Stock market, Bank and Economic Growth: A Case of Nepal
CHAPTER I
INTRODUCTION

1.1 General background

Do well-functioning stock market and banks promote long-run economic growth? Considerable debate exists on the relationships between the financial system and economic growth. Historically, economists have focused on banks. Bagehot (1873) and Schumpeter (1912) emphasize the critical importance of the banking system in economic growth and highlight circumstances when banks can actively spur innovation and future growth by identifying and funding productive investment. The relationship between stock market development, bank and economic growth has received attention of academicians and policy makers in the present decade both in the developed and developing countries as a result of the emerging equity market phenomenon and of the need to provide liquidity for privatization linked equity issues.

Is the financial system important for economic growth? Economic growth of any nation is highly influenced and characterized by development and expansion of capital market. The capital market has more significant role in developing countries like Nepal empirical studies show that bank and stock market play complementary roles in the initial stage of financial development of a country and neither of these is perfect substitute for the other.

Security market is a mechanism created to facilitate the exchange of financial securities or assets by bringing together buyers and sellers of securities (Sharpe 1998). Securities markets provide an effective way of procuring long-term funds by issuing shares and debentures or bonds for corporate enterprises and government and at the same time provide an investment opportunity for individuals and institutions (Adhikari 2004). Thus, the market place for these financial securities is called securities market

The relationship between stock markets and growth may also be influenced by the link between stock markets and financial intermediary, which is not unambiguous. Stock markets and banks are clearly substitute sources for corporate finance since when a firm issues new equity its borrowing needs from the banking system decline. Assuming that banks and financial intermediaries are in a better position than stock markets to address agency problem (for example, diamond 1984) ,(stigliz 1985),it is then possible that stock market development may hamper economic growth if it happens at the expense of banking system development.

Similar views are expressed by the literature on capital market based financial systems that predicts a very weak relationship between stock markets and growth since corporate Investees' not financed through issues of equity (Maver1988 and fly 1997).Cobett (1994) when discussing the contribution of stock market to corporate investment financing , suggest that it was negative in the United Kingdom and only small positive overall in the United States during the 1970s and1980s. AKYUZ (1993) and Singh (1997) argue that unfavorably economic shocks produce macroeconomic instability through the interactions between stock market and foreign exchange markets, which affect economic growth adversely.

On the other hand, at the aggregate level increased stock market capitalization may be accompanied by an increase in the volume of bank business, if not an increase in new landing, as financial intermediaries may provide complementary service to issuers of mew equity such as underwriting thus it is likely that at the aggregate level the development of the stock market goes hand in hand with the development of the banking system.

The finance literature suggests that stock markets serve important functions even in those economies in which a well-developed banking sector already exists, the reason being that equity and debt financing are in general not perfect substitutes. Equity financing has a key role in the management of the conflicts of interest that may arise between different stakeholders in the firm. Stock markets also provide entrepreneurs with liquidity and with

opportunities to diversify their portfolios. Stock trading transmits information about the firm's prospects to the potential investors and creditors. For example, Allen (1993) contrasts the comparative advantages of stock markets and financial institutions in processing information about investment projects. As a result of the different attributes of debt and equity, the development of markets that facilitate the issuance and trade of equity should be reflected in the financing decisions of individual firms.

Empirical studies in many developing countries suggest that every nation has a structure of financial system that exists side by side with its real infrastructure, and the differences in the national financial systems have profound impact upon the pace of economic growth of nations. Evidence shows that financial development of a nation overwhelmingly affects its economic growth

Country's financial system may be bank –dominated or market oriented. Each of these systems has different mechanism for handling stakeholders 'interest and addressing corporate control issues and agency problems though historically countries seem to follow one of these paths for development of its financial system, in recent years , some countries are developing their financial systems through convergence between these two .financial system in Nepal is basically bank dominated . Empirical studies show that bank and stock market play complementary roles in the initial stage of financial development of the country and neither of these is perfect substitute for the other. However it cannot be denied that stock market also has an important role to play in the developing of the country. The present thesis aims to look at some of the issues in the development of financial sector, particularly in the context of the developmental role of stock market, bank and economic growth in Nepal.

1.2 Statement of the problem

Several studies have documented on the stock market, bank and economic growth in international arena to explain the relationship between stock market, bank and economic growth. Apart from globalization and liberalization, the world economy is also being challenged by the important role of knowledge, and the capacity of the nation to utilize

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and generate knowledge. This will in turn create new values in the economy which will further contribute to the economic growth and wealth of the nation.

Considerable debate exists on the relationships between the financial system and economic growth. Historically, economists have focused on banks. Bagehot (1873) and Schumpeter (1912) emphasize the critical importance of the banking system in economic growth and highlight circumstances when banks can actively spur innovation and future growth by identifying and funding productive investments. In contrast, Lucas, Jr. (1988) states that economists "badly over-stress" the role of the financial system, and Robinson (1952) argues that banks respond passively to economic growth. Empirically, King and Levine (1993a) show that the level of financial intermediation is a good predictor of long-run rates of economic growth, capital accumulation, and productivity improvements.

Besides the historical focus on banking, there is an expanding theoretical literature on the links between stock markets and long-run growth, but very little empirical evidence. Levine (1991) and Bencivenga et al. (1995) derive models where more liquid stock markets—markets 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 savings before the project matures. Enhanced liquidity, therefore, facilitates investment in longer-run, higher-return projects that boost productivity growth. Levine and Zervos (1998) whether stock market and bank promotes economic growth. They find that measure of market liquidity are strongly related to growth, capital accumulation ,and productive ,while surprisingly more traditional measure of development such as stock market size are not as robustly correlated.

Similarly, Devereux and Smith (1994) and Obstfeld (1994) show that greater international risk sharing through internationally integrated stock markets induces a portfolio shift from safe, low-return investments to high return investments, thereby accelerating productivity growth. These liquidity and risk models, however, also imply that greater liquidity and international capital market integration ambiguously affect saving rates. In fact, higher returns and better risk sharing may induce saving rates to fall

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enough such that overall growth slows with more liquid and internationally integrated financial markets. Moreover, theoretical debate exists about whether greater stock market liquidity actually encourages a shift to higher-return projects that stimulate productivity growth. Since more liquidity makes it easier to sell shares, some argue that more liquidity reduces the incentivesof shareholders to undertake the costly task of monitoring managers (Shleifer and Vishny, 1986; Bhide, 1993). In turn, weaker corporate governance impedes effective resource allocation and slows productivity growth. Thus, theoretical debate persists over the links between economic growth and the functioning of stock markets.'

The results have implications for a variety of theoretical models. The strong, positive connections between stock market liquidity and faster rates of growth, productivity improvements, and capital accumulation confirm Levine's (1991) and Bencivenga et al.'s (1995) theoretic^ predictions. We do not find any support, however, for theories that more liquid or more internationally integrated capital markets negatively affect saving and growth rates or that greater liquidity retards productivity growth. Renelt (1992) show that past researchers have been unable to identify empirical links between growth and macroeconomic indicators that are robust to small changes in the conditioning information set,   Demirgug-Kunt and Maksimovic (1996) show that firms in countries with better-functioning banks and equity markets grow faster than predicted by individual firm characteristics, and Rajan and Zingales (1998) show that industries that rely more on extemal finance prosper more in countries with better developed financial markets. Atje and Jovanovich (1993) present a cross-country study of stock markets and economic growth. They find a significant correlation between growth over the period 1980-1988 and the value of stock market trading divided by GDP for 40 countries

Though there are these studies conducted in the different very few countries on stock market development, banking development and economic growth. In the context of Nepal Mahat (1981) examines the state of capital markets and the development of financial institutions in the country. The growth of the financial institution has been examined both in term of the growth in their assets. Their role in the national economy has been

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evaluated in terms of some indicators such as total financial institutions issues ratio assets to GDP ratio etc. Bhatta (1997) studied the dynamic of stock market in Nepal. His study mainly focused on the behavior of stock price in Neplesae stock market. Pant (2000) studied the state of the Nepalese stock market with principal emphasis on problems and further prospects of Nepalese stock market. However no significant part of the study has contributed to the role of the stock market in the economy. Wagle (2002) studied the development of stock markets in terms of its size (market capitalization), annual turn over and also studies about the ratio of market capitalization to GDP, and annual turnover GDP. But the study has been fairly descriptive regarding the factual information. Shrestha (2002) studied about the Nepalese stock market efficiency, particularly the efficiency of the banking sector of the market. She concluded that NEPSE is operating its weak form of efficiency. This result shows that NEPSE is in its early stage of development to become a well functioning stock market. Yadav (2002), Poudyal (1988) Rajbanshi (1987) and Sharma (1996) have focused their study on the trends of saving, investment and capital formation in Nepal .but very little has been said or done about the Nepalese security markets .Shrestha however has observed that securities transaction in Nepal has increased significantly for last few year, this marks the positive sign for the developing and growth of capital market. In 2006, Khanal , analyzed about how does securities market affect consumer price index(inflation rate). Hence from the above it is clear the vital economic institution which plays a critical role for the economic development of the nation.

