.

1.5 Objectives of the Study

The specific objectives of this study are:

1. To analyze development of stock market and economic growth in Nepal
2. To analyze the performance of NEPSE.
3. To evaluate the relationship between stock market development and economic growth.
4. To suggest and recommend on the basis of major findings of the study.

1.6 Limitations of the Study

This study will have some limitations. Basically the study is done for partial fulfillment of master of Business studies. Time constraints, financial problem and lack of research experience will be the primary limitations and the study is based on secondary data and different year's data will be used for the study. The study is based on data for a period of 10 years from 2000/01 to 2009/10. The main objective of the study is to find the relationship between stock market development and economic growth. For this purpose the period of 10 years is not sufficient to have accurate result. Data on the important aggregate variables are available only on yearly basis. Apart from this, there is also far and wide variation between the data source. The following are the main limitations of the study.

- The study is based on the period of only ten years i.e since 2000/01 to 2009/10 , so the study period may have been regarded as shorter and inference should have to be made with caution.
- The study is based on secondary data, authenticity of which may be questioned, as there are variations in the same data variable across the source.
- The data on the some of the variables are not readily available and hence are estimated by standard form of relationship.
- The stock market in Nepal is in early stage of growth and stabilization .The investors are gradually becoming aware of the stock market activities and the authorities are realizing that the development of a strong stock market is highly needed. But, it may be a little too fast to measure the concrete contribution made by stock market to the economy and attempt to form a certain pattern of relationship. There may form no sensible relation at all or the significance of the relationship may have to be questioned.

- The assumption that the strong and efficient stock market help to mobilize saving and efficient allocate may not be true in our case since the Nepalese stock market is not strongly efficient. Therefore the study in this direction may lead nowhere at the stage, but it is worth attempting.
- The study covers past and present state of securities market in Nepal.

1.7. Organization of the Study.

The study has been organized into five chapters. They are as follows.

Chapter I: Introduction

This is the introductory chapter, which has covered background of the study, focus of the study, statement of the problem, objectives of the study, significance of the study etc.

Chapter II: Review of Literature

Second chapter deals with the review of available literature .It Includes review of previous unpublished master degree thesis, books, journal and articles etc. It also includes conceptual framework i.e. theoretical analysis and review of related different studies. In this chapter has been also considered that how this present studies are different from previous studies.

Chapter III: Research Methodology

Third chapter explains the research methodology used in the study, It includes research design, nature and sources of data, population and sampling. Methods of data analysis and research variables etc.

Chapter IV: Presentation and Analysis of Data

This chapter describes the research methodology employed in the study. It will include secondary data and primary data presentation, data analysis, interpretation, testing of hypothesis and major finding.

Chapter V: Summary, Conclusion and Recommendations

The last chapter states the summaries, conclusions of the whole study and offers suggestion for the improvement and conclusion of the study. The exhibits and bibliography are incorporated at the end of the study.

CHAPTER – II

REVIEW OF LITERATURE

Reviewing the literature means reviewing research studies of other relevant proposition in the related areas of the studies so that all the past studies, their conclusion and deficiencies may be known and further research can be conducted. This chapter attempts to review the existing literature pertaining to stock market development and economic growth. The relevant literature and articles are reviewed from international as well as national publication available from different libraries, institutions and websites that have great significance to this study. A few books, articles and research working papers have been reviewed on this subject.

2.1 Theoretical Framework

Financial market can be defined as a mechanism bringing together buyers and sellers of financial assets in order to facilitate trading. Financial market is the place of places where securities are bought and sold, the facilities and people engaged in such transactions, the demand for and availability of securities to be traded, and the willingness of buyers and sellers to reach agreement on sales.

Functionally, financial markets are broadly subdivided under two heads: money markets and capital markets. The former are markets in short-term funds and the later in long-term fund (Gupta, 2006).

Considerable debate exists on the relationship between the financial system and economic growth. Stock market is supposed to increase savings and efficiently allocate capital to productive investments which leads to an increase in the rate of economic growth. Stock markets contribute to mobilization of domestic growth. Stock markets contribute to mobilization of domestic savings by enhancing the set of financial instruments available to savers to diversify their portfolios. In doing so they provide an important source of investment capital relatively low cost (Daillami and Actin, 1990). Stock market helps investors to cope with liquidity risk by allowing those who receive a liquidity stock to sell their share to other investors. The result is that capital is not prematurely removed from firms to satisfy short term liquidity needs. Moreover, stock markets play key role in allocating capital to the corporate sector which will have a real effect on the economy in aggregate.

The stock market is supposed to ensure through the takeover mechanism that past investments are also most efficiently used. Theoretically, threat of takeover is expected to

provide management with an incentive to maximize firm value. The presumption is that, if management does not maximize the firm value another economic agent may take control of the firm, replace management and reap the gains from the more efficient firm. It is also an important component of the capital market. Capital market typically involves financial assets having a life span of greater than one year. The key instruments used in capital market are bonds, equities, and preference shares. Therefore, the stock market deals in long-term securities, both private and government. Furthermore, the stock market is mostly a secondary market where existing securities are traded. Capital market is crucial for long-term growth and prosperity of an economy since it provides long term funds of all kinds, mobilizing savings and channelizing them into productive investment for the development of commerce and industry of the country.

Indicators of stock market development reflect the development of an economy > it is important to predict the course of the national economy because economic activity affects corporate profits, investor attitudes and expectations and ultimately security price. Economists have neither a common concept nor a common measure of stock market development (Demirguc-Kunt and Levine, 1995) (Paper No. 1462). However, the various measures of stock market development are market size, liquidity, volatility, and concentration. Generally, large stock market size indicates a developed stock market. One of the measures of stock market size is the number of listed companies in stock exchange in each period. The size of stock market increases with an increase in the number of listed companies. Another measure of stock market size is market capitalization ratio, which aggregates market value of listed shares divided by Gross Domestic Product (GDP). The assumption behind this measure is that the overall stock market size is positively correlated with an ability to mobilize capital and diversify risk on an economy wide basis. It is important to remember that countries with developed stock market have market capitalization ratio greater than 1 and in many developing countries it is between 0.2 and 0.4 (K.C., 2005). Market liquidity allows investors to alter their investment portfolios conveniently at any time at a low cost. Liquidity makes the financial assets less risky and this improves efficient allocation of resources and promotes long term economic growth. Liquidity in stock market refers to the ability to easily buy and sell securities in the market. There are two ways to measure the liquidity of stock market. First, total value traded / GDP i.e. share traded on stock market divided by GDP: this measure complements the market capitalization ratio. Although this method does not measure directly the cost of trading shares, it does indicate the extent of ease in trading in stock market in a

country. It is expected that the volume of organized trading of equities as share of national output increase when such trading is less costly and easy. It is important to note that countries with developed stock market have the total value traded to GDP as high as 0.4 but in developing countries it varies in the range of 0.001 to 0.01 (K.C., 2005). Second, liquidity of stock market i.e. the ratio of value of share traded to market capitalization: this measure is also known as turnover ratio. High turnover ratio indicates low transaction cost and relative ease in buying and selling of shares. In developed countries this ratio is greater than or very close to 1 whereas in many developing countries this ratio is in the range of 0.15 to 0.3 (K.C., 2005)(25-37).

Although greater volatility is not necessarily a sign of more or less stock market development but sometimes “less volatility” is referred as “greater stock market development” for simplicity (Demirguc-Kunt and Levine, 1997). High volatility in stock market denotes risk in equities investment; it does not necessarily imply underdeveloped stock market. It is generally expected that developed stock markets absorb risk in financial asset and offer higher return with less volatility. It means that as an indicator of a country’s stock market development, less volatility is preferred to high. Volatility is also an important indicator of stock market development. This indicator is twelve month standard deviation estimated based on market returns. Higher standard deviation means higher volatility and more risk.

Many profitable investments require a long-term commitment of capital, but investors are often reluctant to relinquish control of their savings for long periods. Liquid markets make investment less risky and more attractive because they allow savers to acquire and sell equity assets quickly and cheaply if they need access to their savings or want to alter their portfolios. At the same time companies enjoy permanent access to capital through public offering which they can use for longer-term and, more profitable investments. Liquid market improves the allocation of capital and enhances prospect for long-term economic growth. Further, by making investment less risky and more profitable stock market can also lead to more investment.

Risk diversification through internationally integrated stock markets is another vehicle by which stock market development may influence economic growth. Greater risk diversification can influence growth by shifting investment in to higher-return projects. Intuitively, because projects with higher expected returns also tend to be comparatively risky,

better risk diversification through internationally integrated stock markets will foster investment in projects with high returns (Levine and Zervous, 1997) (323-339/48).

In developing countries, it is not quite clear, whether stock markets are merely burgeoning casinos where more and more players are coming to place bets, or whether stock markets are importantly linked to economic growth. One line of research argues that it is not important; another line stresses importance of stock markets in mobilizing savings, allocating capital, exerting corporate control and easing risk management.

Traditional growth theorists believed that there is no correlation between stock market development and economic growth. Singh (1997) contended that stock markets are not necessary institutions for achieving high level of economic development. Many viewed stock market as an agent that harm economic development due to their susceptibility to market failure, which is often manifest in the volatile nature of stock market in many developing countries (Singh, 1997; Singh and Weis, 1999; Ahmed et. al., 2008)(771-782,182-198).

Contrary to the traditional view, Pardy (1998) (907) in his seminal paper has argued that in a less developed countries capital markets are able to mobilize domestic savings and allocate fund more efficiently. Similarly, Ate and Jovanic (1996)(632-64) concluded that stock markets have long run impact on economic growth and they have also argued that the stock markets manipulate economic growth through number of channels that are liquidity, risk diversification, acquisition of information about firms, corporate governance and saving mobilization. Levine and Zervos (1997) found that stock market development is positively and robustly associated with economic growth. Similarly, Corporal ET. al. (2006) has concluded that a well developed stock market can foster economic growth in the long run. It also provide support the view that a well functioning stock market can promote economic development by fuelling engine of growth through faster capital allocation, and by tuning it through better resource allocation. G.C. and Neupane (2008) (36-44) has concluded that the stock market fluctuations predict the future growth of an economy.

Sechwatz found in third joing study that government bonds,treasury bills and real state compensate somewhat for unexpected inflatin.The surprising result, however,is that common stock returns are negatively correlated with bond expected and unexpected inflation .

2.1.1 Money Market

Money market comprises of Short-Term Loans, Certificates of Deposit, Treasury-Bills, Banker Acceptances, Commercial Paper and Promissory Notes for short-term financial needs and practices in both primary & secondary market. Money market deals with short term instruments. Money market exists in other to bring together buyers and seller of securities meaning their mechanism is created to facilitate the exchange of financial assets (Sharpe, Alexander & Bailey 2002, 9).

Money market brings together the supplier and the demander of short-term liquid fund. It is the type of market, which is meant for a short term and for highly liquid debt securities. Money market typically involves financial assets that have a life span of one year or less. Money market instruments include short-term marketable, liquid and low risk securities. Money market instruments, sometimes, are also called cash equivalents or just cash.

2.1.2 Capital Market

Capital market is the market where long term lending and borrowing takes place. The capital market is defined as a place where finance is raised by companies for meeting their requirement of funds for new projects, modernization, expansion programs, long-term working needs and for various others propose. Companies and the Government can raise funds for long-term investment via the capital market, which includes stock market, bond market and the primary market. The capital market mobilizes savings of individuals as investment in shares, debentures, units of mutual funds and other like financial instruments which are ultimately deployed for productive purpose in various sectors of the economy.

Capital market refers to the links between lenders and borrowers of funds, arranging of funds-transfer process to seek each other's benefit. The capital market serves as link between suppliers and demanders of long term funds maturities more than one year to make transactions. It has wide term embracing the buyers and the sellers of securities and all those agencies and institutions which assists the sale and resale of corporate securities. The primary function of the capital market is to allocate resources optimally due to this; it is one with the lowest possible prices for transactions services.

The capital market also comprises two segments-the new issue of market that is known as the primary market and the secondary market where already issued securities are traded. For the purpose of this manual, only primary market would be dealt in detail. Capital market consists of non-security and securities market.

2.1.3 Non Security Market

In non-security market, the transaction or the exchange of the funds takes place between user and supplier without issuing securities. The fund is raised as long term in the market. The non-security market includes the financial transactions between the lending institutions such as development banks, business houses, banks or individual too. The contract between parties of capital exchange has less liquidity due to restriction of liquidation of these loans in secondary market.

2.1.4 Security Market

A security market can be defined as a place for bringing together buyers and sellers of financial assets in order to facilitate the sale and resale of transferable securities. Securities markets major function is to provide line between saving and investment there by facilitating the creation of new wealth. Although, securities are concerned in few locations, they refer more to mechanism, rather than to place, designed to facilitate the exchange of securities by bringing buyers and sellers of securities together. Securities, such as equities, short and long term debt instruments, derivatives etc are the products that are traded in the markets institutions such as investment bankers and security firms, securities issuing institutions such as government and corporate bodies and the participants of the securities markets. Securities market is classified into two, the market at where the transactions of the securities issued for the first time take place is called primary market. Secondary market is the market for the existing securities where second hand securities are bought and sold in the market.

2.1.5 Primary Market

The term “Primary Market” is used to denote the market for original sale of securities by issuer to the Public. The primary market is the place where corporations and Government Issue new securities at first time to generate the money for real investment. All the securities, whether it is for short term or long term, are initially issued in the primary market. This is the only market in which the company or government bodies are involved in the transaction and receives direct benefits from issue that is the company actually receives the proceeds from the sale of securities (Bhattarai, 2005: 7).

The primary market itself can be subdivided into seasoned and unseasoned issues. A seasoned new issue refers to the offering of an additional amount of already existing securities, whereas an unseasoned new issue involves the initial offering of a security to the public.

In primary market the principal sources of funds is the domestic savings of individual and business, other supplies include foreign investors and governments. The ultimate supplies of funds are those sectors with a surplus of current incomes over expenditures (savings) and these funds flow to ultimate users, economic use securities to finance a surplus of expenditure over their current incomes.

2.1.6 Secondary Market

Secondary market involves the purchase and sale of securities which are already issued to the general public and traded in the stock exchange. Secondary market is created by brokers, dealers and market makers. Brokers bring buyer and seller together with themselves actually buying or selling, dealers set price at which themselves are ready to buy and sell (bid and ask price respectively). Brokerage and dealer come together organized market or in stock exchange (Gitman, 1992: 457). Nepal Stock Exchange (NEPSE), New York Stock Exchange (NYSE) and Bombay Stock Exchange (BSE) are the example of organized stock exchange (secondary market).

The secondary market is a very important element of the securities market. The existence of an organized secondary market can provide this level of confidence to holder of securities so that they can purchase securities in the primary market readily convert these securities to cash whenever they wish to do so. The benefit of secondary market is that it increases the investment opportunities. Person who may not have been able to acquire securities on the primary market have been able to acquire securities on the secondary market.

2.1.7 Common Equity/Stock

Common equity represents the ownership position in a company. The holders of common stocks, called shareholders or stockholders are the legal owners of the company. They are entitled for dividends for the capital contributed by shareholders by purchasing common shares. The capital represented by common stock is called share capital.

Equities convey ownership of the corporation and are basically valued in line with expected future earnings. To date they have been relatively little affected by financial innovation (Gutam & Thapa, 2006:17).

Many companies have only one class of stock, often called common stock or ordinary shares. This class of stock carries residual ownership of the company, entitling the holder to unlimited interest in the earnings and assets of company after limited claims are paid. Dividends paid on stocks are usually unstable because they tend to vary with earnings and

also less than earnings. The marketprice of common stock is often subject to wide fluctuations, because it depends largely upon investors expectations of future earnings.

Following are the most significant feature of equity shares.

1. Risk: - Equity shareholders run the risk of receiving nothing if earnings are insufficient to cover all obligations (Srivastava, 1995:337).

2. Control: - Every equity shareholder has the right to vote on every resolution placed before the company and his voting right on a pool is in proportion to this share of paid-up capital of the company (Srivastava, 1995:338). **3.Rights:-** The equity shareholder have the right of Voting, to transfer shares in the proceeds upon the liquidation of company, share in the profits when distributed as dividends etc.

4. Pre-emptive Right: - The Company is under legal compulsion to offer new issues to the equity stockholders before placing them in the market for subscription. Such a right of equity stockholders to purchase newly issued equity stock is termed as ‘preemptive right’ or ‘right offering’.

5. Maturity: - There is no stated maturity at which capital must be returned to the equity shareholders. So, equity shares provided permanent capital to the company.

2.1.8 Preference Shares

Preferred stock is a fixed income security and it is also the alternative sources of long term funds for the company. Preferred stock is similar to bonds in same respects and to common stocks in other ways preferred stock represents equity of a corporation but it has different from common stock because it has preferences over common stock in payment of dividends and in the assets of the corporation in the event of liquidation (Ross, Jaffe and Westerfield, 1993:402).

The preferred stock, though not a popular with investors as bonds and common stock, offers unique features that make it attractive under certain circumstances.First, it is hybrid security because it has characteristics of two types of securities: debt and common stock. Second, it is essentially a fixed income security. Preferred stock investors typically receive fixed dividends (Cheney & Moses, 1992: 404-405).

Preferred stock has a number of features, major features includes:

- It has priority of claim over common stockholders with regards to income. They are paid dividend at a fixed rate specified in the agreement.
- Preferred stockholder claims on assets are superior to equity Stockholder during the

time of liquidation of company.

- Normally preferred stockholder do not have direct right to participate in the management through voting from directors and other matters.
- Unlike common stockholder, preferred stock always has a Par value.
- At their option preferred stockholders may be allowed (if mentioned in the corporation's charter) to switch over to equity stock.
- A call provision gives the issuing corporation the right to call in the preferred stock for redemption.
- Today, however most new preferred stock has a sinking fund and thus an effective maturity date.

2.1.9 Bonds/Debenture

Debenture as a debt security is the alternative sources of long-term fund for the company and given different names in different countries. In the United Kingdom, Nepal and India the term 'debenture' is popular, but in the US the term 'bond' is common (Srivastava, 1995:342). A debenture is an unsecured corporate debt, whereas a bond is secured by a mortgage on the corporate property. A debenture is an acknowledgement of a debt under the sale of a company and containing a contract for the repayment of the principal sum at a specified date and for the payment of interest at a fixed rate percentage (Srivastava, 1995:343). A bond is a type of fixed-income security by a borrowing entity in which the amount to be paid to the investor is specified in the investment contract or indenture. Debentures have some important features such as interest rate, maturity date, redemption, indenture, security, converted ability, yield and claims on assets & incomes (Pandey, 1994:820).

In short, debenture is a formal evidence of debt and termed as the senior securities of a company. Certain distinguishing features of debentures are as follows:

- The debenture or bond has fixed maturity date. That means, the principal amount of bond must be repaid at the time of maturity.
- Debenture holder has priority on claim to income over preferred stockholder and common stockholder.
- Bondholders also have priority over stockholder in respect of their claims on assets.
- Debenture holders do not have controlling power through the vote for the election of directors but indirectly influence managerial decision through protective covenants in indenture.

2.1.10 Options

An option is probably the most popular derivative security in the world of investment. It is a contract between two people wherein one person grants the other person the right, but not obligation, to buy or sell a specified asset at a predetermined price on or before a set expiration date. It is derivative security because it derives its value from an underlying security (Security for which the option has been written) such as a stock, a bond etc. In the securities industry, options are marketable security and can be bought and sold in the stock exchanges. So the option owner has the right to sell the option and any other investor's can invest on it. An option buyer pays an option writer a premium for granting the option. After options have been created, they can be traded at determined premiums (or Prices) that fluctuate continuously (Gutam &Thapa, 2006: 7-1). Option is not in exercise up to now in Nepal.

The option is divided into two types i.e. Put and Call Option. Option to sell certain shares at predetermined price within or a certain later date called Put Option where as an option to buy certain share at a predetermined price with in or on certain future date is called call option (Bhattarai, 2006: 291).

Option has certain features which are given below.

1. **Exercising Date:** - The fixed price stated in the option contract at which the underlying asset may be purchased or sold is the exercise price. it is also called strike price and denoted by E.
2. **Expiration Date:** - The option has a certain maturity period. The option expires after its maturity period and the maturity date is the expiration date.
3. **Exercising an option:** - The act of buying or selling the underlying asset through an option contract is called exercising an option.

2.1.11 Warrants

A warrant is along-term option that gives the holder the right to purchase a stated number of shares of the company stock at a specified price within stipulated period of time. Generally, warrants are distributed with debt and preferred stock, and they are used to induce investors to buy long-term debt and preferred stock with a lower coupon rate than would otherwise be required. Warrants are long-term call options that have value because holders can buy the firm's common stock at the exercise price regardless of how high the market price increase. Warrants are usually used by growing firms as sweeteners to reduce the cost of fund. Warrants may be detachable or non-detachable. Detachable warrants can be sold or purchased

without selling or purchasing the security to which it is attached so that after the warrants have been exercised, the bond remains outstanding and total capital increases. Warrants are not in exercises in Nepal till date.

2.1.12 Convertible

Convertible are bonds or preferred stock that can be exchanged for stated number of common stock at the option of the holder within stipulated period of time. A bond can be converted into preferred stock or common stock while the preferred stock can be converted into common stock only. Conversion feature increases the marketability of the security. Unlike the exercise of warrants, the debt and preferred stock is simply replaced by common stock but does not provided additional capital (Gautam & Thapa, 2006: 6-4).

At first time in Nepal, the convertible preferred stock is issued by Everest Bank Limited some time ago but convertible bond are not in practice till date.

Convertible Securities may have the following features;

- 1. Conversion ratio:** - It is the ratio at which a convertible security can be exchanged for a common stock. It explains the number of shares into which a convertible can be converted
- 2. Conversion price:** - It is the price per share that is effectively paid after the conversion of the convertible into common stocks. It is determined by dividing the par value of convertibles by the conversion ratio.
- 3. Conversion value:** - Conversion value is the value of the convertible measured in terms of the market price of the common stock into which it can be converted. Conversion value can be found simply by multiplying the conversion ratio by current market price of the firm's common stock.

2.1.13 Issuing Company

Issuing company is the company that raising funds as the from of Debenture, Preference Share, Equity Share etc, from the general public through the process of public offering as per requirement of business activity. The company seeking for public offerings could be a new company or new company set by the existing company or by existing listed company. As per company Act, only public companies are liable to go for public offerings but not for private companies on it. NRB has made mandatory that financial institutions must go for common stock public offerings within specified time of operation commencement.

2.1.14 Merchant Bankers

Merchant bankers are the financial intermediary that specializes in selling new security issues and advising firms with regard to major financial transaction (Gitman, 2003: 316). The role of merchant bankers is to help create and expand securities underwriting and advising corporations and managing investment portfolio for the needing groups. They charge service charge to their client for intermediary and advisory role. The role of merchant banking in managing the public offerings comes under the heading of securities underwriting. For the working of merchant banking function in Nepal, Nepal Rastra Bank has set forth the working guidelines.

2.15 Merchant Banking Business through Subsidiary Company

With an objectives of bringing the merchant banking business only under the sole regulatory periphery of the Board and to make the provisions of banks and financial institution to reform merchant banking business through subsidiary company in pursuant to the securities Act .2007 the notice provisioning the banks and financial institution to perform merchant banking business through subsidiary company published on August 17,2007 by Government of Nepal with the recommendation from SEBON .According to the notice it was provisioned that the bank and financial institution established in pursuant to prevailing laws were allowed to perform the business issue Manage, securities Business persons, Market maker ,share Registrar, Investment Management and under writing through separate subsidiary company with the approval from SEBON .Therefore, the board has made correspondence to the concerned companies for making necessary arrangement .After the enforcement of such provision, among 10 banks and financial institution working as merchant bankers ,only the companies presented have established their companies and have initiated the process for obtaining the license.

2.1.16 Security Board of Nepal (SEBON)

Security Board of Nepal was established in June 7, 1993 under the provision of securities Exchange Act, 1983 (first amendment) and is now functioning as an apex regulator of securities market. Since its establishment, SEBO has been concentrating its effort on improving the legal and statutory frameworks which are the bases for the healthy development of the capital market (Bhattarai, 2006, 38). As per Securities Act, 2006, the major objectives of SEBON are to regulate issue and trading of securities and market intermediaries, promote market development and investors right (SEBON 2006 Sept. 22).

2.1.17 Nepal Stock Exchange Limited (NEPSE)

Nepal stock Exchange (NEPSE) is a non-profit organization and sole institutions to facilitate secondary market transactions established under Securities Exchange Act, 1983. It commenced its regular operations on January 13, 1994 and had adopted Open-Cry cry system in past but now adopted Computer system for transaction of securities.

The history of securities markets began with the flotation of share by Biratnagar Jute Mills and Nepal Bank Ltd. in 1937. Under the Industrial Policy Security Market Centre was established in 1974 which is converted into Securities Exchange Centre (SEC) with the objective of facilitating and promoting the growth of capital market (Adhikari 2004, 75). Later when Securities Exchange Act was regulated in 1983, it started to operate under this act. Under a programmed initiated to reform capital market, Securities Exchange Centre (SEC) converted into Nepal Stock Exchange (NEPSE). The basic objective of NEPSE is to import free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through market intermediaries, such as brokers and market makers. Government of Nepal, Nepal Rastra Bank, Nepal Industrial Development Corporation and its member is the shareholder of NEPSE. Member of NEPSE are permitted to act as intermediaries in buying and selling of government bonds and corporate securities. It has 27 member broker and 2 market makers. It has also given membership to 11 sales and issue manager (finance companies) and 2 dealers Nepal Merchant Bank and Finance Co. Ltd. and Nepal Financial and Saving Co. Ltd (NEPSE)

2.1.18 Nepal Rastra Bank (NRB)

Nepal Rastra Bank is the central banking authority in Nepal. It is the governing authority in setting guidelines to all the bank and financial institution regarding its area of operation. But, in the case of public offerings, its involvement is very minimal. Its role in the issue process is only to grant bank and financial institutions approval to be involved with different role in the issue process. If the issuing companies are financial institutions then they need to obtain approval from Nepal Rastra Bank as well, prior issuing their shares to public. Also for different fund based activities of merchant banking, approval needs to be taken from Nepal Rastra Bank.

Securities Issue Procedure in Primary Market (Legal Rules, Regulations)

The securities issue in Nepal should have to make by abiding the securities Transaction Act 1983, Issue management guidelines, 1997 Securities registration and issue approval

guidelines 2000. According to the provision mentioned in this legal framework, the procedure of securities issue in Nepal is as follows,

1. The issuing company should have to select the issue manager or underwriter to manager or underwrite the issue.
2. After the selection of the issue manager, the issue manager should have to prepare the prospectus of the issuing company as per the format designed by the company registration office and ministry of commerce and industry.
3. After the preparation of the prospectus, the issue manager should have to send the prospectus.
4. After the approval from the BOD of issuing company, the prospectus should have to be sent to the company registrar for the approval. The registrar of Company (ROC) will send a company of prospectus to the SEBON, Nepal Rastra Bank (NRB) and Insurance Board in case of insurance company for the review of the prospectus.
5. The SEBON, Nepal Rastra bank (NRB) and Insurance Board will send the prospectus after the review.
6. The ROC will again make a correction to the prospectus with reference to the feedback received from the SEBON, Nepal Rastra Bank (NRB) and Insurance Board.
7. The ROC will send the corrected prospectus to the issue manager and the issue manager again sends the corrected prospectus back to the issuing company for the approval.
8. After the approval of issuing company the prospectus should have to send to the ROC for the approval.
9. After the approval of prospectus from ROC, the issue manager should have to register the security in the SEBO for issue after paying certain fee.

Table 2.aRegistration Fee on Issue

Amount of issue	Commission
Up to Rs 50,00,000	0.25%
Rs 50,00,000 to Rs 100,00,000	0.2%
Above Rs 100,00,000	0.15%

10. The SEBON will provide the approval for issue after the discussion of BOD of SEBON.

11. The issue manager should have to issue the securities within the 2 months of receiving the approval.
12. The issue manager should have to prepare the share issue announcement on the basis of the approved prospectus by ROC.
13. The announcement should have to publish in the National daily newspaper.
14. The issue of securities should have to open within a maximum of 15 days and minimum of 7 days of the announcement of the public issue.
15. The share should have to be issued for minimum of 5 days if the share is issued from minimum of 10 collection counters that will cover all 5 development region. If the above provision is not possible, the share should have to open for 7 days.
16. If the targeted amount is not collected within 7 days the company can extend the issue for next 30 days. After that if company thinks to open issue further, the company can extend for another 15 days after getting an approval from SEBON.
17. The issue manager should have to close the sale of share by providing per notice.
18. This issue manager collects the fund from the collection counter day by day.
19. The company has to allot the share according to the allotment guidelines of SEBON.

Table 2.b
The allotment period of Securities

Number of Securities	Time Period (in days)
Up to 15000	45
15000 to 60000	60
60000 to 100000	70
Above 100000	90

Sources: SEBON

20. The distribution of share certificate should have to commence within the 45 days to the allotment after completing the allotment of 50% of shares The Company also has to list the securities in the stock exchange within this period. Similarly, if the company has to refund it has to be made within this period.

2.2 Indicators of Stock Market Development.

The following stock market development indicators are used to analysis stock market development in Nepal

a) **Market Size:** Market capitalization measures the size of stock market and equals the value of listed domestic shares on domestic exchanges. Although large markets do not necessarily function effectively and taxes may distort incentives to list on the exchange, many observers use capitalization as an indicator of market development.

b) **Turn over Liquidity:** Turnover and value traded are two related measures of the market liquidity. First, turnover equals the value of the traders of domestic shares on domestic exchange divided by the value of the listed domestic shares. Turnover measures the volume of domestic equities traded on domestic exchanges relative to the size of the market .high turnover is often used as an indicator of low transaction costs. Importantly, a large stock market is not necessarily a liquid market: a large but inactive market will have large capitalization but small turnover.

The second measure of market liquidity is value traded, which equals the value of the trades of domestic shares on domestic exchange divided by GDP while not a direct measure of trading costs or the uncertainty associated with trading on a particular exchange, theoretical models of stock market liquidity and economic growth directly motivate value traded. Value traded measures trading volume as a share of national output and should therefore positively reflect liquidity on an economy wide basis. Value traded may be importantly different from turnover. While value traded captures trading relative to the size of the size of the economy, turnover measures trading relative to the size of the stock market. Thus, a small and liquid market will have high turnover, but small valued traded.

c) **Volatility:** Volatility is one of the important indicators of stock market development .This indicators is a twelve month, rolling standard deviation estimate based on market returns. Greater volatility could be indicators of development, so far as revolution of information implies volatility in a well functioning market.

d) **Concentration:** In some countries a few companies dominate the market. High concentration is not desirable because it may adversely affect the liquidity of the market. To measure the degree of market concentration, share market capitalization accounted for

by ten largest stocks is computed and called concentration. In more developed market the concentration is low whereas in less-developed market concentration may be quite large. To measure the degree of market concentration, we compute the share of market capitalization accounted for by the ten largest stocks and called this measure concentration ratio. Country's stock market is considered highly concentrated if few large companies dominate it.

e) **Liquidity:** Liquidity in stock market refers to ability to exchange securities easily in the market. There are two methods to measure liquidity of stock market. First, total value traded/GDP i.e. shares traded on stock market divided by GDP. This measure complements the market capitalization ratio. Second, liquidity of stock market i.e. the ratio of value of share traded on market capitalization: this measure is also known as turnover ratio (Demirgüç-Kunt and Levine, 1995).

2.3 Indicator of Economic Growth

a) **Gross Domestic product (GDP)** - An increase in monetary value of output in an economy is considered economic growth, simply. The best measure of growth is an increase in real GDP or GDP at constant prices. The reason for specifying real GDP is because it changes only when the output changes over time. Therefore, if growth is defined an expansion of monetary value of economy's output then price change must be removed from GDP as in constant price. According to the preliminary estimate of central bureau of statistics, the real GDP growth rate in 2009/10 is estimated to grow by 3.5 percent against targeted 5.5 percent. According to revised estimates, GDP in previous fiscal year grew by 4.0 percent. In 2009/10 the agriculture sector was estimated to grow by 1.1 percent, against 3.0 percent growth in previous year. Contribution of this sector to GDP for the fiscal year 2009/10 is estimated to be about 33.0 percent against previous year 32.1 percent. The growth rate of non agricultural sector in the fiscal year 2009/10 is estimated to remain 5.1 percent. This growth rate is slightly lower as compared to the growth rate of 5.7 percent attained in the previous year. (NEPSE Annual Trading Report 2009/10).

b) **Consumption, Investment and Savings** – Another important indicator of economic growth is to consumption, investment, and saving. The consumption expenditure has climbed to 90.6 percent within a decade of the fiscal year 2000/01 to 2009/10 showing an increase of 2.3 percentage point. Gross fixed capital formation during this period grew to 21.3 percentage

from 19.2 percent with a growth of 2.1 percentage point .On the consumption side ,share of private sector consumption in GDP decreased by 1.5 percentage point and reached to 77.5 percentage during this period whereas the government consumption increased by 3.4 percentage point reaching 11.5 percentage .The major reasons for rise in government consumption are the armed conflict, ever extending post peace accord transition period and political instability thus created. In the fiscal year 2008/09, total consumption was 88.3 percentage of the GDP .Similarly in the fiscal year 2009/10 government estimated to consume 11.5 percent of GDP, which was 11.0 percent in the previous year.

Saving in the fiscal year 2009/10 the gross domestic saving in current price has reached RS 110.75 billion with a growth of 15.0 percent in comparison to 20.1 percent of the previous year .Despite the increase in both consumption and saving, it is estimated that saving will be limited to 9.4 percent wit slight decline from 9.8 percent in the previous year. (NEPSE Annual Trading report 2009/10)

c) **Gross private Saving-** As a matter of accounting, investment has to be financed by saving from either domestic or foreign sources. In only a few high investment countries has foreign 20% of investment over long stretcher of time. In an economy investing, say 30% of its GDP ,relying on foreign saving beyond this limit would imply running a persistent current account deficit in excess of 6% of GDP , which would be courting disasters .Hence the critical importance of domestic saving in economic growth follows from a few straight forward ,facts of economic life(Rectric ,1996) .Individuals as well as business institutions define private saving as the surplus of income over the consumption private saving is of immense importance for economic growth because it helps in increasing investment and capital stock growth.

2.4 Review of Empirical Work

2.4.1 International Context

Empirical evidience suggest that the well functioning stock markets can promote economic development by fuelling the engine of growth through faster capital accumulation and by turning it through better resource allocation.

A large literautre,dating at least as far back as Joseph A.Schumpeter (1911) ,emphasized the positive influence of the development of a country financial sector to the level and the rate of growth of its per capital income.

Atje and Jovanovic (1993) presented a cross country study of stock markets and economic growth. They found a significant correlation between growth over the period 1980-1988 and the value of stock market trading divided by GDP for 40 countries. Demirgüç-Kunt and Maksimovic (1996) show that firms in countries with better functioning banks and equity markets grow faster than predicted by individual firm characteristics. Valerie R. Bencivenga et al. (1995) derive models where more liquid stock market where it is less expensive to trade equities reduce the disincentives to investing in long duration projects because investors can easily sell their stake, in the project if they need their saving before the projects matures.