This study deals with the following issues;

1)   What is the role of stock market, bank in economy growth?

2)   Does the efficient stock market mobilize the saving efficiently and help the optimum allocation of such saving?

3) Is there any relationship between various measures of the stock market development,   banking development and long run economic growth?

4) What are the factor affecting of stock market development, banking development and economic growth?

5) Is there any relation between capital accumulation, productivity, growth and private saving?

6) Whether the banking and stock market indicators are correlated with current and future rate of economic growth or not?

7) Are Banking development and stock market liquidity both good predictor of economic growth ,capital accumulation and productivity growth?

8) Is market liquidity is strongly related to growth, capital accumulation and productivity.

1.3 Objective of the study

The principal objective of this study is to analyze the well-functioning of stock market, bank to promote lung run economic growth. The Specific objectives are as follows

1) To examine the relationship between various measures of the stock market development, banking development and long run economic growth of Nepal.

2) To analyze stock market development of the Nepalese banking.

3) To measure of stock market liquidity, size, volatility is robustly correlated with current and future rate of economic growth, capital accumulation, productivity improvement and saving rate.

4) To determine the factor affecting of stock market development, banking development and economic growth

5) To conduct a survey and examine the opinions of financial executives of financial institutions on stock market development, banking development and economic growth.

1.4 Organization of the Study

This study consists following five main chapters and necessary subchapters as follows:

Chapter 1: Introduction

Chapter 2: Review of Literature

Chapter 3: Research Methodology

Chapter 4: Presentation and Analysis of Data

Chapter 5: Summary, Conclusions and Recommendations

The study report has five Chapters. Chapter 1 deals with the introductory part of the study. It includes the introduction, statement of the problem, objectives, limitations and organization of the study. Chapter 2 deals with the review of literature. It helped to assimilate the previous works, which helps to avoid duplication of research in this for the empirical study of the Stock market, Bank, And Economic Growth various literatures have been reviewed. It is divided into theoretical and conceptual frameworks, review of related studies, and review of other relevant literatures. Chapter three states the research design and research methodology. It highlights the research framework, and sources of data. Chapter four deal with data presentation and analysis. This is another important part of research where the data attributed, classified and analyzed. It helped to come up with finding of the study .Chapter five is for summary and conclusion. In this part of study, the findings are summarized with the conclusion from the study. Some insights from the research are also presented .It highlight the degree of extent in which the findings can be generalized. The exhibits and bibliography are incorporated at the end of the study.

CHAPTER II
REVIEW OF LITERATURE

This chapter deals with the review literature on "stock market, bank and economic growth in Nepal" in more detail and descriptive manner. For this, various books, journals, articles and previous thesis related with this topic have been reviewed. These studies are presented below.

2.1Theoretical framework

The growing importance of stock market around the world has recently opened a new avenue of research into the relationship between financial development and economic growth, which focuses on the effect of stock market development. Is the financial system important for economic growth? One line of research argues that the financial system is unimportant for economic growth; another line stresses the important of financial system in mobilizing savings allocating capital, exerting corporate control, and easing risk management. Furthermore, some theories provide a conceptual basis for believing that large more efficient stock markets boost economic growth

Economic growth of any nation is highly influenced and characterized by development and expansion   of capital market. The capital market us part and parcel for corporate development, (Pardhan$Adhikari 2002:16).the rapid development of any country in modern era depends to a large extent on the level of financial activities. Financial activities play a role of catalyst in the process of economic development of a country but for the rapid growth on volume of financial activities, enterprises need a huge amount of funds. Capital is the mean for development and productivity entities to increase gross domestic product. For the mobilization of invertible resource, capital market is an important intermediary through which effective bridging of the deficits and surplus unit can be ensured. Capital market institutions are engaged in mobilization of saving from surplus units and supply funds into the deficit units for productive investment (Shrestha, 1999:1). The development of capital is closely related with the modernization and the

development of financial system (Timilsina, 2001:7). So the development and expansion of capital market are essential for the rapid economic growth of the country. Capital market helps for economic development by mobilizing long-term capital and by creating liquidity, which is needed for productive sector (ojha, 2001:1).

Growth of financial sector in Nepal

During the last one half decade the financial sector in Nepal has grown significantly. It is sad that despite a history of almost half a century of development efforts under different national plans. Conscientious effort to develop financial sector started quite in Nepal. Although some efforts were made to develop country's infrastructure during the Rana regime, they were more sporadic and aimed at fulfilling the need and the whims of the then Rana rulers. Efforts to achieve economic growth in the country in a planned way started only in 1956 with the adoption of the first five years plan by government .under different plans the government set target for economic growth and adopted various polices and program ,which were directed toward developing infrastructure necessary for the creation of national wealth. Unfortunately, these policies and program failed to take into account the need to develop the financial structure that ought to exist side by side with the development of infrastructure necessary for the growth of real sector.

the policy of the government to maintain control of the financial sector by restricting the entry of private sector into financial activities limited the growth of financial sector in the country's the result the country has the limited financial institution to support its development activities for quit a long time .till early eighties the country had only two commercial bank ,two development ,one provident fund and few insurance companies .as almost all of these financial institution were under the government sector they more under social welfare concept then under commercial principles .as a result of the restrictive policy of the government ,the gaps created in the resource needed for the development of real sector and the resource available for it were met through foreign grant and loans under different plans .while this increased the country dependency on the foreign aid , it also made the government less concerned for the need to mobilize resource

locally to meet the resource gap. Apparently, this led to tardy development of financial sector of the country where the real sector lagged behind the financial sector.

The impact on the development of financial sector was observed only when the government changed its restrictive policy and opened up hitherto closed financial sector to private sector and foreign participation in the establishment of bank .with the adoption of privatization and economic liberalization policy the process got further impetus and financial institution in Nepal grew at faster pace especially in quantitative terms. by end of 2008 the financial sector in Nepal included 23, commercial bank ,58 development bank , 79 finance companies ,22 insurance companies ,one employee provident fund, one credit Guarantee corporation,12 micro finance institution ,5regional rural development banks ,3392 saving and credit Corporative 117postal saving bank.

Economic growth indicators

Four economic indicators have been taken for this thesis even there are many economic indicators.

1) Real per capital GDP growth:

Economic growth can be most simply defined as the increase in economy's output overtime. The best measure of economy's output is read GDP or GDP in consent price. the reason for specifying constant price is of course ,the change over the year in GDP in current price are the result of a mixture of price change and output changes. Therefore if growth is define as the expansion of the economy's output and if we are to use GDP as a measure of growth. The price change must be removed from GDP as in the consent price series. Furthermore; if the interest is not merely in how much the economy aggregate output expand overtime , but in how much the amount of output produced per person expand overtime ,real GDP must also be corrected for population increases.

2) Physical capital stock growth-

Real investment adds to the nation's physical stock of capital and increase employment. According to Keynes," investment means real investment .it means an addition to nation's physical stock of capital .it creates employment and generates income". As for

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example, the building of new factories, new companies are real investment. Capital is defined as building of new factories, new companies are real investment. Capital is defined as building, equipment and inventories and sometime intangibles such as knowledge and technique, which are both output of the productive process and inputs to future production.

3) Productive growth:

When it comes to measure the sources of growth and draw economic policy conclusion, economist rely on growth accounting. According this approach per capital growth is explained by two sources; capital accumulation and total factor productivity (Bebczuk, 2002)

The relation between output and inputs can be expressed as:

Total production = efficiency x volume of combined inputs
= TEP x volume of combined inputs

In other words;

$$Q_t = A_t \, F \, (K_t \, L_t)$$

Where,

Q= output (value added)

K value of services rendered by capital

L=value of services rendered by labor

A= level of efficiency

t = time

Productivity growth can be obtained with the help of following relationship as well;

PG= output growth – 0.3 x capital stock growth

Since growth accounting practices generally gives productivity growth a weight that is about two times the weight on physical capital accumulation, the above equations holds true

4) 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 saving accounted for more than 20% of investment over long stretcher of time? In an economic investment, say 30% of its GDP, relying on foreign saving beyond this limit would imply running a persistent current account deficit in excess of 6% GDP, which would be courting disaster. Hence the critical important of domestic saving in economic growth following from a few straight forward facts of economic life (Rodrik,1996).Individual as well as business institution define private saving as the surplus income over consumption . Private saving is of immense important for economic growth because it helps in increasing investment and capital stock growth.