King and Levine (1993a, 1993b, 1993c) study 80 countries over the period 1960-1989 systematically, controlling for other factors affecting long run growth, examine the capital accumulation and productivity growth channels, construct additional measures of the level of financial development and analyse whether the level of financial development predicts long run growth. They use four measures of the level of financial development. The first measure is the depth, which measures the size of financial intermediaries and equal liquid liabilities of the financial system (currency plus demand and interest bearing liabilities of the bank and the non-bank financial intermediaries) divided by GDP. The second measure, bank concentration, measures the degree to which the central bank versus commercial banks are allocating credit. Bank concentration equals the ratio of bank credit divided by bank credit plus the central bank domestic assets. The third measure is the private credit, which equals the ratio of credit allocated to private enterprise to total domestic credit (excluding credit to banks). The fourth measure is the private credit to GDP, which equals credit to private enterprises divided by the GDP. King and Levine (1993b, 1993c) then assess the strength of the empirical relationship between each of these four indicators of level of financial development averaged over the 1960-1989 period, "F", and three growth indicators also averaged over 1960-1989 period, "G". The three growth indicators are as follows: a) the average rate of real per capita GDP growth, b) the average rate of growth in the capita stock per person and c) total productivity growth which is sale residual defined as real per capita GDP growth minus (0.3) times the growth rate of capital per person. In other words if $F(i)$ "represent the value of 1st indicators of financial development and $G(i)$ " represents the value the "I" growth indicators and "x" represents a matrix of conditioning information to control for other factors associated with economic growth (e.g. income per capita, education, political stability, indicators of exchange rates, trade, fiscal and monetary policy) then the following regression on cross section of 77 countries come into existence"

The summary is presented in the table 2.c

Dependent variable	Debt	Bank	Private	Policy
Real per capital GDP growth	0.024*** [0.001]	0.032*** [0.005]	0.034*** [0.002]	0.032 [0.002]
R	0.5	0.5	0.52	0.52
Real per capital stock growth	0.022*** [0.001]	0.022*** [0.012]	0.022*** [0.011]	0.022** [0.001]
R	0.65	0.62	0.62	0.64
Productivity growth	0.018*** [0.026]	0.026*** [0.010]	0.027*** [0.003]	0.025** [0.001]
R	0.42	0.43	0.45	0.44

***significant

at 0.10 level, **significant at 0.05 level,

***significant at 0.01 level (P values in brackets)

Observation-71

There is a strong positive relationship between each of the four financial development F (i) “ and the three growth indicators “G(i)” long run real per capital growth rates, capital accumulation and productivity growth. So, the results suggest that the initial level of financial development is a good predictor of subsequent rates of economic growth, physical capital accumulation and economic efficiency improvements over the next 30 years even after controlling for income, education, political stability and measures of monetary, trade and fiscal Policy. Various research works that have been performed at international level regarding stock market development and economic growth. However the studies pertaining to this study are reviewed.

Demirguc-Kunt and Levine (1997)(47) in their working paper entitled “Stock Market Development and Financial Intermediaries Stylized Facts” collected and compared a broad array of indicators of stock market and financial intermediaries development. Their goal was to summarize the information about a variety of indicators for stock market development, in order to facilitate researchers to link between stock markets, economic development and corporate financing decision. The stock market development indicators that they have used are: (a) market size, (b) market liquidity, (c) market volatility (d) market concentration (e) asset pricing efficiency (f) regulatory and institutional development and (g) conglomerate indexes. They have used the: (a) size of financial system (b) size of efficiency of banking system (c) size of non-bank financial corporation and (d) size of private insurance and private pension funds to describe the financial intermediary’s development. Using the data of 41 countries from 1986 to 1993 they have ranked the countries market as most developed, most underdeveloped, highly developed, and underdeveloped markets. They have found the three most developed stock markets are: Japan, the United Kingdom and the United States. The most under developed markets are: Colombia, Nigeria, Venezuela and Zimbabwe. Malaysia, Korea and Switzerland have highly developed stock market where as Argentina, Greece, Pakistan and Turkey has underdeveloped stock markets. They have also found a strong relationship between stock market development and financial intermediary development. That is to say level of stock market development is highly correlated with development of banks, financial institutions, insurance companies and private pension funds. In the paper it was also mentioned that the big markets tend to be less volatile, more liquid and less concentrated in a few stocks. According to them internationally integrated markets tend to be less volatile and institutionally developed markets tend to be large and liquid. They have also argued that the richer countries generally have more developed stock markets than the poor countries.

From this study one can easily know the indicators of stock market development. Demirguc-Kunt and Levine have prescribed market size, liquidity, volatility and concentration as stock market development indicators. These indicators are also used in this study to analyze stock market development in Nepal. They have also demonstrated the positive relationship between financial intermediary’s development and stock market development. Although, the financial intermediaries can be used as an indicator in measuring economic development but present study has not used this technique. However, present study has focused on stock market development, and its relation with economic growth.

Recently published studies have shown the causality and correlation between stock market development and economic growth.

Levine and Zervos (1996)(323-339.48) have estimated a regression equation to evaluate empirically the relationship between stock market development and long run growth by using pooled cross- country time- series data of forty-one (41) countries over the period from 1976 AD to 1996 AD. They have found a strong correlation between overall stock market development and long-run economic growth. Levine and Zervos have estimated the correlation between stock market development and long run economic growth by controlling the initial level of GDP Per-capita, initial investment in human capital, political instability and measures of monetary, fiscal and exchange rate policy. In the article they have mentioned that the theory does not provide unique concept or measure of stock market development but it only suggest that the size of stock market, liquidity and integration with world capital market may affect economic growth. Consequently, they used conglomerate index of overall stock market development constructed by Demirguc-Kunt and Levine (1995) to measure stock market development. To analyze the impact of stock market development on economic growth they have used the following regression equation:

$$\text{GROWTH} = \alpha X + \beta (\text{STOCK}) + \mu$$

Where, dependent variable GROWTH is the real per-capita growth rate averaged over the relevant period. X is a set of control variables that includes initial income, initial education, measure of political instability, ratio of government consumption expenditure to inflation rate, the black market exchange rate premium. α is a vector of coefficient of the variables in X. β is the estimated coefficient on STOCK, and μ is an error term. STOCK is stock market development index, the average of means removed values of market capitalization, total value traded, turnover ratios and Asset Pricing Theory (APT) mispricing indicator.

Carporale ET. al. (2004) has examined the causal linkage between stock market development, financial development and economic growth. They have investigated seven selected countries (Argentina, Chile, Greece, Korea, Malaysia, Philippines and Portugal) from the period 1971:1 to 1998:4. They have suggested that a well-developed stock market can efficiently mobilize the fund that have not been fully absorbed by financial intermediaries into productive investment and hence spur economic growth. For stock market development they have used two standard indicators, (1) the market capitalization ratio, which equals the value of listed shares divided by GDP and (2) The value of traded shares ratio, which equals the total value

of shares traded on stock exchange divided by GDP. Bank deposit liabilities to nominal GDP and ratio of bank claims on private sector to nominal GDP are used as proxy for bank development. And GDP level is used as a measure of economic development. They have found a robust relationship between stock market development and economic growth. Finally in the article they have mentioned that well-organized and active stock markets could modify the patterns of demand for money, and would create liquidity that eventually enhances economic growth. The empirical part of study exploited the technique recently developed by Toda and Yamato (1995).

Ahmed et. al. (2008) (182-194) has endeavored to investigate whether there is a relationship between stock market development and economic growth in case of developing economies. They have selected Pakistan to perform their study. They have used annual time series data from 1971 to 2006 of Pakistan and found very strong relationship between stock market development and economic growth. The results are vigorous and robust indicating that the stock market is an important wheel for economic growth. In the article they have also mentioned that the financial liberalization improves the efficiency of banking and stock market development. According to them the financial liberalization has significant and positive impact on the economy. They have employed two new tests namely DF-GLS and Ng- Perron to find integrating order of said variables of the study. To test long run robustness, J-J Co-integration and ARDL bounds testing techniques were applied. From this study one can say that there exist positive relation between stock market and economic growth in developing economy too. And financial liberalization of Nepal is necessary for the efficient functioning of NEPSE.

Victor (2005) has investigated the impact of stock market on economic growth in Ghana. Victor has applied auto- regressive model, which was developed by Sims (1972) based on Granger's definitions of causality. The data used in this study is from 1991:1 to 2003:4. Victor has found that the stock market development granger cause economic growth in Ghana and causation is unidirectional from stock market to economic growth. That is to say that the stock market development predicts economic growth in Ghana. In this study, value of market capitalization is the only variable used as an indicator of stock market development. This was done mainly due to lack of data and other indicators of stock market development. This study has recommended that the efforts must be geared towards the improvement of the institutional capacity, regulatory framework and macro economic landscape.

Beck and Levine (2006) have investigated impact of stock markets and Banks on economic growth using a panel data set for the period 1967-98 on 40 countries. They have employed Generalized- Method of Moments (GMM) techniques to assess the relationship between stock market development, bank development and economic growth to measure stock market development, they have used turnover ratio as measure of market liquidity, which equals value of traded shares or domestic exchange divided by total value of listed shares. They have also experimented with other measure of stock market development that which was developed and used by Levine and Zervos (1998) and Rousseau and Wacziarg (2002)(24). They are, value traded and market capitalization ratio. Value traded equals the value of domestic shares exchange in domestic economy divided by GDP. In the paper it has mentioned that the value traded has two pitfalls. First, it does not measure the liquidity of the market. It measures trading relative to size of the economy. Second, since markets are forward looking, they will anticipate higher economic growth by higher share prices. Since, value traded is the product of quantity and price, this indicator can rise without an increase in number of transactions. Turnover does not suffer from this short coming since both numerator and denominator contain the price. In this paper, they have accepted the views of Levine and Zervos (1999) view that the market that the market capitalization is not a good predictor of economic growth. To measure bank development they have followed Levine and Zervos (1999) and use bank credit; which equals bank claims on the private sector by deposit money banks divided by GDP. In their study, stock market development and bank development jointly enter in regression equation and are significant. Finally, they have concluded that the stock market and banks are important for economic growth.

Even though banks are crucial for economic growth but present study has not considered in its analysis. However, present study is confined to stock market development and its relation with economic growth.

Bencivena, Smith, and Starr (2000) have emphasized the importance of stock market liquidity. According to them the ability to trade equity is very important for growth. They have mentioned that the cost of transaction in the equity markets affect not just the level of investment, but the kinds of investment that are undertaken. A reduction in transaction cost will typically alter the composition of savings and investment. It potentially improves capital accumulation and steady state output. This study highlights the importance of liquidity in

stock market. Therefore efforts must be geared towards reducing in transaction cost of financial assets that are traded in NEPSE.

The aforementioned empirical works do not provide unique concept and measure of stock market development but it is clear that market capitalization ratio, value traded ratio, volatility and concentration ratio are important indicators of stock market development. GDP growth and GDP per capita growth are indicators of economic growth. Most of the papers have demonstrated an existence of positive correlation between stock market development and economic growth.

2.4.2 National Context

In the Nepalese context, only a few research studies have been conducted regarding to stock market development and economic growth. However some books, and articles are available, they will be reviewed in the following section.

SINDUKAR.(2004) studies about the relationship between stock market and economic growth, particularly at the role of the stock market in economic growth. He used only correlation analysis and time series analysis in the study. He concludes that the significant relationship doesn't exist between GDP and NEPSE index.

However growth rate and turn over velocity is unexpected and insignificant.

- Sindukar's study on "The relationship between sock market and economic growth "has the following objectives:
- To show the relationship between stock market and economic growth for the role of stock market in economic growth.
- To study and analysis the prospects of Securities Market in future.

Research and methodology

- For the research work he used tools as correlation analysis and time series analysis in the study.
- Research has been carried on between stock market and economic growth.
- He highlighted the research design, population and sample, nature and source of data, financial statement etc.

Following findings were observed in connection with the stock market and economic growth:

- Significant relationship doesn't exist between GDP and NEPSE index.

- Relationship of GDP with market capitalization and number of listed companies is significant.
- The correlation between economic growth rate and turnover velocity is unexpected and insignificant.

K.C. (2005) in the article entitled "Development of Stock Market and Economic Growth in Nepal" has explained that the stock market in Nepal is underdeveloped as well as illiquid and risky and has failed to show impact on overall national economy. K.C has used stock market size, liquidity, concentration and volatility as indicators of stock market development, and data consist for the period 1993/94 to 2003/04. These indicators will be used in this study as well and hence K.C.'s result will be used to compare the results that will be derived in this study.

In this article K.C. has also mentioned that the development of stock markets in emerging nations passes through four main stages. Development of equity markets in any country requires political and economic stability. And growth-oriented policies as pre-conditions for capital market development. At the second stage, equity price rise and investors gradually gain confidence in the equity market. People started accept equity as an alternative to additional bank deposits and government securities. At the second stage, equity markets gain more credibility and market liquidity increases. Investors long for rise in risk adjusted returns and demand a wide variety of securities to match their risk preferences. Rules and regulations are refined and equity markets starts functioning on the basis of self- discipline. Equity markets at this stage gradually get integrated to international markets and attract foreigners. At the third stage equity markets become an integral part of the overall financial system. Investors get higher, less volatile returns and easily absorb new issues of stock and bonds. The volume of trading increases as the equity markets become more liquid and firms go for initial public offering to replace their debts. At the final stage equity markets get highly integrated with the global markets and the equity risk premium match with the international competition levels. Equity –markets at this stage achieve stable growth and attain maturity. The above-mentioned criteria of four stages will help to know in which stage our stock market is in.

- K.C (2005) article entitled “Development of stock market and Economic Growth in Nepal” has the following objectives:
- To develop the stock market in Nepal having a positive impact on national economy.

- To present some recommendations bases on the findings of the study.
- To study and analyze the activities of stock market in Nepal.
- To examine the liquidity position in the stock market.
- To examine the performance of Securities Board, Ministry of Finance and NEPSE to build up the stock in Nepal.

Research and Methodology:

- During research and Methodology process major indicators of stock market such as stock market size, liquidity; concentration and volatility are used verifying different relevant years to obtain concrete result to carry on further research.
- Furthermore various stages are listed above to achieve the stable growth and attain the maturity.

Following findings were observed in connection with the stock market:

- It creates a positive impact on overall national economy if stock markets are well developed.
- There is almost no liquidity in the stock market for shares except some of banking and insurance sectors. Though ,its quite late to take initial steps to overcome those hurdles of Nepalese stock market to make it supportive and active but stock market has good prospect productive enterprises in Nepalese for the resource mobilization,

Baniya (2006) Thesis, on “Determinants of share price in Nepalese Financial market” has following objectives, research methodology, and major findings:

Baniya’s(2006) highlighted some of the objectives:

Examine and evaluate the relationship Mps and various financial indicators like EPS, NWPS, DPS, ROE, etc.

- To analyze the market trends of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- To identify sample companies are at equilibrium price or not.
- To present recommendation based on the finding of the study.

Research and Methodology:

- He tried to make clear view of method and process adopted in the entire thesis study.
- Financial and statistical tools have been used in well designed qualitative way.

Major findings:

- HBL's MPS has positive relationship between EPS and ROE, whereas it has negative relation with other financial variables.
- HBL'S MPS is negatively correlated with major financial indicators, however it has positive relationship.
- NIBL'S MPS is negatively correlated with major financial variables; however MPS and DPS are statistically significant at 1% level of significance.
- NIBL'S MPS is positively correlated with EPS, NWPS and DOS which are statistically significant at 1% and 5% level of significance.
- NHDL's MPS has positive relationship with main financial indicators, but such relationship is not statistically significant.
- KFL'S MPS has positive relationship with major financial variables except DPR and ROE.

Shrestha (2007) in the article has argued that the monetary policy of central bank has profound influence on the stock market. He has mentioned that monetary policy plays a decisive controlling function to avoid artificial rise in stock price to save the investors from the hands of the gamblers. He has also mentioned that monetary policy creates over all linkage to guide the stock market to take right kind of direction and change proving vital to endure fair trading practice and compliance of the guide lines and regulatory provisions to protect the common interest of the investors.

Shrestha (2007) article objectives are:

- It has listed monetary policy of central bank can influence the stock market, if they are monetarize efficiently.
- To analyze the government policies and program related to stock market.
- To study and analyze the activities of the stock market related to the investors.
- To suggest the findings of the study to the interested parties related to stock investment.

Research and methodology:

- It uses monetary policy as a major means for research.

Following findings were observed:

- To guide the stock market to take right decision fair trading practice and compliance of the guide lines and regulatory provisions should be endured to protect the common interest of the investors.
- Investors in the corporate sector should be encouraged. The listed firms which shares are not traded should provide the financial publicly in order to make investors aware about their exact financial condition.
- Proper polices and programs should be amended by the government for the development of entrepreneurship in Nepalese economy.
- Public awareness and investors awareness programmer should by developed by the security board in coordination with Ministry of Finance and NEPSE.

Dangol (2007) has analyzed the trend of stock market in Nepal. She has examined the role of stock market in economic growth, and has determined the relationship between stock market indicators and economic growth indicator. The study covers the time period form 1993/094 to 2004/05. She has used real GDP growth as an indicator of economic growth. She has used trend analysis, correlation analysis as well as regression analysis as the analytical tools in her study. In correlation analysis, she has found that the market capitalization (i.e. stock market indicator) is highly correlated and significant with the growth indicators viz. saving, investment, capital formation, population growth rate and Gross domestic product (GDP). The correlation coefficient between MC and S is 0.71, between MC and I is 0.79, between MC and PGR is -0.89 and MC and GDP is 0.84. The correlation between monetary indicator i.e. the discount rate (DR) and MC was also important. The correlation between DR and MC is -0.81. Similarly, value of share traded was found positive and significant relationship with GDP, S and I and negative relationship with DR and PGR at 5 percent level of significance. However, the correlation of other stock market indicators such as value traded, turnover, and volatility with GDP and other growth indicators are found insignificant. She has used regression equations to find out the causal relationship between stock market development variable and economic growth variable. The regression equations that Dangol has used were:

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log \text{PGR} + b_4 \log \text{DR} + b_5 \text{Log MC}$$

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log \text{PGR} + b_4 \log \text{DR} + b_5 \log \text{VT}$$

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log \text{PGR} + b_4 \log \text{DR} + b_5 \log \text{TO}$$

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log \text{PGR} + b_4 \log \text{DR} + B_5 \log V$$

Where,

GDP= Gross Domestic product, S= Gross Domestic Saving, I= Total Investment,

DR= Discount rate, PGR= Population growth rate, a= coefficient, b= estimated coefficient.

Dangol has found that the MC, VT and V have significant impact on gross domestic product. While the other stock market indicator TO have insignificant impact on GDP. The regression equations which Paneru and Dongal have used are relevant for this study to examine the relationship between stock market development and economic growth. The result derived by the above mentioned studies will be used to compare the result of this study. No significant part of their study contributed to the market concentration and performance of Nepalese stock market. However this will be examined in this study.

Dangol (2007) trend of stock market in Nepal has following objectives:

- To examine the role of stock market in economic growth.
- To analyze major elements resulting the change in stock price and their relationship with it.
- Different time period from 1993/1994 to 2004/2005 are taken for the research work.
- To shows the relationship between stock market indicators and economic growth to determine trend of stock market.