Bank development indicator

Bank credit-An extensive theoretical literature examines the ties between banks and economic activity. Ideally, researchers would construct cross-country measures of how well banks identify profitable activities, exert corporate governance, mobilize resources, manage risk, and facilitate transactions. Economists, however, have not been able to accurately measure these financial services for a broad cross section of countries. Consequently, researchers traditionally use measures of the overall size of the banking sector to proxy for "financial depth" (e.g., Raymond W. Goldsmith, 1969; Ronald. McKinnon,(1973). Thus, researchers often divide the stock of broad money (M2) by GDP to measure financial depth. As noted by King and Levine (1993a), however, this

type of financial depth indicator does not measure whether the liabilities are those of banks, the

Central bank, or other financial intermediaries, nor does this financial depth measure identify where the financial system allocates capital. Thus, we use the value of loans made by commercial banks and other deposit-taking banks to the private sector divided by GDP, and call this measure *Bank Credit.* Bank Credit improves upon traditional financial depth measures of banking development by isolating credit issued by banks, as opposed to credit issued by the central bank or other intermediaries, and by identifying credit to the private sector, as opposed to credit issued to governments.

Stock market development in Nepal

The history of security market began with the floatation of shares by Biratnagar jute mails ltd and Nepal bank ltd in 1937. Introduction of the company act in 1964, the first issuance of government bond in 1964 and the establishment of securities center ltd in 1976 were other significant development relating to capital markets. His majesty's government under a programmed initiated to reform capital market converted securities exchange center into Nepal stock exchange in1993.nepal stock exchange , in short NEPSE, is a non profit organization, operating under securities exchange act, 1983.

The basis objective of NEPSEs to impact marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through member's market intermediaries such as brokers market makers etc. NEPSE opened its trading on 13th January, 1994.

Government of Nepal , Nepal Rastra bank , Nepal industrials development corporation and member are the shareholders of the NESPSE.NEPSE has adopted an open out cry system .nowadays fully computerized system is going to be adopted in NEPSE to carter from open cry stem .it means transaction of security are conducted on the open auction principle on the trading floor .The buying broker with the highest bid will post the price and his code number on the buying column while the selling broker with the lowest offer will post the price and code number on the selling column on the quotations board .the

market maker quotes the bid and offer price match contracts between the buying and selling brokers or between the brokers and market makes are concluded on the floor.

NESPE has adopted a t+3 system, which mean that settlement of transaction should be within 5 working days following the transaction day. Settlement will be carried out on basis of paper versus payment (source: www.nepalstock.com)

Nepal being one of the least developed countries in the world has to make every possible endeavor to efficiently mobilize the available capital. The need of securities market development in Nepal has been an accepted reality; however, it has not been developed at desired rate. If we see the size of the market during the past 14 years (i.e; FY1993/94-FY 2006/07), the annual average amount of public issue was Rs 849.5millionthe annual average amount of turnover was 1396.50million, annual average paid up value of listed securities was Rs 9559.90 million, annual market capitalization was Rs 49732.99million.the above indicator show that security market has low level of resource mobilization, low level of turnover, and low of impact on the national economy.

The level of stock market development and its impact on the national economy can be measured by using various indicators broadly classified into following categories (Demirguc-kunt and Levine 1996)

1) Stock market size- capitalization measures the size of the stock market and equals the value of listed domestic shares on domestics exchanges divided by GDP. Although large market does not necessarily function effectively and taxes may distort incentives to list on the exchange, many observers use capitalization as indicators of market development.

2) Liquidity indicator- we use two related measures of market liquidity.

 First, *Turnover* equals the value of the trades of domestic shares on domestic exchanges divided by the value of listed domestic shares. Turn over measures the volume of domestic equities traded turn over equals the on domestic exchanges relative to the size

of the market. High Turn over is often used as an indicator of low transactions 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 exchanges 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 Trade (Levine, 1991; Bencivenga et al., 1995). 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 as shown by Demirgu9-Kunt and Levine (1996). While Value Traded captures trading relative to the size of the economy, Turnover measure trading relative to the size of the stock market. Thus, a small, liquid market will have high Turnover but small Value Traded.

3)**Volatility**- this indicator is a twelve month; rolling standard deviation estimate based on market return .greater volatility is not necessarily a sigh of more or less stock market development. Indeed, high volatility could be an indicator development, so far as revelation of information implies volatility in a well-functioning market.

4) Concentration: A country's stock market is consideration highly concentrated if few large companies dominate it. In other words, in stock market which has high concentration shares of few companies account for major percentage of total market value and are trade most frequently relative to stock of other companies. High concentration is not desirable as it adversely affects liquidity in the stock market .concentration on stock market is measured by computing the share of ten largest stocks to total market value of share. Countries with family owned, closed enterprises and limited number of listed companies have high concentration ratio.

2.2 Review of major empirical works

Several studies have documented on the stock market, bank and economic growth in international arena to explain the relationship between stock market, bank and economic growth. Apart from globalization and liberalization, the world economy is also being challenged by the important role of knowledge, and the capacity of the nation to utilize and generate knowledge. This will in turn create new values in the economy which will further contribute to the economic growth and wealth of the nation.

Considerable debate exists on the relationships between the financial system and economic growth. Historically, economists have focused on banks. Bagehot (1873) and Schumpeter (1912) emphasize the critical importance of the banking system in economic growth and highlight circumstances when banks can actively spur innovation and future growth by denitrifying and funding productive investments. In contrast, Lucas, Jr. (1988) states that economists "badly over-stress" the role of the financial system, and Robinson (1952) argues that banks respond passively to economic growth. Empirically, King and Levine (1993a) show that the level of financial intermediation is a good predictor of long-run rates of economic growth, capital accumulation, and productivity improvements.

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Boyd and smith (1996), developed a model in which capital is produced by investors who makes use of two technology ,one ,yield a high expected return but has the advantage of full public absorbability .investor must make a decision regarding how heavily they will use each technology. This decision depended, among other thing, on the relative price

between capital and resources used in state verification. as an economy develops, investors will perceive a relative cost of monitoring t hat rise over time .as a result, under the condition typically expected to prevail less use will be made of the unobservable return .and more use will be made of the observable return technology which is associated with equity .it is also typically expected the ratio of equity finance to rise as an economy develops. More over it is possible to produce parameter values such that a low level of development, there will be no use of equity market .equity market actively can be observed for such parameters only once the economy attains a critical level real development. It is also the case that quantity of resources consumed by monitoring declines as an economy develops. This provides a sense which the endogenous evolutions of debt and equity market in the development process provide an economy with a more efficient set of capital market .finally, their analysis provides a sense in which debt and equity market function as complements rather than substitutes. A case against the important of equity market in financing real development is often made on the basis that existing credit market are close substitutes.

Perhaps the most important contribution is made by Levine, Zervos and Demirgue-Kunt. Levine's(1991)study examined a model which liquidity and productivity risk elicit the creation of a stock market and studied how the resulting stock market change the incentives in ways that alter steady state growth rates. he found that stock market accelerate growth by facilitating the ability to trade ownership of firm without disrupting the productive process occurring within firms, and allowing investors to hold diversified portfolios . Tax policy in his model influenced growth directly by altering investment incentives and indirectly by affecting the functioning of financial market in ways that alter investment in incentives. In the model growth only occurs if society invests and maintains a sufficient amount of capital in firms that argument human capital and technology in process of production. The more resource's allocated to firms; the more rapid will be economic growth. An externality firm's production implies that the economy grows faster when investors do not prematurely liquidity firm capital to satisfy short term liquidity needs. In the model, without stock markets, liquidity shocks force some agents to remove capital from firms prematurely and receive a very lone liquidation

return. So, stock markets accelerate growth firm productivity and indirectly reducing liquidity risk which encourages firm investment.

Levine and Zervos(1996), empirically evaluate the relationship between stock market development and long run growth .they fund a strong correlation between overall stock market development and long run economy growth. after controlling for the initial level of GDP per capital ,initial investment inhuman capital ,political instability and measures of monetary ,fiscal and exchange rate policy ,stock market development remain positively and significantly correlated with long run economic growths . However there study was based on cross country growth regression that suffer from measurement .statically and conceptual problem. in term of measurement problem ,country offices sometime define collect and measure variable inconsistently across countries .in term of statistical problem ,regression analysis assumes that the observations are drawn from the same population ; vastly different countries appear in cross-country regression . these measurement statically and conceptual problem ,however should not detract from the benefit that can accrue from cross-country comparisons .so, there study suggest that stock market development is positively associated with economic growth .Moreover ,the instrumental variable procedures indicate a strong connection between the predetermined component of stock market development and long run growth.

Demirgur –Kunt and Levine (1996) have also studied the relationship stock market, corporate finance and economic growth. There research focused on four issues. First it compared liquidity, concentration, volatility, institution development and international integration across forty –four industrial and developing countries from 1976 to 1993. Second the investigated and the relationship between stock market and financial intermediaries. Third, their research analyzed the relationship between stock market and economic growth. And, fourth, the research studied the ties between stock market developments and financing choices of firm's .they found that well-developed stock market can help align the interests of owners and managers and thereby spur efficient resource allocation and economic growth. They also found that stock market and other financial institution are generally complements, they grow simultaneously.

In this next paper Demirgue-Kunt and Levine studied about stock market development and financial intermediates in some detail there article collected and summarize information on a wide assortment of indicator of stock market and financial intermediary development. To describe different characteristics of equity market development, they use major market size, liquidity, integration with world market, volatility, concentration and feature of the regulatory system. to describe the development and structure of financial intermediaries, they use measures of overall size of the financial intermediary sector, the allocation of credit, the spread interest rates and size of the particular type of financial intermediaries, such as bank, insurance companies and pension fund /later on they firm various type of indicator and on the basis of such indicator categorizer the country market as most develop, most underdeveloped, highly develop, underdeveloped and emerging markets.

King and Levine (1993a, 1992b, and 1883c) studied 80 countries over the period 1960-1989 systematically, controlling for other factor affecting long run growth, examine the capital accumulation and productivity growth channel, construct additional measures of the level of financial development and analyze whether the level of financial development predicts long run economy growth, capital accumulation and productivity growth. they use for measures of the level of financial development, the first measures, depth, measure the size of financial intermediaries and equal liquids liabilities of financial system(currency plus demand and interest bearing liabilities of bank and non bank financial intermediaries)divided by GDP. The second measures, bank, measures the degree to which the center bank versus commercial banks are allocating the credit. The bank equals the rate of bank credit divided by bank credit plus central bank domestic's assets. the third measures, private, equals the ratio of credit allocated to the private, enterprises to total domestics credit(excluding credit to banks),the forth measures ,privy equals credit to private enterprises GDP king and Levine (1993b,1993c) then access the strength of empirical relationship between each of these four indicator of the 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 indicator are as

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follows:1)the average rate pf real per capita GDPgrowth,2)the average rate of growth in the capital stock per person and 3)total productivity growth which is a sole 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)" represents the value of ith indicator of financial development and "G(i)"represents the value the "i^{th}" the growth indicator and "X" represents a matrix of conditioning information to control for other factor 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.

'There is a strong positive relationship between each of the four financial development indicators ,"F(i)"and the three growth indicators "G(i)"long run real per growth rate ,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 improvement over the next 30 years even after controlling for income, education, political stability and measures of monetary, trade and fiscal policy.

Similarly, Devereux and W. Smith (1994) and Obstfeld (1994) show that greater international risk sharing through internationally integrated stock markets induces a portfolio shift from safe, low-return investments to high return investments, thereby accelerating productivity growth. These liquidity and risk models, however, also imply that greater liquidity and international capital market integration ambiguously affect saving rates. In fact, higher returns and better risk sharing may induce saving rates to fall enough such that overall growth slows with more liquid and internationally integrated financial markets. Moreover, theoretical debate exists about whether greater stock market liquidity actually encourages a shift to higher-return projects that stimulate productivity growth. Since more liquidity makes it easier to sell shares, some argue that more liquidity reduces the incentives of shareholders to undertake the costly task of monitoring managers (Shleifer and Vishny, 1986; Bhide, 1993). In turn, weaker corporate governance impedes effective resource allocation and slows productivity growth. Thus,

theoretical debate persists over the links between economic growth and the functioning of stock markets.'

The results have implications for a variety of theoretical models. The strong, positive connections between stock market liquidity and faster rates of growth, productivity improvements, and capital accumulation confirm Levine's (1991) and Bencivenga et al.'s (1995) theoretic^ predictions. We do not find any support, however, for theories that more liquid or more internationally integrated capital markets negatively affect saving and growth rates or that greater liquidity retards productivity growth.

David (1992) show that past researchers have been unable to identify empirical links between growth and macroeconomic indicators that are robust to small changes in the conditioning information set,   Demirgug-Kunt and Maksimovic (1996) show that firms in countries with better-functioning banks and equity markets grow faster than predicted by individual firm characteristics, and Rajan and Zingales (1998) show that industries that rely more on external finance prosper more in countries with better developed financial markets. Atje and Jovanovic (1993) present a cross-country study of stock markets and economic growth. They find a significant correlation between growth over the period 1980-1988 and the value of stock market trading divided by GDP for 40 countries

Guglielmo ,Honells and Soliman (2002) investigated the important role that well functioning stock market can play in promoting long run economic growth ,they included seven countries in their study . With the use of an appropriate econometric technique they first performed causality test in a bi-varite context, looking for casual links between the commonly used proxies for finance development (domestic credit and prevalence of bank deposits) and economic growth. On the basis they found little evidence of causality .then they tested of causality in a bi-variate contest in order to model the dynamic interactions between financial development stock market development and economic growth. Inclusion of the stock market changed the results dramatically between financial development, and economic growth was found, in five cases out of seven but the measure

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of financial development which produce the result in stock market development .It was clearly found in the bi-variate system inference was affected by the omission of a stock market variable .in that case the causality was found only in two cases. They thus, concluded that the development of stock markets is necessary to achieve fully efficiency of capital allocation if the government id to liberalize the financial system.

Newton (1997) also studied the relationship between stock market and the economy .he found that stock market leads the economy by one to two quarters. Rising stock market appear to result in increased sales through increased consumer borrowing. When sales raise the ratio of business inventories to sales declines .change in stock market found to be affecting the corporate capital expenditure through new stock issuance .therefore smaller companies benefit from increased stock price by more easily raising fund. He also found that the stock market also caused changes in federal tax revenues through the capital gain taxes which allow the government to change spending, borrowing and tax rates.

By extending king and Levine (1993a) study Levine and Zervos (1998) have conducted another significant research study .this particular study examines the empirical relationship between various measures of stock market development, banking development and long run economic growth. They found that, even after controlling for many factors associated with growth, stock market liquidity and banking development are both positively and robustly correlated with contemporaneous and future rates of economic growth, capital accumulation and productivity growth. Furthermore , since measures of stock market liquidity and bank development both enter the growth regression significantly ,the finding suggest that bank   provide different financial service from those provided by stock market. They, therefore, concluded that bank and stock markets should be developed simultaneously.

 Levine (1997) studied about financial development and economic growth. A growing body of empirical analyses, including firm-level studies, industry-level studies, individual

country-studies, and broad cross country comparisons, demonstrate a strong positive link between the functioning of the financial system and long-run economic growth. Theory and evidence make it difficult to conclude that the financial system merely- and automatically-responds to industrialization and economic activity, or that financial development is an inconsequential addendum to the process of economic growth. He believes that we will not have a sufficient understanding of long-run economic growth until we understand the evolution and functioning of financial systems. This conclusion about financial development and long- run growth has an important corollary: although financial panics and recessions are critical issues, the finance-growth link goes beyond the relationship between finance and shorter-term fluctuations. Undoubtedly, the financial system is shaped by non financial developments. Changes in telecommunications, computers, non financial sector policies, institutions, and economic growth itself influence the quality of financial services and the structure of the financial system. Technological improvements lower transaction costs and affect financial arrangements (Merton 1992).