Research and methodology:

- Different indicators (stock market indicators/economic growth indicators) are used for the research work.
- Mostly regression analysis, correlation analysis, trend analysis are the analytical tools used to show obtain the result between stock market development variable and economic growth variables.

Following findings were obtained:

- Finds that the market capitalization (stock market indicator) is highly correlated and significant with the growth indicator via saving investment, capital formation, population growth rate and gross domestic product.
- Value of share traded was found positive and there is significant relationship with GDP, S and I.
- Negative relationship with DR and PGR are at 5 % level of significance.

- The correlation of other stock market indicators such as value traded, turnover, and volatility with GDP and other growth indicators are found insignificant.
- MC, VT and V have significant impact on gross domestic product. While the other stock market indicator TO have insignificant impact on GDP.
- Result derived by the studies will be used to compare the result of the study

Rijal (2008), in his Masters Thesis “Role of Financial Indicators in Determining share price in Nepalese Financial Market” has the following objectives ,research and methodology and findings .

Rijal (2008) study on “Role of Financial Indicators in Determining share price in Nepalese Financial Market” has following objectives:

- To examine and evaluate the relationship of MPS with various financial indicators like NWPS, EPS, DPS, ROE, etc.
- To analyze the market trends of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- To find out whether stocks of the sampled companies are equilibrium priced or not.
- To identify qualitative factors affecting the stock price.

Research and methodology:

In order to complete, this thesis the researcher (Rijal) used especially secondary sources plus primary sources. He used published materials such as books, magazines and newspaper as secondary sources to collect data and information regarding the topic. He also used of the internet to obtain information about the company such as its background and other related information. He used interview method as primary sources.

Following findings were observed:

- Confidence with EPS and at 10% level of confidence with NWPS and DPS. NABIL’s MPS is positively correlated with all financial indicators but these values are not statistically significant at either 5% or 10% level of significance.
- NIBL’s MPS has negative correlation with all financial indicators..
- For all other banks, the correlation coefficients of MPS with other financial indicators are both positive and negative. These values are statistically significant at either 5% or 10% level of significance

- Relationship with all financial indicators of MPS for NFCL is positively correlated and the relationship is statistically significant at 5% level of

Pradhan (2009), Pradhan's study on "Market behavior in a small capital market" has following objectives:

- To assess the stock market behavior in Nepal.
- To examine the relationship of equity market to book value prices, earning and dividend with liquidity, profitability, leverage, asset turnover and interest coverage.

Research and methodology:

- To carry on the research, book value price, earning and dividend with liquidity, assets turnover, and leverage ratio are used to show the different affect on stock and dividend per share and used many other secondary sources to obtain the result.

Following findings were observed in connection with the dividend behavior:

- Higher the earning on stock, larger dividend per share to market price per share.
- Stock with large ratio of dividend per share to market per share have lower leverage ratio.
- Stocks with large ratio of dividend per share wear positively correlated.
- Positive relationship between the dividend per share to market price per share and interest coverage.

Bhusal (2010) has conducted a research "An Analysis of Stock Price Volatility in Nepalese Stock Market" "The prime objectives, research methodology and findings of his research are as follows:

Major Objectives:

- To analyze major elements resulting the change in stock price and their relationship with it.
- To examine group wise overall behavior of NEPSE index.
- To analyze and examine the signaling factor's impact on stock price with the help of NEPSE index.
- To assess the randomness of share price.

Research and methodology:

He included construction of research design, nature of data, data gathering procedure, population and sample data processing procedures and different tools and techniques used in course of this thesis preparation for analysis and interpretation of data.

Major findings were obtained:

- The correlation coefficient (r) for the SCBN between MPS and EPS, MPS and DPS and MPS AND NWPS are -0.3636, -0.1499 and -0.2103 respectively which shows there exists low negative relation between MPS and these variables.
- The correlation coefficients (r) for ACEDBL between MPS & EPS, MPS & DPS and MPS & NWPS are -0.4926, -0.1996 and -0.6997 respectively that shows there exists negative relation between MPS and these variables.
- The correlation coefficients (r) for PFCL between MPS & EPS, MPS & DPS, and MPS & NWPS are 0.5938, 0.8068, and 0.5042 respectively, which shows there is positive relation between MPS and these variables.
- The correlation coefficients (r) for HGI between MPS & EPS, MPS & DPS and MPS & NWPS are -0.7823, 0.6692 and -0.6539 respectively which shows there exists positive relation between MPS and DPS and negative relation between MPS and EPS and NWPS.
- The correlation coefficients (r) for CHCL between MPS & EPS, MPS & DPS and MPS & NWPS are 0.8761, 0.8916 and 0.9491 respectively which shows there is positive relation between MPS and all other variable.

2.5 Research Gap

The reviews of after mentioned works makes it clear that the development of the stock market is a necessary factor for modern day economy. Therefore, it is obvious that stock markets be well functioning for the sustainable economic development. Firms need capital to grow and finance their investment needs. It requires more efficient way of raising funds. If the investment is required for new technology for the projects with long-gestation period, premature liquidation of the capital is always on cards without the existence of liquid and well-functioning stock markets. Thus, it assumes a significant role in present day economics. Hence, economic growth of any nation is highly influenced and characterized by the development of capital market. Development and expansion of capital market is essential for rapid economic growth of country. Thus, in the primary stage of economic

development, and stabilization of Nepalese stock market can play a crucial role. The reviews of above literature also make clear that the stock market development can be analyzed in terms of market size, liquidity, volatility, and concentration. And stock market performance can be analyzed in terms of number of issue approval, amount of issue approval, number of listed companies, annual turnover, market capitalization, market capitalization to nominal GDP, and NEPSE index. And there exist positive relationship between stock market and economic growth. This study will be helpful to public companies (new and existing), issue manager, underwriter, investor, government organizations, general public, and researcher.

CHAPTER – III

RESEARCH METHODOLOGY

Research and methodology is a process of arriving to the solution of problem through planned and systematic dealing with the collection, analysis and interpretation of the facts and figures. Research Methodology refers to the various sequential steps adopted by a researcher in studying a problem with certain objectives in view. It tries to make clear view of method and process adopted in the entire aspect of the study. It is known as a path from which we can systematically solve the research problem. This research tries to perform a well designed quantitative and qualitative research in a very clear and direct way using both financial and statistical tools. Detail research methods are described as below:

3.1 Research Design

Research design refers to the entire process of planning and carrying out a research study. To carry out the study descriptive, co-relational and analytical research design has been employed. This study is carried out in the context of Nepal, for the variables regression analysis has been employed. For purpose of evaluating the causal relationship between appropriate statistical tools such as annual growth rate, compound growth rate, percentage, measure of central tendency, dispersion, and correlation and regression analysis have been used. It is also chosen to investigate the causality between the stock market indicators and growth indicators. The study covers the ten years time period between the fiscal year 2000/01 to 2009/10.

3.2 Nature and Sources of Data

The study is based on the secondary data only. As the study is related to the aggregate values of the economy as well as the aggregate values of stock market activities no need for primary data has been felt. The study is based on secondary data only. Researcher has collected data from NIDC Central Bureau of Statistics, Nepal Rastra Bank, SEBON and NEPSE and T. U. Central Library, Various report published by National Planning Commission, ADB and World Bank etc. At the same time, data from Annual Report of Security Board of Nepal for Fiscal Year and NEPSE 2009/10 has also been collected.

3.3 Selection of Study Period

The transaction of the stocks in the Nepalese stock market started from the fiscal year 1993/94. As this study is about the contribution made by the stock market in the economy, time period of the study will be 2000/01 to 2009/10. This is related to the main part of the study. Since the study has been totally confined to the stock market and economic growth in Nepal.

3.4 Method of Data analysis

Analysis is the systematic and careful examination of available facts so that certain conclusion can be drawn and inferences are made.

3.4.1 Trend Analysis

Trend analysis has been used to examine the market scenario of different indicators of the stock market and economic growth

Simple trend analysis has been used for the following purpose of the study.

- (i) To analysis the stock market development and economic growth in Nepal
- (ii) To analyze the performance of NEPSE.

3.4.2 Arithmetic Mean

Arithmetic mean is average of random variable which can be used for further analysis. The arithmetic mean, in this study, is used to calculate the average of various indicators of stock market and economic growth like; market capitalization, value traded, turnover, volatility, GDP, saving, investment and capital formation through the study periods.

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

3.4.3 Standard Deviation

The standard deviation measures the variability of the observation around the mean value. Therefore it is the appropriate measure of the variability of the stock market return. Volatility of the stock market is measured by the use of the standard deviation of the monthly stock index around the mean value. The research also calculate the standard deviation of various variables used in the study period.

3.4.4 Coefficient of Variation

The coefficient of variation (CV) is the relative measure of dispersion, comparable across which is defined as the ratio of the standard deviation to the mean expressed in percentage

Note: Higher CV denotes to the higher fluctuation of variables and vice-versa.

3.4.5 Correlation Analysis

The appropriate statistical tool to measure the relationship between two or more variables in quantitative terms is the correlation analysis. Correlation shows the degree of relationship between the variables. It is the square root of the coefficient of multiple determinations. Correlation can either be positive or it can be negative. If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation coefficient always remains within the limit of +1 to -1.

In this study, coefficient of correlation is calculated between various indicators of stock market, such as market capitalization, value traded, turnover, volatility, and size of primary market and various indicators of economic growth, such as, gross domestic product, saving, investment and capital formation. For this simple correlation analysis has been calculated by using Excel(2007) and SPSS software.

Coefficient of multiple Determinations (R^2):

The coefficient of multiple determination is a measure of degree (extent or strength) of linear association or correlation between two variables one of which happens to be independent variable and the other being dependent variable. In other words, R^2 measures percentage of total variation in independent variable explained by explanatory variables. The coefficient of determination can have value ranging from zero to one (i.e. $0 \leq R^2 \leq 1$). If R^2 is equal to 0.95, which indicates that the independent Variables used in regression model, explain 95 percent of total variation in dependent variable. A value of one can only occur only if the variation of dependent and independent variable are equal, which simply means that all the data points in the scatter diagram are fixed or exactly on regression line.

3.4.6 Regression Analysis

To find causal relation between stock market variables and economic growth variables the regression analysis is employed. The variables that will be used in the models are: Gross

Domestic Product (GDP), Gross Domestic Saving (S), Investment (I), Market Capitalization (MC), Value of Traded Share (VT), Turnover (TO) and Volatility of stock return (V).

Theoretical statement of model is that GDP may be regarded as subject to constraints of various macroeconomic and stock market related variables. To see whether the stock market variables along with macro economic variables are related or not the regression equations are used and data are calculated by using (SPSS)version 16.0 .The regressions equations used in this study as follows:

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log \text{MC}.$$

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log \text{VT}.$$

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log \text{TO}.$$

$$\text{Log GDP} = a + b_1 \log S + b_2 \log I + b_3 \log V.$$

Where, GDP= Gross Domestic Product, S= Gross Domestic Saving, I= Total Investment, MC= Market Capitalization, VT= Value of Share Traded, TO= Turnover, V= Volatility, a= coefficient, b= estimated coefficient.

3.4.a Regression Constant(a)

The value of constant which is the intercept of the model, indicates the average level of dependent variable when independent variable is Zero .In another words, it is better to understand that ‘a’ constant indicates the mean or average effect on dependent variable of all the variables omitted from the model.In this study, regression constant is calculated for selceted dependent and independent variables specified in the model, which is presented above.

3.4.b Standard Error of Estimate (SEE):

With the help of regression equation perfect prediction is practically impossible. Standard error of an estimate is a measure of the reliability of the estimating equation, indicating the variability of obverse points around the regression line, i.e. the extant to which observed values differ from their predicated values on regression line. The smaller value of SEE, the closer will be the dots to regression line and better estimates based on the equation for the line. If SEE is zero, then there is no variation about line and correlation will be perfect. Thus, with the help of SEE, it is possible to ascertain how good and representative the regression line is, a description of the average relationship between two series.

3.5 Hypothesis Analysis

A hypothesis is defined as tentative theory or supposition provisionally adopted to explain certain facts and to guide in the investigation of others. However, in statistics, hypothesis means a statistical statement about the values of one or more parameters of the population. After setting the hypothesis, it is necessary to test the reliability of such statistical statements. In order to make proper decision about the quantitative statement of the population, testing of hypothesis techniques is used.

Student's t- Statistics-

To test the validity of assumption of the study for small for small samples, t- test is used. It is very difficult to make a clear cut distinction between small samples and large samples. However from practical point of view, in most of the situations a sample is termed as small, if $n \leq 30$. For applying t distribution, the t- values are calculated first and compared with the critical values at a certain level of significance for given degree of freedom. If the computed value of 't' exceeds the table value (say t 0.05), it is known that the difference is significant at 5 percent level of significance but if t-values are less than the corresponding critical of the 't' distribution, the difference is not termed as significant.

Test of significance of Difference between stock market variables and economic growth variables.

Null Hypothesis (H_0): $\mu_1 = \mu_0$

i.e there is no significant difference between two means. This means there is no relationship between stock market and economic growth.

Alternative Hypothesis (H_1): $\mu_1 \neq \mu_0$

There is significant difference between two means. This means there is relationship between stock market and economic growth.

Level of significance: Fix the level of significance = 5% or other will specify level along with the type of alternative hypothesis.

Critical value: Tabulated or critical value of 't' at % level of significance for $(n_1 + n_2 - 2)$ degree of freedom is obtained from t-tables.

Decision: If calculated t is less than or equal to tabulated value of t , it falls in the acceptance region and the null hypothesis is accepted and if calculated t is greater than tabulated t , H_0 may be rejected at the adopted level of significance

F-test:

The Fisher's F-distribution is defined as a distribution of the ratio of two independent chi-square variables each divided by the corresponding degrees of freedom. It is clear that F-distribution has a single mode. Note that the shape of F-distribution depends on the value of degrees of freedom and value of F lies between 0 and ∞ (zero and infinity). F test some times called the variance ratio test, is based on the F-distribution. In order to test the goodness of the fit of the regression model F-test is used.

Probable Error (P.E)

Probable error measures the reliability of the calculated value of r . It is tested with the help of the following formula.

$$P.E = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

The result derived with the help of the formula is interpreted using the following rules:

- (i) If $r < P.E$. r is not significant at all.

3.6 Definition of Key Terms

The financial statement published by different organisations have its own format for publishing the financial data on a more or less uniform basis. The terms used in analysis may have different meaning in different circumstance and under different conditions, in this study the meaning of the given terms as follows:

Savings: It means excess of income over expenditure. In economics a company national savings is the sum of private and public savings.

Investment : It refers to the value of that part of the aggregate output for any given time period which takes the form of construction of new structures, installation of new capital equipment and positive change in business inventories in economies.

Market

- Capitalization:** It refers market value of company's issued shares. This is the share price times the number of shares issued. It also a measuremet of corporate or economic size equal to the share price times the number of shares outstanding of a public company. As owning stock presents owning the company ,including all the assets ,capitalization could represent the public option of a company net worth.
- Value Traded:** It equals values of share traded in the exchange.
- Turnover:** Turnover equal to the value of trade of domestic shares on domestic exchange divided by the value of listed domestic shares.
- Volatility:** A measure the movement of the stock market index during the certain period around the mean value. Specifically, it is the variance of the market index during the certain period.

CHAPTER — IV

PRESENTATION AND ANALYSIS OF DATA

This chapter is the backbone of the research .In this chapter, the collected data are presented in systematic manner and analyzed by using different appropriate tools and techniques. This chapter is divided into four sections. The first section is related with analysis of various indicators of stock market. The second section deals with the performance of Nepalese stock market. The third section of this chapter attempts to find the association between the indicators of stock market development and economic growth with the help of correlation matrix. And last section examines the causal relationship between stock market development and economic growth by using regression analysis and testing of hypothesis

4.1 Stock market Development

Over the past few decades stock markets in the emerging economies have surged with growing attention of the investors around the world .As a result of the emerging equity market phenomenon and of the need to provide liquidity for privatization linked equity issues the relationship between stock market development and economic growth has received renewed attention of academicians and policy makers both in the developed and developing countries .The level of stock market development depends upon market size, liquidity, volatility and concentration. Economic growth of a country is usually strongly correlated with the development of stock market. However, stock market development also depends upon institutional investment and investors, legal infrastructure, government policy and human resource development. Table 4.1 shows the stock market development in Nepal. Market size can be measured in terms of number of listed companies and market capitalization ratio. Securities exchange Act, 1983 section 8, prohibits securities trading without listing to Nepal Stock Exchange Ltd. The number of listed companies was 66 in 1993/94 and went up to 115 in 2000/1. It has sharply decreased to 96 in 2001/2 due to the delisting of securities of 25 companies for non-compliance of annual reports and listing fees. This increased to 135 in 2005/6 and 2006/7, 142 in 2007/8, 159 in 2008/09 and now it reached 176 in 2009/10. The findings of research by Demiguc-Kunt and Levin (1995) shows that the countries with most developed stock market as Japan, United Kingdom, and United States has listed companies 2027, 1932 and 7087 respectively, and in countries with most under development market such as Colombia, Nigeria. Venezuela and Zimbabwe had listed 87, 127, 82 and 57

respectively from 1986 to 1993. Comparing the result of this study, the number of listed companies in Nepal is very few and cannot be compared with the developed stock market.

Table 4.1
Stock market indicator.

Fiscal Year	Nominal GDP (Million)	Size		Liquidity		Volatility	Concentration
		Listed Companies	MC R	Value Traded/(GDP)	TOR		
2000/01	393566	115	0.12	0.006	0.05	57.77	0.66
2001/02	405662	96	0.08	0.003	0.04	38.58	0.68
2002/03	460325	108	0.08	0.001	0.02	7.46	0.61
2003/04	500699	114	0.08	0.004	0.05	5.55	NA
2004/05	548485	125	0.11	0.008	0.07	23.43	0.61
2005/06	611089	135	0.16	0.006	0.03	33.83	0.67
2006/07	670631	135	0.27	0.012	0.045	81.97	0.66
2007/08	820815	142	0.45	0.028	0.062	100.1	0.52
2008/09	991316	159	0.53	0.022	0.042	140.65	0.48
2009/10	1182680	176	0.32	0.010	0.031	75.08	0.51
Average		130.5	0.22	0.010	0.044	56.44	0.54

Appendix-I

Appendix-II

Appendix-III

Appendix-IV

Appendix-VII

MCR=MC/GDP

TOR=TO/MC

However, the number of listed companies in Nepalese stock market is more or less similar to most of the underdeveloped stock markets. This shows that the Nepalese stock market is underdeveloped it has long way to go to be a developed stock market.