Arestis, Demetriades, Luintel (2001) research on financial development and economic growth: the role of stock market .they have taken 5 developed economic, Germany, the United States, Japan, the United Kingdom and France

This paper utilized the time series method to reexamine the relationship between economic growth and stock market development, while controlling for the effects of the commercial banking sector and stock market volatility. They show that stock market may be able to contribute to long term output growth; there influence is, at best, a small fraction of that of the banking system. specifically ,both stock market and banks seem to have made important contributions to output growth in France, Germany and Japan ,even though the latter's contribution has ranged from about one seventh to around one third of the latter .finally ,the link between financial development and growth in the united kingdom and the United states was found to be statistically week and ,if anything, to run from growth to financial development .thus their finding are consistent with the view that

bank based financial systems may be more able to promote long term growth than capital market based ones.

2.3 Review of Major Nepalese studies

In the contest of Nepal this types of research has not done before, but study little bit related in this topic and important while studying about market and economic growth

Wagle (2002) studies the development of stock markets in terms of its size (market capitalization), annual turn over and also studies about the ratio of market capitalization to GDP, and annual turnover GDP. But the study has been fairly descriptive regarding the factual information. Pant (2000) studies the state of the Nepalese stock market with principal emphasis on problems and further prospects of Nepalese stock market. However no signification part of the study has been contributed to the role of the stock market in the economy.

Shrestha (2002) studies about the Nepalese stock market efficiency, particularly the efficiency of the banking sector of the market. She concluded that NEPSE is operating its weak form of efficiency. This result shows that NEPSE is in its early stage of development to become a well functioning stock market. Yadav (2002), Poudyal (1988) Rajbanshi (1987) and Sharma (1996) have focused their study on the trends of saving, investment and capital formation in Nepal .but very little has been said or done about the Nepalese security markets .Shrestha how ever has observed that securities transaction in Nepal has increased significantly for last few year, this marks the positive sign for the developing and growth of capital market.

Mahat (1981) examines the state of capital markets and the development of financial institutions in the country. The growth of the financial institution has been examined both in term of the growth in their assets. Their role in the national economy has been evaluated in terms of some indicators such as total financial institutions issues ratio assets to GDP ratio etc. Bhatta (1997) studied the dynamic of stock market in Nepal. His study mainly focused on the behavior of stock price in Nepalese stock market. Pant (2000)

studied the state of the Nepalese stock market with principal emphasis on problems and further prospects of Nepalese stock market. However no significant part of the study has contributed to the role of the stock market in the economy.

2.4 Conclusion

The review of aforementioned works makes it clear that the development of stock market, bank are the necessary factors for modern day economy. Therefore, it is obvious that stock market and bank well-functioning for the sustainable economy growth. Firm needs 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 the present day economies .because of its primary stage of growth and stabilization, the contribution of Nepalese stock market to the economy is yet to be recognized. though ,there has been a lot of studies explaining on the relationship between stock market and economic growth in order contexts, such a study is still due to come in our context. This study still due to come our context .This study aims to fill the gap by assessing the contribution of NEPSE and primary stock market to the overall economic growth of the economy.

CHAPTER THREE
RESEARCH METHODOLOGY

This third chapter of this study deals with research methodology that aims at answering the research questions raised and accomplishing the research objectives set in the introduction. This chapter is further subdivided into five different subsections. The first one deals with the research design, which is followed by an explanation of nature and sources of data. Selection of sample objects and selection of variables under investigation are presented in third and fourth subsection respectively. At the last in fifth section some methodological limitations of this study are outlined.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology is a systematic method of finding solution to a problem i.e. systematic collection, recording, analysis, interpretation and reporting of information about various facts of a phenomenon under study.   In this study research Methodology describe the methods and processes applied in the entire aspect of the study. This chapter describes research design, population, sampling procedures, nature and sources of data, data collection technique and analysis of data, what we are doing at present.

Both descriptive and analytical types of research are employed to fulfill the objective of research work.

3.1   Research design

Research design is the overall plan for the activities going to be undertaken during the course of research. It is an integrated system that guides the researcher in formulating implementing and controlling the study. "Research design is a plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control variances." (Kothari, 1991: 24). The present study is basically related with the stock market bank and economic growth in Nepal. The study will explore the collection of data, tabulation and compilation of data, computation of complied data and financial parameters, findings, conclusion and recommendations. The research design is an organized approach and not a collection of loose unrelated parts. It is an integrated system that guides the researcher in formulating, implementing, and controlling the study. (Wolff and Pant, 2005: 92).

To analyze the past phenomena historical research design has been used. Similarly to access the opinion, behaviors or characteristics of a given population and to describe the situation and events occurring at present, descriptive research design were used Descriptive research is a fact- finding operation that describes the existing

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phenomena. Descriptive studies simply portray an accurate profile of organizations, events or situation. Thus the research design adopted in the study is of descriptive type. Correlation research design is used to ascertain the extent to which two variable are related. The researcher's main interest is to determine whether two or more variable covary, and if so, to establish the direction, magnitude and form of observed relationships. The study also used different variables. Therefore the research design adopted is correlation research design. Causal comparative research investigates the possible causes affecting a particular situation by observing existing consequences and searching for the possible factor leading to these results. (Wolff and Pant, 2005: 107). The study thus also employed causal comparative research design.

3.2   Nature and sources of data

This study is based on primary and secondary data. The necessary data and information have been collected from various sources covering a period of years i.e. from 1993/1994 to2007/2008. The required data are collected on the variables such as per capital GDP, Gross domestic savings, gross fixed capital formation, private savings, market capitalization, turnover, value traded and primary issue approval. The data on the variables such as productivity growth and stock market volatility has been derived by using appropriate relationship. The major sources of data are the followings

⟩ The journal of Banking and Finance

⟩ American economic review

⟩ Journal of finance

⟩ European economic review

⟩ World bank economic review

⟩ The journal of Business

⟩ The Nepalese Management Review

⟩ Website of NEPSE Ltd: http://www.nepalstock.com

⟩ Website of SEBON/N: http://www.sebonp.com

- ʃ Website of Nepal Rastra bank www ://nrb.org.np

- ʃ Dissertations of Master's Degree related to the subject.

- ʃ Economic Survey (2007/2008)

- ʃ Annual Report of SEBO/N from FY 2000/01 to FY 2004/05

- ʃ Annual reports of the selected enterprises.

- ʃ The Journal of Financial Economic

3.3 Method of analysis

Analysis is the systematic and careful examination of available facts so that certain conclusions can be drawn and inferences be made .the major part of this study os concerned with the testing of association of stock market, bank with economic growth .various related variables have been used for this purpose . The statistical technique of regression analysis has been used for the analysis. The empirical results have been estimated in the study by using annual data for the 1993/1994 to 2007/2008

3.3.1Trend analysis

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

- ʃ To find the relationship between primary market activities and secondary market development, the amount of equity issuance approved in the primary market is compared with market capitalization, turnover and value trade. It is done to find some kind of relationship between primary and secondary markets.

  To determine the association between the saving mobilization and growth the trends of primary markets amount of equity issuance is compared with the factors of growth such as saving, capital stock growth and productivity growth. This would clarify that even though in the small scale; equity issued by firms has a bearing on saving investment and productivity.

3.3.2 Correlation Analysis

Correlation between each of the following variables will be computed to determine any kind of association. The variables are: output growth per capital, capital stock growth, productive growth, saving, capital capitalization, value trade turnover, market volatility and equity issued in primary market.

3.3.3 Econometric Models

The main objective of the study is to find the role of stock market development in the overall economic growth. The study, hence, attempts to assess the role of stock market in the economy. Various models are used to determine the association between stock market, bank and economic growth. The variables that will be used in the models are : per capital real gross domestic product(GDP), private savings(S), Fixed capital stock growth(CF), productivity growth(PG), Investment(I), capital formation(CF), Market Capitalization(MC) , Value of trade shares(VT), Turnover(TO) and volatility of stock returns(V).

Theoretical statement of the model is that real rate of GDP per capital, Capital Stock growth, Productivity Growth, Savings may be regarded as subject to the constraints on Bank credit and Turnover As an approximation of the function may be written as:

Regression Equations:

Log GDP=log F (BC+ TO)   … (1)

Log CS=log F (BC+ TO)   … (2)

Log PG=log F (BC+ TO)   … (3)

Log S=log (BC+ TO)   … (4)

Where,

Gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) Saving(S), Bank Credit (BC), Turnover (TO)

Regression Equations:

Log GDP=a+b1 log BC+b2log TO   … (5)

Log CS=a+b1 log BC+b2log TO   … (6)

Log PG=a+b1 log BC+b2log TO   … (7)

Log S=a+b1 log BC+b2log TO   …   (8)

The theoretical relationship of Bank Credit and Value Trade with other macroeconomic variables may be specified as under:

Log GDP=log F (BC+ VT)   …   (9)

 Log CS=log F (BC+VT)   …   (10)

Log PG=log F (BC+ VT)   …   (11)

Log S =   log F   (BC+ VT) …   (12)

Regression of gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) Value Trade(VT)

Regression Equations:

 Log GDP=a+b1log BC+b2log VT   … (13)

 Log CS=a+b1log BC+b2log VT   …   (14)

Log PG=a+b1log BC+b2log VT   …   (15)

Log S=a+b1log BC+b2log VT   …   (16)

Similarly the theoretical relation of Bank Credit and Market Capitalization with other Variables may be specified as under,

Regression Equations:

 Log GDP=log F (BC +MC)   … (17)

 Log CS=log F (BC+ MC   ) …   (18)

Log PG=log F (BC+ MC)   …   (19)

Log S=log F (BC+ MC)   …   (20)

Regression of Gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) and Market Capitalization (MC)

Regression Equations:

Log GDP=a+b1log BC+b2log MC   … (21)

Log CS=a+b1log BC+b2log MC   …   (22)

Log PG=a+b1log BC+b2log MC   …   (23)

Log S=a+b1log BC+b2log MC   …   (24)

Finally the theoretical relations of Bank Credit and Volatility with other macro economic variables are as follows;

Log GDP=log F (BC+V) …   (25)

Log CS=log F (BC+V   ) …   (26)

Log PG=log F (BC+ V   )   …   (27)

Log S=log (BC+ V)   …   (28)

Regression of gross Domestic Product (GDP), Capital stock growth (CS), Productivity Growth (PG) and saving(s) on Bank credit (BC) and Volatility(V)

Regression Equations:

Log GDP=a+b1log BC+b2log V   … (29)

Log CS=a+b1log BC+b2log V   … (30)

Log PG=a+b1log BC+b2log V   … (31)

Log S=a+b1log BC+b2log V   …   (32)

3.3.4 Other Statistical Tools Used:

In the process of estimating above mentioned models various statistical tools have been used, e.g. coefficient correlation (r), coefficient of multiple determinations (R^2), Standard Error of Estimate (SEE), student's t-statistics and f-statistics, sample average

mean, weighted mean, median etc. The statistical parameters are calculated with the help of computer through SPSS, software for the models prescribed above.

Coefficient of Correlation (r)

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another (Levin and Rubin: 1995, 613). The coefficient of correlation measures the direction of relationship between two sets of figures. It is the square root of the coefficient of determination. Correlation can either be positive or it can be negative. If both variables are changing in the same direction, then correlation is said to be positive but when the variations in the two variables take place in opposite direction, the correlation is termed as negative. In this study, coefficient of correlation is calculated between stock prices and market equity, stock price and price earning ratio, stock price and market value to book value, stock price and dividend per share to market price per share, stock price and dividend per share to earning per share.

Coefficient of multiple Determinations (R^2)

The coefficient of multiple determinations is a measure of the degree (extent or strength) of linear association of correlation between two variables, one of which happens to be dependent and other being independent variable. In other hank, R^2 measures the percentage total variation in independent variable explained by explanatory variables. The coefficient of multiple determinations can have the value ranging from zero to one (i.e. 0 R 1). If $R = 80$, the independent variables used in regression model, explain 80 percent of total variation in the independent variable. A value of one can occur if only the unexplained variations is zero, which simply means that all the data points out in the scatter diagram fall exactly on the regression line.

Regression constant (a)

It is also known that the numerical constant which determines the distance of the fitted line directly above or below the origin (i.e. y-intercept). The value of the constant, which is intercept of the model, indicates the average level of dependent variable when independent variable (s) is (are) zero. In other words, it is better to understand that a

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(constant) indicates the mean or average affect of dependent variable if all the variables omitted from the model .Alone 'a' has no economic significance.

Regression Coefficient (b$_1$ b$_2$, b$_3$…)

The regression coefficient of each dependent variable indicates the marginal relationship between that variable and value of dependent variable, holding constant effect of all other independent variables in the regression model. In other words, the coefficients describe how changes in independent variables affect the values of dependent variable's estimate. It is also known that the numerical constant which determines the change in dependent variable per unit change in independents variables (i.e. slope of line).

Standard Error of Estimate (SEE)

With the help of regression equations perfect prediction is practically impossible. Standard error of an estimate is a measure of reliability of the estimating equation, indicating the variability of the observed values differs from their predicted values on the regression time. The smaller the value of SEE, the close will be the dots to the regression line and better the estimates based on the equation for this line. If SEE is zero, then there is no variation about the line and the correlation will be perfect. Thus, with the help of SEE, it is possible to ascertain how good and representative the regression line is as a description of the average relationship between two series.

Student's t-statistics:

To test the assumptions of the study 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 situation a sample is termed as small if n   30. It should be clearly understood that exact sample techniques (tests) can be used, even for large samples but large sample theory can't be used for small samples (Gupta: 1995, 1208). For applying t-distribution, t-values are calculated first and compared with critical values at a certain level of significance for given degree of freedom. If the computed value of 't' exceeds the table value (say $t_{0.005}$), it is known that

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the difference is significant at 5 percent level of significance but if t-values are less than corresponding critical values of the 't' distribution, the difference is not traded as significant.

F-Test

The Fisher's F-distribution is defined as a distribution of the ration of two independent chi-square variables each divided by the corresponding degree of freedom. It is clear that F-distribution has a single mode. Not that the shape of F-distribution depends on the value of degrees freedom and the value of F lies between 0 to   (zero to infinity). The F-test sometimes called variance ration test, is based on F-distribution. In other to test goodness of fit of the regression models, F-test is used.

Sample Arithmetic Mean

Sample arithmetic means is the sum of the values of all the elements in the sample (X) and divide by the number of elements in the sample (n).

Weighted Mean

Weighted mean is an average that takes into account how important each value is to the overall total. In this study, weighted mean is calculated to analyze rank wise number of responses to field survey.

Median

The median is a single value that measures the central item in the data. Half the items lie above the median, half below it. If the data set contains an odd number of items, the middle item of the array is the median. In this study, median values of responses for each statement of observations on corporate dividend practices have been computed.

3.4 Limitations of the Study

The study is based on the period of only nine years i.e. since 1993/94 to .... so the study period may have been regarded as a shorter and inference should have to be made with caution.

) The study is based on yearly data only, hence making it a study of nine observations only. Had the database been efficient enough and monthly or quarterly data on stock market and growth been available the result might have been far better and reliable than what is expected from analysis.

) Regression results are based on pooled cross-section analysis of limited observations years.

) The stock market of the firm is in its 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.

) The assumption that the strong and efficient stock market enhance productivity and efficient allocate capital 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 has been forced to use annual data which are available in profit and loss accounts and balance sheet as monthly or quarterly data could not be obtained. The use of annual data in this study is thus likely to make the conclusions somewhat less valid and less reliable.

) The findings and conclusions of the study are accurate to that extent what the data and information provided by the companies and respondents are accurate.

⟩ The limited data, limited observations, lack of key figures in certain year, and lack of recent information etc. mar the accuracy and reliability of the data and hence the conclusions.

3.5 Definition of key terms

The following terms may have different meaning in different circumstance and under different conditions, but they bear the meaning as they are defined in this study.

⟩ *Saving*: It means excess of income over expenditure. Firms saving mean the retained earning left after the distribution of dividend.

⟩ Investment: in national income analysis it is the value of that part of economy output for any time period that takes the form new structures, new producers, durable equipment, and change in inventories. But the growth in total assets of individual's enterprise is taken as investment for the enterprise level.

⟩ Productivity growth: that part of the gross domestic product or national output which is not the result of the increase in the fixed capital stock growth and the growth in the inventories.

⟩ Fixed capital stock growth: the growth in the economic s stock of fixed capital in the form of structures, equipment and productive factories, building, etc .but it does not include the change in inventory as in investment. So it is net of inventories'

⟩ Market capitalization: it equals the value of listed domestic shares on domestic exchanges. So it is the product of number of outstanding shares in the exchanges in the market price of those shares

⟩ Value trade: It equals the value of the shares traded in the domestic exchange.

∫ <u>Turnover:</u> it equals the value of the trades of domestics shares on domestic exchanges divided by the value of listed domestic shares.

∫ <u>Volatility:</u> It measures the movement of the stock market index during the certain period around the mean value. Specifically, it is the variance of the market index a certain period.

∫ <u>Bank credit</u>: It measures the value of lone made by commercial banks and other deposit taking banks to the private sector.