Another measure of stock market size is market capitalization ratio. In this stage MCR and nominal GDP is positive and significant at 5 percent level. This is the ratio of aggregate market value of listed shares to GDP. It is on an average is around 0.22 during the study period. In developing countries it is in between 0.2 to 0.4 (K.C., 2004). The findings of Demirguc-Kunt and Levine shows that countries with developed stock market had market capitalization ratio greater than and very close to one and in most underdeveloped stock market such as Colombia, Nigeria, Venezuela and Zimbabwe had this ratio 0.07, 0.04, 0.1, 0.18 respectively from 1986 to 1993. According to above mentioned results the market capitalization ratio in Nepalese stock market is less than that of developed stock market but more or less similar underdeveloped stock market. This fact implies that the stock market in Nepal is very small size and it is yet to show its impact on economy activities of the country. The MCR is highest in FY 2008/09 which is 0.53 but it slightly decreased in the FY 2009/10. The value of MCR from 2003/04 to 2008/09 is increasing. This indicates that the size of stock market is increasing in Nepal. The MCRs of the recent past suggest that the ideal resources are getting mobilized in an increasing rate in Nepal. If this trend continues to take place in the future, it can be said that Nepal is on the way to economic development.

There are two major indicators of market liquidity the first one is the ratio of value of share traded to GDP. During the study period, the value of shares traded accounted, on an average only 0.010 of GDP. In developed stock market this figure is as high as 0.4 and in developing countries, it varies in the range of 0.001 to 0.01 of GDP (K.C., 2004). This shows that value of share traded to GDP is like developing country in Nepal. Low ratio value of shares traded to GDP indicates that trading in equity relative to size of an economy is very low in Nepal.

Turnover ratio is another measure of liquidity of stock market. Table 4.1 shows that, in Nepal the turnover ratio have remained very low during the study period. Low turnover ratio indicated high transaction cost and relative difficulty in buying and selling of securities, it is on an average 0.044 during the study period, it shows highly illiquid stock market in Nepal. In developing countries this ratio is in the range of 0.15 to 0.3. It means Nepalese stock market is very poor on liquidity.

Taken together, these ratio i.e. market capitalization, value of traded to GDP and turnover indicate that stock market in Nepalese very small relatives to its economy and highly illiquid and stock market in Nepal is yet to make its presence felt in national economy.

Stock Market is considered highly concentrated if few large companies dominate it. In other words, in a stock market which has high concentration shares of few companies account for major percentage of total market value and are traded frequently relative to stocks of other companies. Market concentration in Nepalese stock market in an average is around 0.54 over the study period. This indicates that the market values of share of ten largest companies account for 54 percent of the total market value. However, the countries with developed stock market have concentration ratio of 0.2 of the market. The findings of by Demiguc-Kunt and Levine show that the countries with developed stock market such as Japan, U.K. and U.S. have concentration ratio 0.19, 0.24 and 0.14 respectively, and in most underdeveloped countries Colombia, Nigeria, Venezuela have this ratio 0.74, 0.51 and 0.63 respectively from 1986 to 1993. According to above result, market concentration in Nepalese stock market is very high in comparison to the developed stock market but more or less similar to most of the under developed stock markets. These facts indicate that stock market in Nepal is highly dominated by ten largest companies in terms of market capitalization. This high concentration has adversely affected the liquidity and significance of the stock market in national economy of Nepal. It is interesting to note that the ten largest companies that dominated the Nepalese market mostly are those commercial banks and two hydro companies, indicating that the stock market in Nepal is highly dominated by the commercial banks. High concentration has adversely affected liquidity and significance of the stock market in the national economy.

Although high volatility in the stock market denotes risk in equity market, it does not necessarily imply underdeveloped stock market like Nepal. It is generally expected that developed stock markets absorb risk in the financial assets and offer higher return with less volatility. Put simply, it means that as an indicator of country's stock market less volatility indicates that Nepalese stock market is risky in equity investment. Volatility in the stock market had wider fluctuation but it showed to rise consistently. Countries with high inflation rates seem to have higher volatility in the equity markets. The reasons for this is mainly the low volume of trading equities due to low demand. Developed stock market should not only provide high liquidity but also handle large volume of trading with less price swings. In other

words liquid market should allow large volume of trading with less volatility. However the volatility when measured in terms of value traded ratio to annual volatility does not reveal any interesting trend during the period indicating stock markets inability to provide liquidity and handle risk. Turnover ratio and value of shares traded to market capitalization ratio have remained fairly low and varied within narrow range during the 10 years but sign of improvement is seen in years. It is interesting to note that none of these indicators revealed a consistent trend during this period, indicating that the development of stock market in Nepal lacks a definite direction and is not guided by clear cut policies and actions. Due to low volume of shares traded and wide fluctuations, the stock market in Nepal has been highly illiquid and volatile.

4.2 Performance of Stock Market (NEPSE)

The performance of stock market can be analyzed in terms of number of issue approval, amount of issue approval, number of listed companies and their value of traded securities, market capitalization, annual turnover and NEPSE index. The performance of stock market in Nepal is shown in Appendix I.

Performance of stock market

S. N	Indicator	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
1	No. of Public Issue	9.00	16.00	17.00	16.00	14.00	29.00	34.00	64.00	64	61
2	Amount of Public Issue	717.20	1555.11	853.63	1547.79	1626.80	2443.60	2295.50	10668.20	16828.50	10822.41
3	Number of Listed Companies	115	96	108	114	125	135	135	142	159	176
4	Number of Traded Companies	67	69	81	92	102	110	116	136	170	198
5	Turnover	2344.16	1540.63	575.80	2144.27	4507.70	3451.40	8360.10	22820.80	21681.14	11851.11
6	Market Capitalization	46349	34703	35240	41424.77	61365	96763	186301	366247.50	512939.07	376871.37

7	Paid up value of Listed Securities	8165.00	9685.04	12560.07	13404.90	16771.80	19958.00	21798.80	29465.00	61140.00	79356.00	
8	Number of Transaction	46095	42028	69163	85533	106246	97374	120510	150800	209091	376871.37	
9	Number Of listed Securities ('000')	124971	126850	159958	161141	194673	226540	243504	321131	637868	821746	
10	Number of Traded securities ('000')	4989	6005	2428.00	6428.00	18433.55	12224.93	18147.25	285997.70	30547.16	26231.35	
11	% of Turnover on Market Capitalization	5.06	4.44	1.63	5.18	7.35	3.57	4.48	6.23	4.22	3.14	
12	% of Market Capitalization on Nominal GDP	11.78	8.56	8.08	8.77	12.06	16.03	27.78	44.62	53.43	31.86	
13	NEPSE average Index for the Year	348.40	227.50	204.90	222.10	286.70	386.80	636.80	963.36	749.1	477.73	

Public Issue Approval

Public issue of securities is made in primary market. As per the securities legislation, it is mandatory of corporate bodies to get their securities registered with SEBON. The SEBON reviews application and documents if the documents fulfill the mandatory requirements, it gives issue approval of different class of securities such as shares, right shares, debentures, preference shares, mutual fund and unit schemes which are in practice. And the companies can issue their securities in the primary market.

The number of public approval granted by SEBON showed a sharp down ward trend in the first four FYs where approval amount has change in erratic trend during the same period. Then from fiscal year 1997/98 to 2003/04 the number of public approval of companies remained fluctuating. But showed an increasing trend in the successive FY's and reached 64 issue approvals in FY 2007/08, it remained constant on FY2008/09 and it decreased in

2009/10 reached only 61. The empirical result reveal that overall growth rate of number of companies issue approval is around 24 percent during the study period. This short of growth trend indicates the expansion of public

The number of issue approved is the total number of issue approved by the Security Board of Nepal. Before issuing securities, the issuing company must make approval from Security Board of Nepal (SEBON). For issue approval and registration, the company must submit requited information within prescribed format otherwise SEBON may reject it. After registration and issue approval, the company must open issue within three month of issue approval. In case if the issue couldn't be made, then after another date should be fixed consulting with SEBO. The advertisement for application should be published in national daily news paper, the advertisement should consist all actual and real information. The advertisement should be able to identify application collection centre and its duration.

Number of Issue Approval

The issuing company must publish its prospectus after approval of SEBON at any easily assessable media for public purpose. The prospectus should consist of general information of company, capital, its product, and services, legal provisions, economic conditions of issuing authority, management, information regarding its promoters.

The number of issue approved during the period of 1993/94 to 2009/10 varies differently which is presented in the table 4.2

Table: 4.2

Number of Issue Approved since 1993/04 to 2009/10

Year	No. of issue approved	% of issue approved
1993/94	14	4.18
1994/95	16	4.78
1995/96	10	2.99
1996/97	12	3.58
1997/98	5	1.49
1988/99	12	3.58
1999/00	5	1.49
2000/01	6	1.79
2001/02	9	2.69
2002/03	12	3.58

2003/04	18	5.37
2004/05	14	4.18
2005/06	14	4.18
2006/07	29	8.66
2007/08	34	10.15
2008/09	64	19.10
2009/10	61	18.21
Total	335	100

Source: SEBON Annual Report (2009/10)

Table 4.2 revealed that from 1993/94 to 2009/10 SEBON has approved 335 no of issues in total in which highest number of issue approved (64) was in the year 2008/09 and in the year 2008/09 with the highest percentage of issue approved of 19.10% .These trend decreased to the level of (61) leaving 18.21% .Whereas, the lowest no of issue approved was 5 in the year 1997/98 and 1999/00. The average number of issue approved in each fiscal year has also been in fluctuating trend. Average size of issue offered was Rs15.30 millions in the year 1993/94 which is smallest and Rs.262.95 million in the year 2008/09 which is highest during the study period than other periods.

Figure: 4.2

No. of issue approved

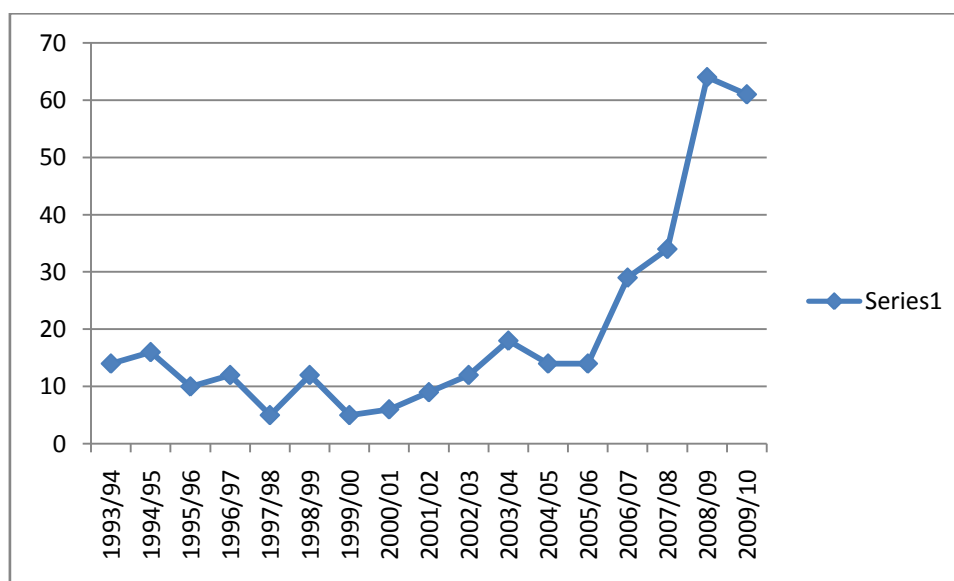


Table 4.2 and Figure 4.2 depict number of issues approved and the percent of issued approved are shown. The numbers of issues approved were 14 in fiscal year 1993/04 but at the end of fiscal year 2009/10 the total number of approved issue was reached to the point of 335 issues. Its is gradually increasing years after but it certainly decreased to the level of 61 in 2009/10 .The highest number of issue approved till date is 64 that is almost twice of previous year figure. Over the six years period number of issues has increase significantly but it diminished little in 2009/10 at 61.Before the year 2009/10 it increased because of establishment of new financial institution. Before FY 2004/05 numbers of issues are varying everywhere showing inconsistency.

There is fluctuation on the number of issue approved in different years but significant change has been seen from 2007/08 to 2008/2009 which increase gradually but it decrease slightly at the end of 2008/09 and has slopped slightly downwards .Before it wa at the increasing trend because of the establishment of the new financial institutions these shows fluctuation on the number of the issue approved.

Sector wise Issue Approval of listed companies

SEBON approved different types of securities of different sectors for public issue since FY 2000/01 to FY 2009/10. The most intriguing aspect of this approved amount is the contribution from financial sector that includes commercial banks, development banks, finance companies and insurance companies then the non-financial sectors (Manufacturing and processing, trading, hotels and others companies) as revealed from Table 4.3

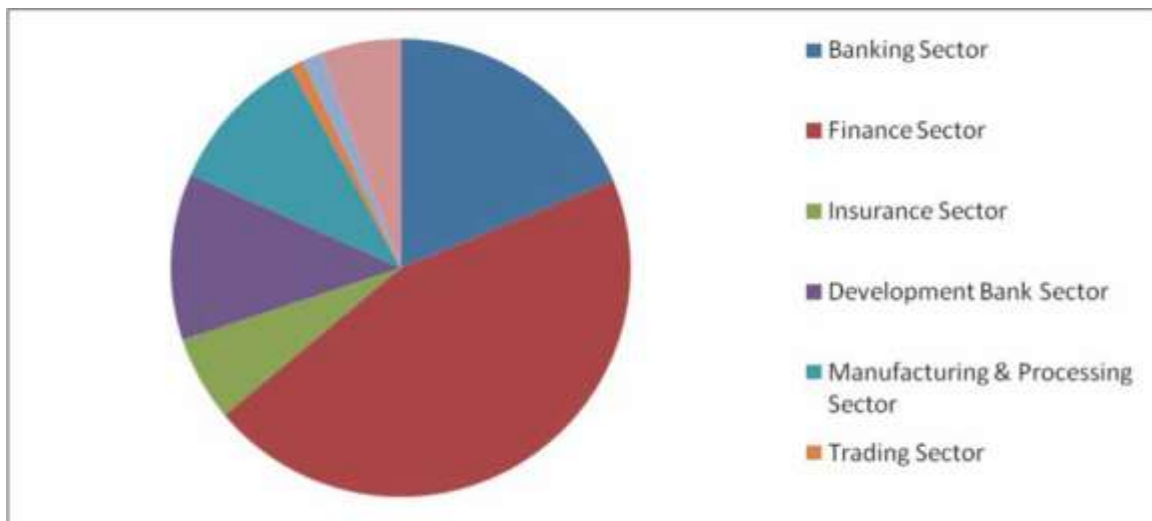
**Table 4.2.1 Sectorwise
listed companies**

Sector	No. of listed companies	percent
Banking Sector	23	13.07
Finance Sector	62	35.22
Insurance Sector	19	10.79
Development Bank Sector	40	22.74
Manufacturing & Processing	18	10.22
Trading Sector	4	2.27
Hotel Sector	4	2.27
Other Sector	6	3.41
Total	176	100

Source: SEBON annual Report

The table shows that SEBON accepted the various sector's issued for going to public. The highest issue approved by SEBON was 62 and has (35.22 %) of Finance Sector and it was followed by 40 and has (22.74 %) of Banking Sector, 23 and has (13.07 %) of Development Bank Sector and 18 and has (10.22 %) of Manufacturing & Processing Sector during study period (FY 2000/01 to FY 2009/10). Similarly, the least issues approved during the period is 4 issues (2.27 %) of Trading Sector and followed by 4 and has (2.27 %) of Hotel Sector and 6 and has (3.41 %) by others sector.

Figure 4.2.1 Sector wise listed companies



Number of listed companies and paid up value of listed securities

As per the provisions of 'securities listing By laws, 1996' the end the listed companies that have earned profit for the last three consecutive years, book value higher than paid up value submitted their financial statements to NEPSE within six months of the expiry of fiscal year, paid up capital at least 20 million and has at least 1000 shareholders can be categorised in group 'A' and remaining of the listed companies can be categorised in group 'B'. In the fiscal year 2009/10 .NEPSE categorised 94 companies into group 'A' comprising 15 commercial banks, 20 development banks, 43 finance companies, 11 insurance companies, one hotel company, one manufacturing and processing company and three other companies.

The total paid up value of the listed securities by the end of the fiscal year 2009/10 reached to 79356.73 million which was Rs 61140.39 million in the fiscal year 2008/09. The

total paid up value of the listed securities by the end of the fiscal year 2008/09 is presented as below:

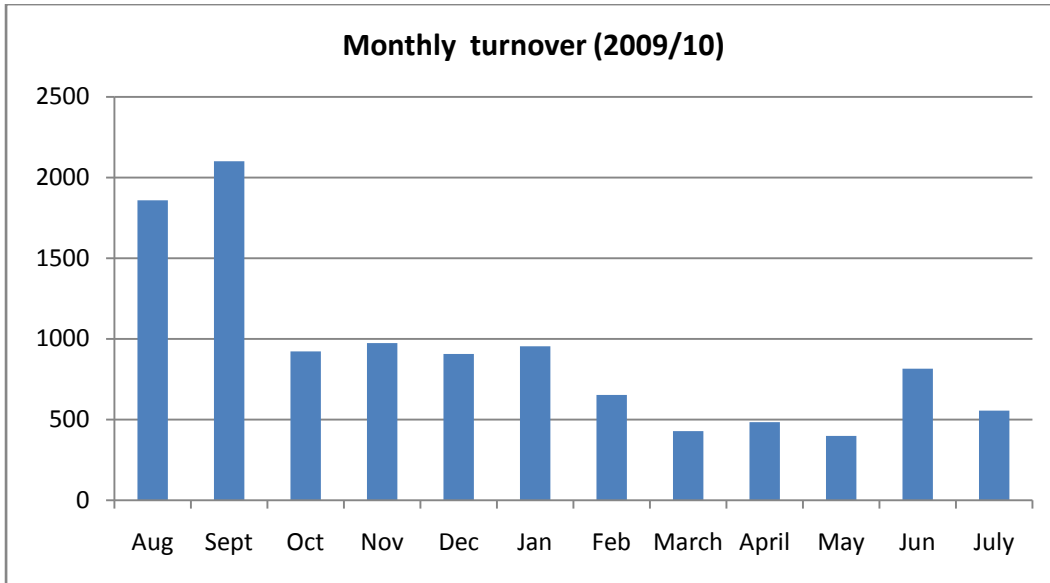
Table: 4.2.2
Paid up value of listed securities-

(Rs in million)

S.N	sector	Paid up value	percent
1	Commercial bank	32900.64	41.46
2	Development bank	10027.14	12.64
3	Finance company	11466.39	14.45
4	Insurance company	2432.94	3.07
5	Hotel	1580.71	1.99
6	Manufacturing	2539.74	3.20
7	Trading company	82.18	0.10
8	Other company	18326.98	23.09
Total		79356.73	100.0

The total amount of securities traded in the fiscal year 2009/10 is Rs 11851.11 million which was Rs.21681.14 million in the fiscal year 2008/09 .However the number of securities traded is not satisfactory and volume of securities traded is negligible during the study period. These evidence indicates that the trading of securities is unattractive and illiquid in the capital market and this implies that there is a lack of confidence among investors or investors are not quite certain in investing in the Nepal stock market. Monthly turnover in the fiscal year 2009/10 is shown below:

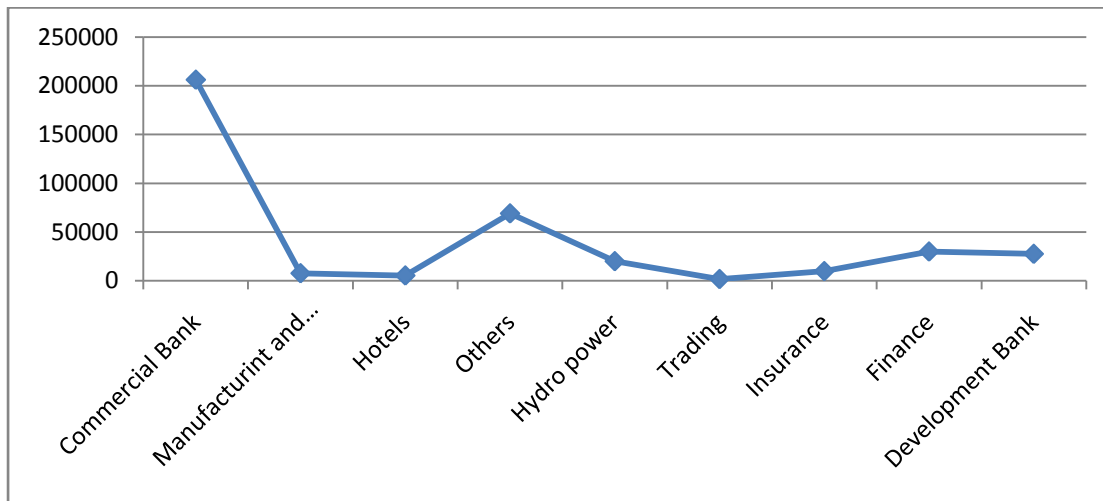
Figure 4.a



As we can see from above monthly turnover table, during september it has reached to the highest level than other months it starts to keep its pace slightly upward from august but it certainly decreased to the 922.51 that means there is higher fluctuation in those months .Most significant change has been made to may it reached to 397.9 minimum level and it tends to rise. There is fluctuation between every months that has been as turnover for 2009/10.

Paid up Capital and Market Capitalization
Sector wise Market Capitalization and Ratio

Figure 4.b



Total paid up capital is the function of number of listed securities of traded companies and paid up values per shares. Market capitalization simply refers to the market price of listed securities. It is the sum of the numbers of listed securities multiplied by closing market price of the corresponding securities. Thus, total paid up capital, indicates the actual investment in the financial assets where ad market capitalization indicates the present value of the investments (Gurung, 2006)

The amount of paid up capital has increased in every subsequent FYs. However, the annual growth has not increased in the same ratio. The over growth rate is 28.75 percent over the study period. This indicates pace of investment in corporate sector through securities is still in snail pace.

The worth of market capitalization was Rs.13872 million in 1993/94. It decreased during the subsequent two fiscal years, which significantly recovered in later years of the study period, annual growth rate is positive in all the observed FYs except in 2001/02 and 2009/10. The initiation of reform programs of peace talk with Moist and peoples revolution against monarchy have made frequent changes in the value of market capitalization during study period. The overall growth rate of market capitalization is 26.22 percent during the study period. The erratic trend in value of market capitalization and it's low contribution to GDP imply the poor and immature capital market, de-motivation in investment in the companies and downward trend in the economy during the study period, the percentage of market capitalization in nominal GDP from 2003/2004 to 2009/10 is increasing but in very small portion.

The total market capitalization of listed shares increased rapidly in last 5 years. The central bank's directive to increase the capital base bank and financial institutions has a major impact on the market value of listed shares. Most of the companies opted to issue bonus and right shares to increase their capital base, which attracted lots of investors.

With the step increase in market capitalization, its ratio to GDP went up to 53.43 percent in 2008/09. In terms of market capitalization, the commercial bank sector again dominated the stock market. The market capitalization of the commercial banking group touched Rs. 302219.29 Million in the year 2008/09, which is 59 percent of the total market capitalization but it decreased on 2009/10 to 55 percent. Manufacturing and processing companies occupied 2 percent only. Similarly, share of Hotels groups, others, hydropower, insurance, finance and development banks occupied 1 percent, 18 percent, 5 percent, 3 percent, 8 percent and 7 percent of the total market capitalization whereas trading companies occupied less than 1 percent during the year. (Annual report 2009/10)

Opening and closing market capitalization of different group for the FY 2006-07

Groups	closing		opening		%
	Market cap*	%age	Market cap*	%age	Change*
Commercial bank	206282.52	54.74%	295875.49	58.79%	-30.28%
Manufacturing and processing	7592.03	2.01%	7706.09	1.53%	-1.48%
hotels	5285.58	1.40%	4859.40	0.97%	8.77%
others	690.19	18.31%	92569.16	18.39%	-25.44%
Hydro power	19959.51	5.30%	21078.11	4.19%	-5.31%
Trading	1617.51	0.43%	1696.36	0.34%	-4.65%

Insurance	9756.61	2.59%	10552.01	2.10%	-7.54%
Finance	29869.59	7.93%	42182.89	8.38%	-29.19%
Development Bank	27488.87	7.29%	26837.48	5.33%	2.43%
Total		376871.37		503356.99	-25.13%

*Rs In million.

***% changed from opening to closing.

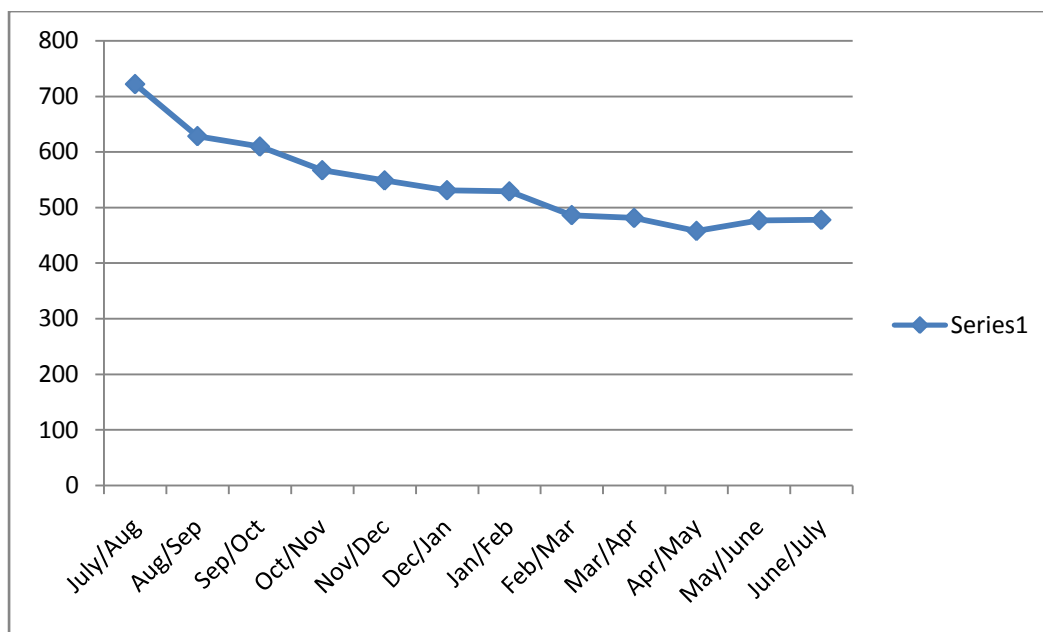
By reviewing the group wise market capitalization composition, banks and financial institutions recorded the highest of the total market capitalization as usual. Commercial banks group contribute about 55 percent of the total market capitalization which is 30.28 percent decline from the opening market capitalization for the FY 2066-67. Similarly the market capitalization of other group and finance group has shown a decline of 25.44 percent and 29.10 percent during the period. Market capitalization of only two groups namely hotel groups and development banks has shown an upward trend. The cause behind the increase in two groups is primarily due to the increase in price of hotel group and significant increase in the number of shares listed in development banks. The above group wise market capitalization shows that Nepalese capital market is deeply concentrated at banking and financial institution industry during the period.

NEPSE Index

Index is one of the most important indicators of secondary market which is considered as a mirror of country economic health. NEPSE index group consists of various indices and they are calculated on the basis of the market capitalization. Among the major indicators, NEPSE index is the oldest one which is being calculated from the initial days of Nepal stock Exchange

NEPSE Index during the F/Y 2009/10

Figure 4.c



Stock market indices are used to study the trend of growth pattern in the economy, to analyze as well as forecast business cycle and to correlate it with economic activities. A high index implies an increase in market price of securities and better performance of companies and vice versa. From the above figure, NEPSE index at the end of 1993/94 was 226.03. Then it started to move down and reached 163.35 at the end of 1997/98. Then in two subsequent FYs it increased and reached to a level of 360.70 at the end of 1999/00. Then at the end of 2002/03 it again reached a down level 204.86. From 2003/04 it has an increasing trend up to end of 2007/08 with 963.36 point but at the end of 2008/09 it reached again 749.1 and it also decrease to 477.73 during the current 2009/10. The fluctuating on NEPSE index indicates that the NEPSE is high volatile during the study period. The overall growth rate of NEPSE is 3.57 percent during the study period. The low and highly fluctuating NEPSE index growth indicate the poor performance of the companies listed in the stock exchange which causes certain effects on economic growth.

The stock market opened with the NEPSE index of 749.10 at the beginning of the 2009/10 and ended with 477.73 points which was the lowest during the year. In this year NEPSE Index decrease by 36.23 percent. From the beginning period of 2009/10 it decline continuously. In Jan/Feb it has reached to the highes above 500 .The steep rise in the NEPSE index and the resultant high market capitalization created serious apprehension regarding the functioning of the stock market and the behaviour of investors attracting serious attention of the regulators and the policy makers ,including the central bank. with the real sector of the economy performing dismally during the period a sharp rise in the NEPSE index was

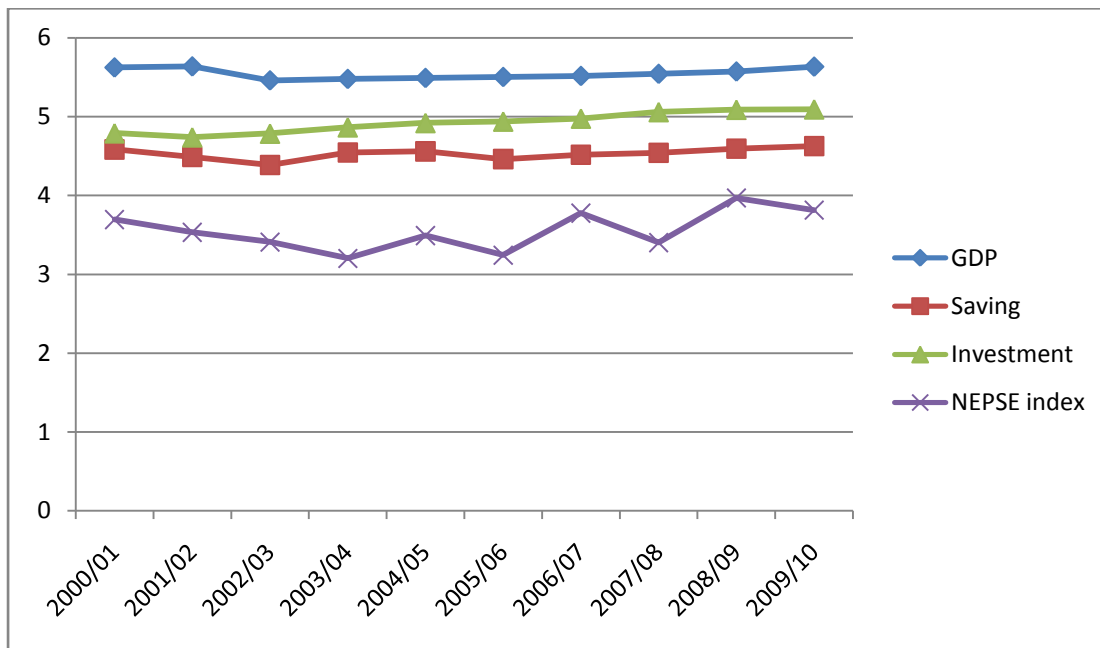
somewhat unconvincing to many including the management of the companies with high price/earning ratios. The problem surfaced with the index starts to decline since Feb/March which declines in significant ways. With a period between Feb/March to June/July the stock market saw a decline in shareholders wealth. One of the problems is the absence of support and resistance in the stock market in Nepal. Support from investors indicates a point when buyers start to buy the shares from the market whereas resistance indicates selling of shares by the sellers. The consistent decline in Nepse index during last some months indicates that the investors are not confident about the share price to go up and as such are on the selling spree.

NEPSE index rises when the sector index of commercial banks rises. So the margin lending created more demand for the shares of the banks thereby leading to a sharp rise in the market price of shares of the commercial bank. In one way the banks are lending to the investors who would buy the shares of the banks and push the market price up. With the view to control this practice the central bank prohibited the commercial banks to lend for buying shares in the primary market completely and adopted various measures to tighten the loan against shares. This invited sharp opposition from the investors, particularly those with the speculative motive which forced the central bank to relax its rules to some extent.

It is important to note that the rise and fall in the NEPSE index is more due to the policy of the central bank, particularly relating to the capital base of the commercial bank, rather than the fundamentals of the companies and the rules and the regulations of the securities board of Nepal. As the rise in the NEPSE index is mainly due to the speculative motives of the investors, sustaining the index at the high level has been a major problem. High inflation, low growth of GDP, low saving rate and investment, absence of the major problems facing the development of stock market and sustainability of NEPSE index in Nepal, of late the loss of people's confidence in the Nepalese financial system has created a big problem both in banking sector and stock market sector. The current liquidity problems show that despite the long history of banking industry and various efforts of the government and donor agencies, the financial architecture in Nepal has many flaws and loopholes and is not well designed.

Further more the NEPSE INDEX can be analysed comparing the log value of Gross domestic product (GDP), Saving (S), Investment (I), for the study period.

Figure 4.d



Appendix-X

When comparing the NEPSE index with other Macro economic variables such as Gross Domestic Product(GDP) , Investment(I), Saving(S) present a positive picture .In this picture GDP, S , I were increased in the increasing trend except the saving(S) ,was slightly decreased in the fiscal year 2005/06 and it is increasing in a increasing trend then after ,though the primary market(PM) was not listed in the economic variables but it has got the positive impact on the saving (S) and the investment(I) .As a firm raise a capital through the primary operation , they utilize it as a capital whichis the main cause to have the positive impact on the saving and the investment .If such an investment capital turns out to be the profitable,firms can retain the earning for the future use ,which have the positive impact on the saving .Therefore somehow the similai movement of S, I is quite understandable .while comparing the NEPSE with the Gross domestic product, saving and the investment it has a positive impact on those and from the year 2003/04 it has a bit increasing trend than those of the year because of the high market capitalization created a serious apprehension regarding the function of the function of the stock market and the behaviour of the investors attracting serious attention of the regulators and the policy makers ,including the central bank.NEPSE index was somehow unconvincing to many including the mangement of the companies with highprice/earning ratios.The problem surfaced when it starts to fluctuate and has affect on other indicators too.NEPSE index rises when sector indec of the commercial bank rises,it is to note that it rise and fall due to policy of the central bank particulary relating to the capital

base of the commercial banks.As the NEPSE fluctuate it has the severe effect on the saving (S),investmet(I)and the gross domestic product(GDP).

4.3 Correlation Analysis

Correlation coefficients between each of the variables are computed to determine any, kind of association .The variables are gross domestic product , saving , investment capital formation market capitalization , value traded , turnover ,volatility , size of the primary market and NEPSE index for the period of various years and the correlation coefficient between the data of each of the seven variables (Four stock market and three economic growths) from the fiscal year 2000/01 to 2009/10, are computed and table 4.3 presents the matrix form :

Table 4.3
Correlation Matrix

	GDP	S	I	MC	VT	TO	V
GDP simple Correlation	1						
S simple Correlation	0.45	1					
I simple Correlation	0.17	0.47	1				
MC simple Correlation	0.29	0.37	0.94	1			
VT simple Correlation	0.35	0.57	0.95	0.95	1		
TO simple Correlation	0.18	0.42	0.88	0.94	0.90	1	
V simple Correlation	0.42	0.33	0.78	0.90	0.80	0.89	1

Where,

S= saving, I= investment, MC=market capitalization, VT=Volatility ratio

TO=turnover ratio.

Source: Appendix –V
Appendix- VI
Appendix- VIII

Table 4.3 presents the correlations. The following correlations are worth high lightening. Obviously there is the strong correlation between the various indicators, like the correlations between GDP with saving, investment and capital formation with the coefficients respectively. The interesting correlation prevail between the stock market indicators market capitalization (MC) and growth indicators i.e. gross domestic product (GDP) , saving (S) , investment (I) .,The correlation coefficient between MC and GDP is 0.29 between MC and S is 0.37 ,between MC and I is 0.94 .The correlation of MC with growth variable is meaningful .