CHAPTER IV
PRESENTATION AND ANALYSIS OF DATA

The chapter is divided into three sections. The first section is related to the trend analysis of various indicators of stock market, bank and economic development. The second section of this chapter attempts to find the association between the indicators of economic growth, bank and stock market development with the help of correlation matrix. And, the last and third part examines the casual relationship of economic growth, bank and stock market development indicators.

The relationship between stock markets and growth may also be influenced by the link between stock markets and financial intermediary, which is not unambiguous. Stock markets and banks are clearly substitute sources for corporate finance since when a firm issues new equity its borrowing needs from the banking system decline. Assuming that banks and financial intermediaries are in a better position than stock markets to address agency problem (for example, diamond 1984) ,(stigliz 1985),it is then possible that stock market development may hamper economic growth if it happens at the expense of banking system development.

David (1992) show that past researchers have been unable to identify empirical links between growth and macroeconomic indicators that are robust to small changes in the conditioning information set, Demirgug-Kunt and Maksimovic (1996) show that firms in countries with better-functioning banks and equity markets grow faster than predicted by individual firm characteristics, and Rajan and Zingales (1998) show that industries that rely more on external finance prosper more in countries with better developed financial markets. Atje and Jovanovic (1993) present a cross-country study of stock markets and conomic growth. They find a significant correlation between growth over the period 1980-1988 and the value of stock market trading divided by GDP for 40 countries Securities market plays a pivotal role in mobilizing savings and channeling them in Productive purposes and many more like providing liquidity on securities so that one can Minimize the risk and maximize the returns. The secondary market not only influence the firms other activities but also their position in the primary equity market. A firm is need

of capital, unable to find it through other means, ultimately turns towards the equity investors in the primary market, but the proposition is that only that firm that that is performing strongly in the secondary market could be able to raise the equity investment through the primary market. Their share prices and its movements are used as the signal by the investors for evaluating its future prospects. Likewise bank credit to the private sector is also important factor for economic growth .to examine the direction of the movement of secondary market indicators as well as size of the primary market, simple line trend analysis is performed. Later in the section, the size of the primary market and bank credit is compared with the various indicators if economic growth

4.1 Analysis of Secondary Data

This section is further divided into three sub-section one deal with descriptive analysis. Summary statistics of dataset is presented in sub-section two. Sub-section three examines the casual relationship of economic growth, bank, and stock market development.

Descriptive statistics

In this section the analysis of simple line trend on the basis of log values because these process showed the direction of change more clearly. To examine the direction of movement of secondary market indicators as well as size of the primary market, simple line trend analysis is performed. Later in the section, the size of the primary market, bank credit is compared with the various indicators of economic growth.

Table 4.1 shows logarithm value of stock market development, bank development and economic growth variables over 1993-2007.While comparing stock market development variables such as market capitalization (MC), primary market (PM) and value trade (VT), the values of MC are higher than PM but values of VT are lower than PM. During the study period, PM shows steadily increasing trend. This indicates shows more firms are listed in the

Table 4.1
Logarithms values of the variables MC, PM, VT, TO, V, S, I, AND GDP

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Year/Particulars	MC	PM	VT	TO	V	S	I	GDP
1993/94	9.5376	5.4289	-1.9369	1.1569	4.2322	10.6891	11.1130	12.6090
1994/95	9.4699	5.1588	-1.0733	2.0956	2.9365	10.7294	11.2607	12.6391
1995/96	9.4169	5.6827	-2.7427	0.5596	2.4123	10.7120	11.3929	12.6903
1996/97	9.4492	5.8057	-2.1037	1.1878	2.3878	10.7711	11.3673	12.7400
1997/98	9.5672	5.9118	-2.8545	0.3436	1.9430	10.7886	11.3783	12.7710
1998/99	10.0682	5.1818	-0.9046	1.8532	2.7869	10.8192	11.2278	12.8133
1999/00	10.6718	6.2861	-1.2137	0.9858	3.9122	10.9868	11.4584	12.8725
2000/01	10.7440	6.4525	-0.6331	1.6214	4.0892	10.9177	11.4993	12.9980
2001/02	10.4546	6.8473	-1.0541	1.4907	3.6535	10.5094	11.3481	12.9992
2002/03	10.4699	6.3217	-2.0769	0.4910	2.0541	10.5570	11.4109	13.0379
2003/04	10.6316	6.5896	-0.8079	1.6448	1.7579	13.1665	11.5716	13.0836
2004/05	8.7221	7.1905	-0.0991	1.9947	3.1892	10.8010	11.6621	13.1178
2005/06	11.4805	7.3736	-0.3992	1.2726	3.5656	10.6337	11.7055	13.1509
2006/07	12.1351	7.4058	0.4526	1.4996	4.4500	10.7213	11.7202	13.1838
2007/08	12.8111	8.9513	1.4047	1.8294	4.6496	10.9549	11.9171	13.2359

stock market. The trend line of MC also shows increasing over the period. This indicates the number of investor increases with increment of listed companies. Information about the stock

market also available readily. VT shows fluctuating trend. All the values are negative over 1993-2006 and after 2006 it increases positively. It can be seen in the figure 4.1.

Figure 4.1 compares the Amount of equity issued in primary market with Market Capitalization and value trade though the logarithm values, Value trade (VT) is negative, but in absolute terms it is positive and here only the movement of variable is studied comparing MC, VT, PM it is found from the figure 4.1 but it is positive in 2006/07 and2007/08. Through1993/94 there were less equity issued in the market, otherwise the trend of primary market development are encouraging shows that more firm are listed in the market. PM and

Figure 4.1: Presentation of log Value of Market Capitalization (MC), Value Trade (VT), Amount Equity Issue In Primary Market (PM) Over The Last fifteen Fiscal Year.
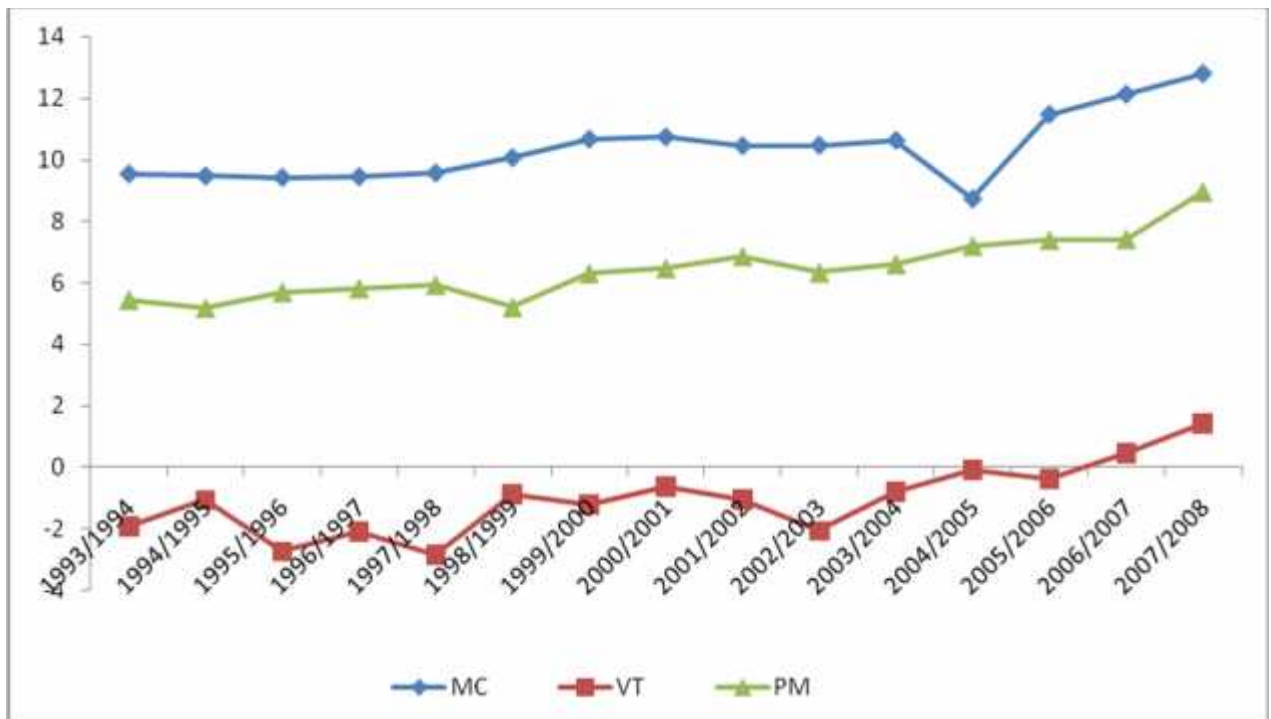
MC are increasing trend which is obvious, since it is assumed that as the time increases with it the activities in the stock market also increase. More and more firms are listed in the market; more investors participate in investing activities. More information becomes available in the market and so on. These activities have positive impact on MC.VT and PM.