The study computes the correlation coefficient between stock market development indicators and economic growth indicators. The following results are worth highlighting. There is a positive correlation between stock market development indicators and economic growth indicators. In the context of significant relationship a few inference can be made. As MC is the product of market price of share multiplied by outstanding number of shares, if the firms are performing strongly in a bull market, it passes a optimistic message to the general investors who tend to invest more in the market and firms on the other hand without having any productive and profitable investment project in hand no firm will be able to influence its share prices in the market. So, to finance such projects, firms need to capitalize their earnings which will increase their saving. The inference is that, as the share are performing strongly in the market general investors as well as firms tend to save their earning for further investment purpose which will increase gross domestic saving. Ultimately, that increases the investment, therefore strong correlation between MC and I is quite natural. Same proposition applies in the case of the relation between MC and I as well. Since the investors (individual or institutional) tend to save their saving in the new projects and hence increasing their investment which fuel up the national capital formation also. The result of all is that market capitalization is also significantly and positively strongly correlated with gross domestic product.

Some other indicators of stock market are also related economic growth indicators. More interestingly, there is positive and significant correlation between value traded and investment. Its correlation coefficient with investment is 0.95. It means there is nearly perfect

positive correlation. Value traded measures the trading relative to size of the economy. Higher value traded is regarded as developed stock market and contributes positively towards the GDP. The significant relationship between VT and I is meaningful. Higher value traded means that stock market is performing better with maximum participation of investors, if more investors are involved in the market saving and investment are likely to increase and hence GDP. Therefore, a positive significant relation between VT and I is obvious.

Another measure of stock market development is turnover (TO) which equal to trading value of stocks in domestic market divided by market capitalization. It measures trading relative to size of market. A high turnover indicates more liquid market and has positive correlation with growth. The correlation coefficient of turnover and growth indicator (GDP) and saving (S) are 0.18 and 0.42 respectively. This is because of underdevelopment of secondary market. But, the coefficient of turnover and growth indicator investment is 0.88. Through the correlation of stock market liquidity indicator TO with the economic growth indicators, such as, GDP, S, I, are positive but the correlation are insignificant and unexpected, This unexpected an insignificant correlation may be due to the other observed factors as mentioned in limitation. This signifies that even though the contribution of turnover is very small but its contribution to investment is important from economic point of view.

Volatility (V) is another important indicator of stock market development. The correlation coefficient between stock market indicator V and growth indicators GDP, S, I are positive but all of them are in significant. Statistically in significant relationship makes little sense, one cannot draw inference from a statistically in significant results, so I have avoided drawing inferences based on these results.

4.4 Regression Analysis

For the purpose of investigating the causality between stock market indicators and economic growth indicators four regression equations have been used. Variables entered into the regression equations are: Gross Domestic Product (GDP), Savings (S), Investment (I), Market Capitalization (MC), Value Traded (VT), Turnover (TO), and Volatility (V).

The relationship of growth domestic product (GDP) with all stock market indicators market capitalization (MC) value traded (VT), turnover (TO) and volatility (V) is presented in table 4.3

Table 4.4

Regression of Gross Domestic Product (GDP), on market capitalization (MC), Value Traded (VT), Turnover (TO), and Volatility

	Independent Variables			
	Market Capitalization (MC)	Value Traded (VT)	Turnover (TO)	Volatility (VT)
Estimated Coefficient	0.115	-0.025	-0.006	-0.273
Standard Error	0.337	0.319	0.430	0.232
T-Statistics	2.337	-0.076	-0.015	-1.190
R ²	0.228	0.220	0.220	0.309
F	0.593	0.567	0.564	0.842

Appendix-VIII

Appendix-IX

R² = Adjusted coefficient of multiple determination.

*Results are significant at the level of 0.05

Various regression equations are used as below:

$$\text{Log GDP} = a_1 + b_1 \text{Log S} + b_2 \text{Log I} + b_3 \text{LOG MC}$$

$$\text{Log GDP} = a_1 + b_1 \text{Log S} + b_2 \text{Log I} + b_3 \text{LOG VT}$$

$$\text{Log GDP} = a_1 + b_1 \text{Log S} + b_2 \text{Log I} + b_3 \text{LOG TO}$$

$$\text{Log GDP} = a_1 + b_1 \text{Log S} + b_2 \text{Log I} + b_3 \text{LOG V}$$

Above table represents regression where dependent variable is (GDP) and stock market indicators are the independent variables.

Where S = saving, I= Investment,

MC = Market Capitalization,

VT = Value Traded Shares

TO = Turn Over of shares,

V = Volatility of Market return

The table presents the result of regression where Regression of Gross Domestic product(GDP) on market capitalization (MC) ,value traded (VT) ,turnover(TO) and volatility (V) .The coefficient of the value traded , turnover are negative .All the variables i.e. Market capitalization, value traded, turnover volatility are related under T-statistics and F-test.

The positive coefficient of market capitalization is statically significant meaning that the theorized relation between growth indicators and market capitalization is true. The value of (R^2) for the model (i.e. regression equation) shows the variability since the value of F indicates that the assumption under which the model is formed is good or bad .As market capitalization is the product of market price of the shares, the aware and active participation of investors is necessary and they make the decision to invest by evaluating the firms capability to utilize theirs fund and give them the return in equity form or dividend form.

The estimated coefficient market capitalization turnover and size of the primary market have positive and expected signs but the coefficient of value traded and volatility have negative signs. The results presented in table 4.3 indicate that the regression coefficient of market capitalization is 0.115 and value of R^2 Is 0.228 which states that 22.8 percent change in GDP is attributes to S, I and MC and other variables may attributes 77.2 percent change. The regression coefficient of MC 0.115 states that on percent change in MC cause GDP to increase by 0.115 percent. The calculated value of t ratio 2.337 is greater than tabulated value of 't' at 5% significance level. Since, the calculated value of t is greater than tabulated value t, so null hypothesis is rejected. Thus, we can conclude that there is a significant relation between GDP and market capitalization. The market capitalization can be regarded as one of the significant determinant of GDP. The tabulated value of F (3, 6) at 5% level significance is 4.76. And the calculated value of F is 0.593 which are lesser than tabulated value. Therefore, the regression line is insignificant.

While comparing the Gross Domestic Product and Market Capitalization it is found to be positive aspects. The relation of GDP with MC is that as MC is the market value of the entire listed outstanding share and price element is associated with it. Pricing of security is done with lots of aspects keeping in view. Some factors are the profitability of firm, its investment plans, and its saving position. If the price of stocks are increasing it shows that the listed firm on an average have got good investment projects in their hand and are expected to turn profitable in future, this causes investment to increase and it leads to over all optimism in the economy, which helps to grow GDP.

The liquidity indicator, value of traded share (VT) has regression coefficient of -0.025 but it is significant. And stock market indicator TO have negative and insignificant relation with GDP, as turnover measures the size of stock market, a positively significant relation with GDP is important. However the result of this study is negative and insignificant. The unexpected result may be due to other factors that have not been considered in this study or wrong assumption of the study.

Another variable of stock market indicator volatility, measured by standard deviation Of monthly stock return has negative relation with GDP. The regression coefficient is -0.273, it is insignificant as well. Hence no inference is made here.

The result presented in table 4.3 should be viewed very skeptically because the results are based on only 10 observations from FY 2000/01 to 2009/10 which can not considered sufficient enough to draw inferences confidently.

This chapter presented the data and analyzed those data in the context of objectives of the study .In the next chapter, the major finding of the study, summary and conclusion are outlined along with the recommendation for future research possibilities in this area.

4.5 Major Findings

The major findings of trend analysis are as follows:

1. The size of secondary stock market as measured by market capitalization is small but it has an increasing trends. The sizes of secondary market measured by number of listed companies has also increasing trend.

2. The liquidity of secondary stock market as measured by ratio of value of shared traded to GDP and turnover ratio is very low but it is increasing. The ratio of value trade to GDP and turnover ratio is in an average around 0.007 and 0.044 respectively.
3. Number of listed companies and their securities, annual turnover, market capitalization, paid up capital and NEPSE index have been found fluctuating in nature during the study period. This indicates the performance of Nepalese stock market is not stable though it is improving gradually.
4. Gradual improvement has been made relevant to the primary market in Nepalese stock.
5. The Nepalese stock market is highly concentrated .Especially it is bank dominated.
6. The Nepalese stock is highly volatile. It is in an average around 40.44. From the above finding few inferences can be made. The ratio of stock market capitalization value traded is very small. Low turnover ratio, value traded and high volatility indicate that the stock market, in Nepal, is highly illiquid and risky.

The major findings of correlation analysis are as follows:

1. The relationship of market capitalization (MC) , the stock market variable: gross domestic product (GDP) ,saving (S) ,investment (I) are highly significant and positive Hence there is positive relationship between stock market variable ,MC, and economic growth variables: GDP , S, I.
2. The relationship of value traded (VT) and stock market variable with economic growth related variable: GDP, S, I are positive and significant.
3. The relationship of turnover (a stock market variable) with GDP is very low. This mainly because of illiquid and underdeveloped stock market, in Nepal.
4. The relationship between volatility (a stock market variable) with various economic variables is positive. This indicates that the investment in Nepal can increase through stock market.
5. More interestingly, economic variable investment and stock market variable MC, VT, TO have positive and significant relationship.
6. NEPSE index (NI) the composite indicator of the secondary market with the various economic growth indicator GDP,S, I ,MC are positively and significant hence there is a positive relationship between secondary stock market and economic growth.

The major findings of regression analysis are follows:

The study of the size of secondary market revealed that market capitalization and gross domestic product are positively and significantly related. The causal relation tells that with and increasing in this size of the market measured by MC the size of the economy as measured by GDP also increases. This result supports the theoretical assumption of Levine and Zervos (1998)

1. VT and V was expected to have significant positive influence on GDP but VT and V, in this study have no significant positive relation influence on GDP. The insignificant influence of VT and V on GDP may have to with other factors such as very small observation period, data distortion and other invisible factors.
2. The estimated coefficients of S on MC and TO have positive and expected signs but the coefficient of VT, V and PM has negative signs. All the variables i.e. MC, VT, T,V, and PM have significantly related with saving (S) under t-statistics and F-test .The casual relation specifies that with the size of the secondary stock market saving level of the economy also increase due to the increased saving by firms and individuals.
3. Though some of the relations are quite consistent with the theoretical relationship of stock market variable and economic growth variables as proposed by Levine and Zervos (1999) ,surprisingly, value traded and volatility are not related significantly even with any one of the economic growth variables.
4. The indicator of stock market (i.e. turnover) has negative and insignificant relation with GDP.
5. Though some of the relation are quite consistent with the theoretical relationship of stock market variable and economic growth variables as proposed by Levine and Zervos (1999),surprisingly value traded and volatility are not related significantly even with any one of the economic growth variables.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Stock market work as a medium to channelize the saving resource towards the productive use in the form of investment .where secondary market does it by influencing the perception and investor of the firm about the economic activities and the perspect ,primary market plays a directly role in increasing the investment level and thus, capital stock ,through mobilizing the savings of the individual investors as well as the instituional bodies .AN efficient stock market is the medium through which the productive firm that have better performace can easily raise the capital through primary market .this type of behaviour of efficient market enhance the economic growth process by the productive growth.

Nepal Stock Exchange (NEPSE) is the only one exchange centre for listed securities in Nepal. It was converted into stock exchange in 1993, with an objective to make a full fledged organized market under the program initiated to reform the capital market. NEPSE is an organization operating under the securities ordinance 2005. The main objective of NEPSE is to impart free marketing ability and liquidity to government and corporate bodies by listing and facilitating transaction in its trading floor through licensed financial intermediaries. NEPSE started its trading floor on January 13, 1994 through licensed members. It has replaced “open out-cry” system by the automation system from August 15, 2007. In Nepal, NEPSE is the only one stock market, which comprises listed 176 companies, 23 stock brokers, ten issue managers and two securities dealers (SEBON, 2009/10).

NEPSE is only one stock market in Nepal. It opened its trading floor from 13th January, 1994 through licensed members. However, trading facilities is confined in Kathmandu valley which hindered wide public participation in trading take place in share of financial institution and a few are multi- national business entities such as Standard Chartered Bank (Nepal) Ltd., Bottlers Nepal, Uni-Lever Nepal, Soaltee Hotel, Bishal Bazar, Chilime Hydropower etc.

Stock markets works as the vechicle for raising capital for firm .stock market help investor to diversify their weath across variety of the assets and help investors to cope with liquidity risk by allowing those who are hit by a liquidity shock to sell their shares to other investors who do not suffer from a liquidity shock. Moreover, stock market can promote economic

development by fueling engine of growth through faster capital accumulation and by tuning it through better resource allocation. Stock market works as a medium to channelize the saving resources towards the productive uses in the form of investment. Where as secondary stock market does it by influencing the perception of investors and firms about the economic activities and prospect, the primary market plays the viral role directly in increasing the investment level and thus, capital stock, of firms through mobilizing the savings of individual investors as well as institutional bodies. An efficient stock is market through which only productive firms that have better performance can easily raise capital through primary markets, this type of behavior of efficient market enhance the economic growth process by the productivity growth .stock market also help agents manage liquidity which also increase the firms productivity risk by eliminating, premature capital liquidation which also increase the firms productivity .stock market work as a vehicle for raising capital for firms. Stock market helps investors to diversify their wealth across variety of assets. The company enjoy permanent access to capital fund raised through equity issue .The growth in the economy only occurs if society invests and maintain a sufficient amount of capital in firms that augment human capital and technologies.

Studies assessing the role of the stock market in economic growth in context of Nepal the study is totally based on the secondary data .for the purpose of the study objecives the data on aggregate economic variable such as saving, investment and stock market variables such as market capitalization, value traded, turnover, volatality, were collected from the year 2000/01 to 2009/10.

The main aim of this study was to examine relationship between stock market development and economic growth in context of Nepal. Specifically the objectives of this study are to analyze stock market development in Nepal Specifically focusing on size, liquidity, volatility and concentration of Nepalese stock market to analyze the performance of NEPSE and to evaluate the relationship between stock market development and economic growth in Nepal. The study has found that there is a positive correlation between stock market development and economic growth in Nepal.

5.2 Conclusion

Stock market it works as the medium to channelize the saving resources towards the productive uses in the from on investmet.jus opposite of it secondary stock market does it by

influencing the perception of ancestors' and firms about the economic activities and prospect, though primary market play a crucial role directly in increasing the investment level and thus, capital stock or firms through mobilizing the savings of individual investors as well as institutional bodies. Partially this studies assessing the role of stock market in economic growth in the contact of Nepal. It is totally based on secondary data for the purpose of the study's objectives ,the data on aggregate economic variables such as domestic product , saving , investment , capital formation and stock market variables such as market capitalization ,value traded , turnover ,volatility , and size of the primary market were collected from the year 2000/01 to 2009/10.

Being a landlocked country it's situated between two giant economies China and India. It has been going through a political and economic limbo in the recent time, Nepal's neighbors' China and India grew respectively by 9.0 percent and 7.3 percent in 2008 and is projected to record respective growth rates of 6.5 percent and 4.5 percent in 2009 and 7.5 percent and 5.6 in 2010. South Asia, which attained a growth rate of 6.8 percent in 2008, is expected to rise by 4.3 percent in 2009 and 5.3 percent in 2010, but growth rate of Nepal was 4.7 percent during the FY 2007/08. This was the highest during the last seven years. But in FY 2001/02, 2002/03, 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 the growth rates of Nepal was 0.2, 3.8, 4.4, 2.9, 4.1, 2.6, 4.7 percent respectively and projected 3.6 percent for FY 2008/09 and 3.3 for 2009/10 (Economic Survey 2009/10).

However, there is a lack of institutional infrastructure and an absence of institutional investors. The market dominated by individual investors. The potential institution that can invest as Citizen Investment Trust (CIT), Employees Provident Fund (EPF), NCM mutual fund and insurance companies and so on. However, except NCM mutual fund, the investment of other institutions is very nominal. Regarding the investment of CIT in securities market, out of the total investment only 4.58% in FY 2002/03, and 4.20% in FY 2001/02 and in the fiscal year 2009/10 under NCM Mutual fund ,2002 total investment reached to RS.142.26 million in comparison to fiscal year 2008/09 was RS.151.53 million and RS.536.85 respectively .Similarly, regarding the EPF out of total investment only 1.19% was invested in corporate securities in FY 2002/03, 1.24% in FY 2001/02, 0.72% in FY 2000/01. This shows that investment of EPF is very negligible portion of their huge fund. And investment of insurance companies in corporate securities was 1.30% in FY 2002/03 which show's little bit change than the previous year funds.

The diversity in securities market instruments attracts the investors of various risk performance providing choice in the investment alternatives. But in case of Nepalese securities market, it is mostly dominated by risky instruments (equity share) which constitute more than 80% of the total paid up value of the securities listed in the exchange market and the rest comprises of consisting preference shares, debentures, bonds and mutual funds.

From the various measure of stock market development indicates that stock market in Nepal is underdeveloped and has failed to show significant positive impact on overall national economy. Low market capitalization, low value-traded ratio and low turnover ratio, high volatility and high concentration ratio indicate that stock market in Nepal is highly illiquid and risky. And stock market in Nepal is basically bank dominated. Apart from this, regression and correlation results state that only market capitalization has significant relation with domestic product, which also indicates that the stock market in Nepal is on underdeveloped stage. More interestingly, investment in Nepal can increase through stock market, however, annual turnover, market capitalization, number of listed and traded companies, market capitalization to nominal GDP and NEPSE index have been fluctuating in nature, that indicate performance of Nepalese stock market is not stable however it is improving gradually.

To show off this trend various analyses such as correlation analysis is performed so as to understand the simple association between variables. The analysis is done with the help of simple correlation .further more regression analysis is performed to find the casual association between stock market and economic growth variable. Though the result obtained from the analysis on aggregate economic growth variable and stock market variable should be viewed skeptically and while drawing the conclusion a cautious and calculative process is required. This study finds positive relationship between stock market development and economic growth in Nepal.

Last but not least a few very interesting inference can be made from this research.

5.3 Recommendations

As is found by numerous research works, from international as well as national present study, it is found that stock market is one of the very strong instruments of economic growth in Nepal since the economic activity get boost by orderly and efficient functioning of stock market , creating the frame work for the stock market is the must .An appropriate legal frame

work ,with sufficient provision to safe guard the interest of the investors and making them aware , to regulate the behavior of the participating firm in the market , to make the efficient improvement in the ways the securities are traded with adopting the new technology of trading such as automatic quotation system via computer should be created such on atmosphere should be present for the firms such that firms abide by the rules in terms of timely and regularly reporting the financial position to the investor. However, various problems exist in the stock market of Nepal which has to be solve, the following measures are recommended to overcome the existing problem of the Nepalese stock market.

1. Central Depository System (CDS) is very important to make ease in transforming securities from owner's account. Therefore CDS must establish.
2. Strong provisions via specific should be made to protect the rights of the investors.
3. Maximum possible information should available to the investors at the minimum cost.
4. To complete prerequisite of capital market the Nepalese government should immediately enact Fund Act.
5. Specific provision should be made to attract the foreign portfolio investment in domestic market.
6. Prospective and incumbent investors should be made more aware about the functioning mechanism of the market.
7. Nepal government has initiated financial sector reform program and has increased the effort towards improving the financial system of the country to stimulate economic growth. However, up to now, it has focused on banking system only. Policy makers should equally encourage stock market development. They should remove impediments to stock markets, such as tax, legal and regulatory barriers. One of the reasons Nepal has a small stock market is low saving rate. To promote investment by implication appropriate policies. Therefore, equal importance must be given to both bank based financial sector and market based stock market of the economy for fostering capital accumulation and investment in increasing living standard of the people via economic growth.
8. Management of the listing and delisting of the firm should be made effective with the help of the specific criteria.

9. Proper information is one of the important measures to promote stock market. The proper information of the companies will attract people to invest in company. Hence proper information system of stock market should be established.
10. Information of firm is essential to gain public confidence thus, regular and timely information of financial data of the firms should be made.
11. Ways of transaction should be rectified and modified via automated quotation and appropriate technology.
12. High volatility of market share price should be checked by implementing various rules and regulation.
13. Investment bankers should be encouraged to participate in stock market.

If necessary measures are taken towards making Nepalese Market efficient not only the investors and participating firm but whole economy is likely to be benefited. Since the efficiency of the market may be the cause for the efficiency of the economy this goal should be pursued by concerning authorities more seriously.

Finally, there is a lot of scope for research in the particular field and research study in this area is new phenomena. Even, this particular study can be extended by including more and more specific variables and designing the research more appropriately. Therefore, comprehensive study in this field is necessary. Another aspect of future research may be not merely estimating the causal relationship stock market and growth variable but focus on channels through which the stock market influences the growth positively. And another aspect of future research may be relationship between bank and stock market development and its impact on economy growth.

Studies on the role of stock market expansion of the corporate base, industrialization, technological advances and employment generation will not be out of place considering the early stage of our stock market.

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Appendix I

Stock Market Performance

S.N.	Mark Indicator	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
1	No. of Public Issue	9.00	16.00	17.00	16.00	14.00	29.00	34.00	64.00	64	61
2	Amount of Public Issue	717.20	1555.11	853.63	1547.79	1626.80	2443.60	2295.50	10668.20	16828.50	10822.41
3	Number of Listed Companies	115	96	108	114	125	135	135	142	159	176
4	Number of Traded Companies	67	69	81	92	102	110	116	136	170	198
5	Turnover	2344.16	1540.63	575.80	2144.27	4507.70	3451.40	8360.10	22820.80	21681.14	11851.11
6	Market Capitalization	46349	34703	35240	41424.77	61365	96763	186301	366247.50	512939.07	376871.37
7	Paid up value of Listed Securities	8165.00	9685.04	12560.07	13404.90	16771.80	19958.00	21798.80	29465.00	61140.00	79356.00
8	Number of Transaction	46095	42028	69163	85533	106246	97374	120510	150800	209091	376871.3

											7
9	Number Of listed Securities ('000')	124971	126850	159958	161141	194673	226540	243504	321131	637868	821746
10	Number of Traded securities ('000')	4989	6005	2428.00	6428.00	18433.55	12224.93	18147.25	285997.70	30547.16	26231.35
11	% of Turnover on Market Capitalization	5.06	4.44	1.63	5.18	7.35	3.57	4.48	6.23	4.22	3.14
12	% of Market Capitalization on Nominal GDP	11.78	8.56	8.08	8.77	12.06	16.03	27.78	44.62	53.43	31.86
13	NEPSE average Index for the Year	348.40	227.50	204.90	222.10	286.70	386.80	636.80	963.36	749.1	477.73

Appendix-II

Top ten companies on the basis of Market Capitalization from year 2001/01 to 2009/10

		Rs. Millions			Rs. Millions
Fiscal year 2000/01			Fiscal year 2001/02		
SN	Name of Companies	Amount	SN	Name of Companies	Amount
1	Nepal Grindlaya Bank Ltd.	6824.93	1	Standrad Chartered Bank Ltd.	5263.01
2	Nepal Arab Bank Ltd.	5695.54	2	Nabil Bank Ltd.	3608.81
3	Himalayan Bank Ltd.	4050.00	3	Himalayan Bank Ltd.	3000.00
4	Nepal Bangladesh Bank Ltd.	2404.80	4	Bottlers Nepal (Balaju) Ltd.	1364.22
5	Nepal SBI Bank Ltd.	2156.76	5	Yak & Yeti Hotel Ltd.	1325.22
6	Nepal Indosuez Bank Ltd	2030.26	6	Nepal Investment Bank Ltd.	1285.78
7	Nepal Lever Ltd.	2025.54	7	Nepal Ind. & Com. Bank	1250.00
8	Nepal Ind. & Com.	1955.00	8	Nepal Bangladesh Bank	1224.00

	Bank	
9	Bank of Kathmandu Ltd.	1780.74
10	Nepal Bank Ltd.	1551.56
Total		30475.13

9	Nepal Bank Ltd.	1197.90
10	Soaltee Hotel Ltd.	652.29
Total		20171.23

Fiscal year 2002/03
Rs.
Millions

Fiscal year 2004/05
Rs.
Millions

SN	Name of Companies	Amount
1	Standrad Chartered Bank Ltd.	14142.68
2	Nabil Bank Ltd.	10998.29
3	Himalayan Bank Ltd.	8494.20
4	Nepal Investment Bank Ltd.	7441.38
5	Everest Bank Ltd.	5212.62

SN	Name of Companies	Amount
1	Standrad Chartered Bank Ltd.	8785.32
2	Nabil Bank Ltd.	7389.47
3	Himalayan Bank Ltd.	4830.00
4	Butwal Power Company	4111.38
5	Everest Bank Ltd.	2740.50

6	Butwal Power Company Ltd.	4530.91
7	Nepal SBI Bank Ltd.	3964.56
8	Bank of Kathmandu Ltd.	3940.44
9	Nepal Ind. & Com. Bank	2976.00
10	Chilime Hydro Power Ltd.	2918.40
Total		64619.48

6	Nepal Investment Bank Ltd.	2362.34
7	Bank of Kathmandu Ltd.	1993.40
8	Unilever Nepal Ltd.	1973.51
9	Nepal Ind. & Com. Bank Ltd.	1830.00
10	Laxmi Bank Ltd.	1567.50
Total		37583.42

Fiscal year 2005/06 Rs.
Millions

SN	Name of Companies	Amount
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Fiscal year 2006/07 Rs.
Millions

SN	Name of Companies	Amount
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1	Standrad Chartered Bank Ltd.	14142.68
2	Nabil Bank Ltd.	10998.29
3	Himalayan Bank Ltd.	8494.20
4	Nepal Investment Bank Ltd.	7441.38
5	Everest Bank Ltd.	5212.62
6	Butwal Power Company Ltd.	4530.91
7	Nepal SBI Bank Ltd.	3964.56
8	Bank of Kathmandu Ltd.	3940.44
9	Nepal Ind. & Com. Bank	2976.00
10	Chilime Hydro Power Ltd.	2918.40
Total		64619.48

1	Standrad Chartered Bank Ltd.	24795.25
2	Nabil Bank Ltd.	24382.03
3	Himalayan Bank Ltd.	14270.26
4	Nepal Investment Bank Ltd.	13855.39
5	Everest Bank Ltd.	9185.40
6	Butwal Power Company Ltd.	8390.58
7	Bank of Kathmandu Ltd.	8293.19
8	Nepal SBI Bank Ltd.	7618.17
9	Chilime Hydro Power Company	6858.24
10	Nepal Ind. & Com. Bank	6270.00
Total		123918.51

Fiscal year 2007/08 Rs.
Millions

SN	Name of Companies	Amount
1	Standrad Chartered Bank	42337.90
2	Nabil Bank Ltd.	36259.90
3	Nepal Investment Bank	24564.50
4	Himalayan Bank Ltd.	16054.00
5	Bank of Kathmandu Ltd.	14173.80
6	Butwal Power Company	13080.90

Fiscal year 2008/09 Rs.
Millions

SN	Name of Companies	Amount
1	Nepal Doorsanchar Company Ltd.	94350.00
2	Standrad Chartered Bank	37254.92
3	Nabil Bank Ltd.	33675.38
4	Himalayan Bank Ltd.	14270.26
5	Nepal Investment Bank	13916.56
6	Nepal SBI Bank	12308.26

7	Everest Bank Ltd.	11839.00
8	Chilime Hydro Power Company	11396.30
9	Manchhapuchhre Bank Ltd.	10393.90
10	Nepal Ind. & Com. Bank	10169.30
Total		190269.50

7	Butawal Power Co. Ltd.	10554.97
8	Bank Of Kathmandu Ltd.	10554.97
9	Chilime Hydro Power Company	9455.62
10	Everest Bank Ltd.	9279.90
Total		245620.84

Fiscal year 2009/10

Rs. Million

SN	Name of Companies	Amount
1	Nepal Doorsanchar Limited	69000.00
2	Standrad Chartered Bank Ltd.	30559.18
3	NABIL Bank Ltd.	23023.41
4	Nepal Investment Bank Ltd.	16969.84
5	Everest Bank Ltd.	10412.77
6	Himalyan Bank Ltd.	9924.31
7	Butwal Power Company	9145.71
8	Chilime Hydro Power Company	8032.90
9	Nepal Industrial And Col Bank	7139.40
10	Bank Of Kathmandu	7092.94
Total		191300.50

Sources: various yearly publications of trading reports of NEPSE.

Appendix III

Monthly NEPSE index from the fiscal year 2000/01 to 2009/10

2000/01	July/Aug	364.20
2000/01	Aug/Sep	421.20
2000/01	Sep/Oct	433.90
2000/01	Oct/Nov	519.30
2000/01	Nov/Dec	486.10
2000/01	Dec/Jan	464.80
2000/01	Jan/Feb	455.30
2000/01	Feb/Mar	395.90
2000/01	Mar/Apr	369.10
2000/01	Apr/May	355.60
2000/01	May/June	333.20
2000/01	June/July	348.40
2001/02	July/Aug	332.10
2001/02	Aug/Sep	265.20
2001/02	Sep/Oct	281.20
2001/02	Oct/Nov	300.20
2001/02	Nov/Dec	284.50
2001/02	Dec/Jan	255.90
2001/02	Jan/Feb	236.00
2003/04	Sep/Oct	207.50
2003/04	Oct/Nov	206.20
2003/04	Nov/Dec	201.90

2001/02	Feb/Mar	187.90
2001/02	Mar/Apr	216.20
2001/02	Apr/May	239.10
2001/02	May/June	226.00
2001/02	June/July	227.50
2002/03	July/Aug	226.60
2002/03	Aug/Sep	223.00
2002/03	Sep/Oct	219.30
2002/03	Oct/Nov	220.70
2002/03	Nov/Dec	214.60
2002/03	Dec/Jan	200.80
2002/03	Jan/Feb	213.30
2002/03	Feb/Mar	209.70
2002/03	Mar/Apr	214.10
2002/03	Apr/May	207.50
2002/03	May/June	207.70
2002/03	June/July	204.90
2003/04	July/Aug	207.90
2003/04	Aug/Sep	208.50
2005/06	Sep/Oct	297.30
2005/06	Oct/Nov	302.40
2005/06	Nov/Dec	303.10

2003/04	Dec/Jan	201.90
2003/04	Jan/Feb	211.30
2003/04	Feb/Mar	207.80
2003/04	Mar/Apr	201.20
2003/04	Apr/May	204.30
2003/04	May/June	213.10
2003/04	June/July	222.01
2004/05	July/Aug	241.50
2004/05	Aug/Sep	234.60
2004/05	Sep/Oct	231.30
2004/05	Oct/Nov	235.10
2004/05	Nov/Dec	236.40
2004/05	Dec/Jan	239.61
2004/05	Jan/Feb	257.30
2004/05	Feb/Mar	280.70
2004/05	Mar/Apr	293.30
2004/05	Apr/May	285.40
2004/05	May/June	277.80
2004/05	June/July	286.70
2005/06	July/Aug	300.10
2005/06	Aug/Sep	293.40
2007/08	Sep/Oct	861.37
2007/08	Oct/Nov	915.38
2007/08	Nov/Dec	1025.91
2007/08	Dec/Jan	958.91
2007/08	Jan/Feb	814.43

2005/06	Dec/Jan	305.50
2005/06	Jan/Feb	317.70
2005/06	Feb/Mar	339.80
2005/06	Mar/Apr	334.80
2005/06	Apr/May	385.90
2005/06	May/June	372.00
2005/06	June/July	386.80
2006/07	July/Aug	389.20
2006/07	Aug/Sep	382.60
2006/07	Sep/Oct	398.40
2006/07	Oct/Nov	447.40
2006/07	Nov/Dec	508.60
2006/07	Dec/Jan	537.10
2006/07	Jan/Feb	523.90
2006/07	Feb/Mar	499.00
2006/07	Mar/Apr	494.60
2006/07	Apr/May	513.50
2006/07	May/June	575.00
2006/07	June/July	683.90
2007/08	July/Aug	705.96
2007/08	Aug/Sep	817.08
2008/09	Feb/Mar	667.2
2008/09	Mar/Apr	661.27
2008/09	Apr/May	660.96
2008/09	May/June	678.74
2008/09	June/July	749.1

2007/08	Feb/Mar	714.76
2007/08	Mar/Apr	746.69
2007/08	Apr/May	806.26
2007/08	May/June	930.65
2007/08	June/July	963.36
2008/09	July/Aug	1084.76
2008/09	Aug/Sep	976.01
2008/09	Sep/Oct	933.97
2008/09	Oct/Nov	806.9
2008/09	Nov/Dec	734.85
2008/09	Dec/Jan	659.81
2008/09	Jan/Feb	663.52

2009/10	July/Aug	721.95
2009/10	Aug/Sep	628.34
2009/10	Sep/Oct	609.55
2009/10	Oct/Nov	566.94
2009/10	Nov/Dec	548.61
2009/10	Dec/Jan	530.96
2009/10	Jan/Feb	528.9
2009/10	Feb/Mar	486.25
2009/10	Mar/Apr	481.19
2009/10	Apr/May	457.81
2009/10	May/June	476.69
2009/10	June/July	477.73

Source: Various Yearly Publications of Trading Reports of NEPSE from Year 2000/2001 to 2009/10

Appendix-IV

Data Relating to Gross Domestic Product (GDP)

Fiscal Year	Nominal GDP	GDP Deflator	Real GDP (Base Year 2000/01 = 0)
2000/01	393566	150.10	419734.90
2001/02	405632	155.20	432809.30
2002/03	460325	160.00	287703.10
2003/04	500699	166.70	300359.30
2004/05	548485	177.50	309005.60
2005/06	611089	189.90	317889.90
2006/07	675484	204.60	327756.10
2007/08	768832	220.70	348360.70
2008/09	960021	256.14	374803.23
2009/10	1182680	275.19	429768.52

Appendix-V

Data Relating to saving(S) and Investment(I)

Rs.Millions

Fiscal Year	Saving In current Price	Investment in Current Price	CPI (Base Year 2000/01 = 100)	Real Saving	Real Investment
2000/01	61532	98815.00	160.70	38289.90	61490.30
2001/02	50775	101668.00	165.40	30698.30	61467.90

2002/03	42141	105383.00	173.30	24316.70	60809.50
2003/04	63064	131671.00	180.20	34996.70	73069.40
2004/05	68110	155907.00	188.30	36171.00	82797.10
2005/06	58727	175603.00	203.30	28886.80	86376.30
2006/07	71902	203741.00	216.40	32723.20	94150.20
2007/08	80193	262582.00	230.60	34775.80	113869.04
2008/09	96298	298536.00	245.00	39305.30	121851.43
2009/10	110751	323515.00	262.50	42190.85	123243.80

Appendix-VI

Annual Growth Rate

Fiscal Year	Number Of Public Issue	Amount Of Public Issue	Paid Up Capital	MC	Turnover	NEPSE Index
2000/01	0	24.11	9.13	7.48	102.23	-3.41
2001/02	77.77	166.83	18.61	-25.13	-34.27	-34.70
2002/03	6.25	-45.1	1.54	1.54	-69.62	-10.83
2003/04	-5.86	81.31	17.54	17.54	272.39	8.40
2004/05	-14.28	5.1	48.13	48.13	110.22	29.10
2005/06	107.14	50.2	57.68	57.68	-23.43	34.92
2006/07	17.24	-6.06	9.23	92.53	142.22	77.59
2007/08	88.24	364.74	35.17	96.59	172.97	40.86
2008/09	0	57.75	107.5	40.05	-4.99	17.67
2009/10	-4.69	-35.69	62.50	26.53	45.34	36.22

Appendix-VII
Compounding Growth Rate

S.N.	Compound Growth Rate	Percentage
1	Number of Public Issue	23.70
2	Amount of Public Issue	35.20
3	No. of listed Companies	4.85
4	No. of Traded Companies	12.54
5	Turnover	19.73
6	Market Capitalization	26.22
7	Paid up Capital	28.75
8	NEPSE Index	3.57
9	No. of Listed Securities	23.28
10	Traded Securities	20.25