In figure 4.2, the purpose of uniformity in the comparison of all the variable i.e. Turnover (TO), volatility (V), and amount of equity issued and approved in the primary market (PM) are transformed into logarithms values. The figure shows that primary market is steadily increasing .though in the year 1998/1999 were relatively less equity issues in the market, otherwise the trend of primary market development are encouraging .while turning to the

Figure 4.2: Presentation Of Log Value Of Amount of Equity Issue In Primary Market (PM), Volatility (V) And Turnover (TO) The Last Fifteen Fiscal Year
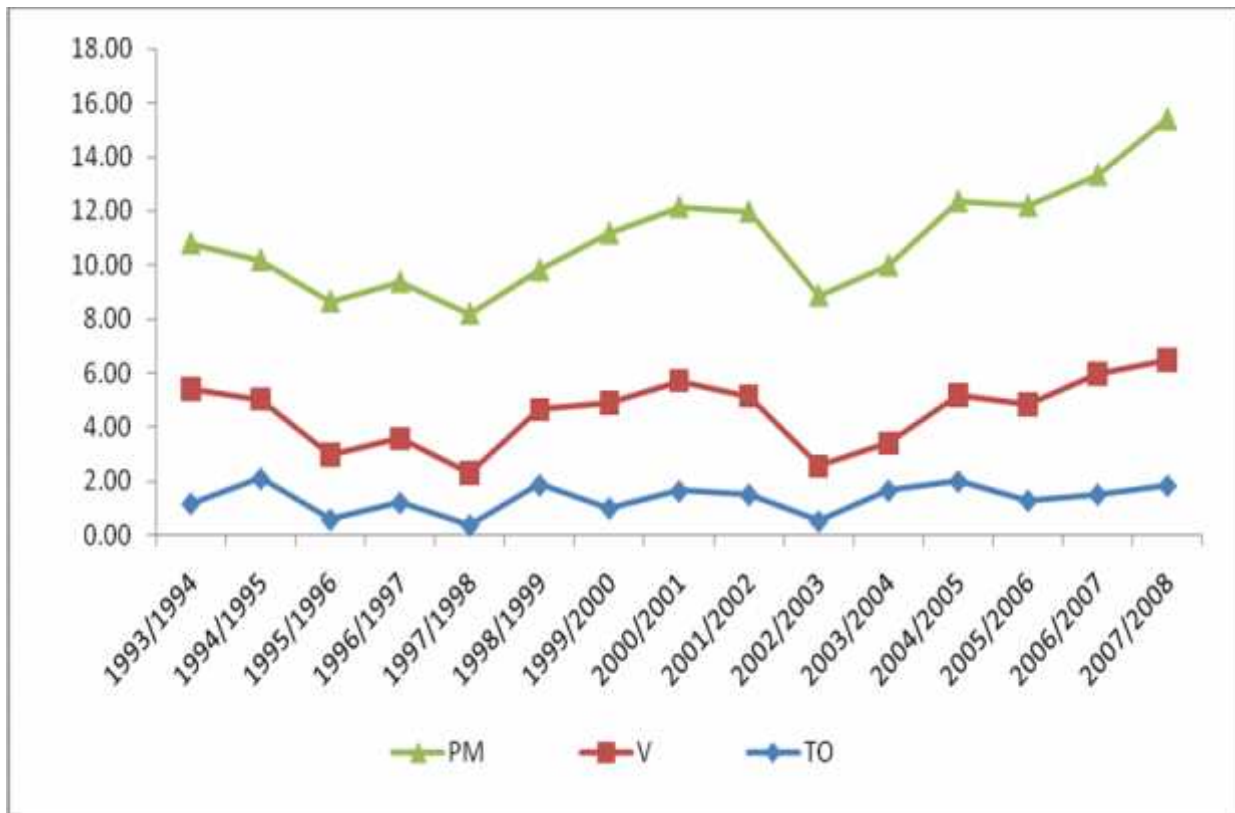
volatility it was highest in the 1993/1994 and 2007/2008 and decreased dramatically up to 1997/1998 and2003/2004 otherwise it is gradually increasing. Turnover has been fluctuating up and down with a zic-zac pattern. Though there cannot be any tentative relationship of PM to TO and V is hovering around some figure for quite some time and TO is beginning to increase so it has presented a good sign. Hence the stock market is developing slowly.

Figure 4.3 the comparison of primary market size made with macroeconomic variables such as Gross Domestic Product (GDP), Saving(S), and Investment present a positive picture. Saving and Investment are moving as is the size of the primary market (PM).It can be say that size of the primary market might have the positive impact on saving and investment .As the firm rise capital through primary market operation, they utilize it as the capital which is the main cause to have positive impact on investment.

Figure 4.3: Presentation Of Log Value Of Saving(S), Investment(I), Amount Of Equity Issue In Primary Market(PM)And Gross Domestic Product(GDP)Over The Last fifteen Fiscal Year.
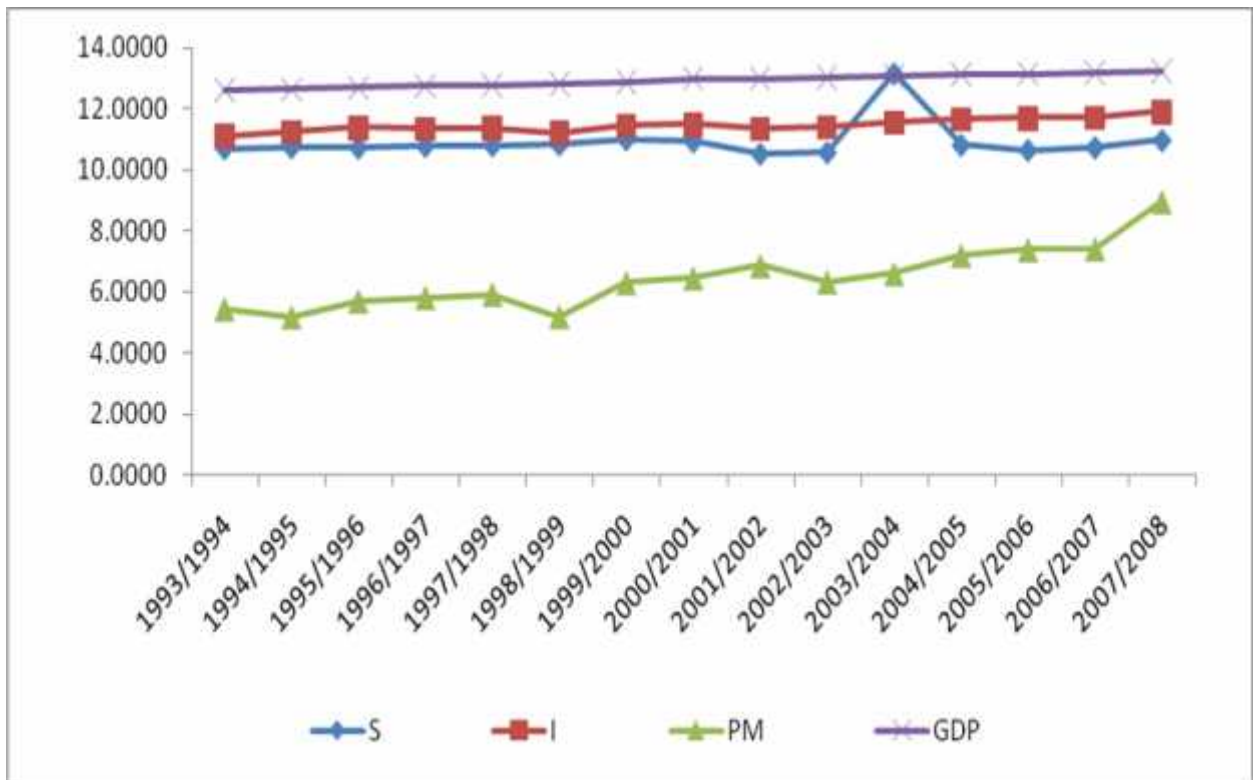
If such investment turns out it should be profitable for the firms for future use, which have a positive impact on saving. There for somehow similar movements of S,I and PM is quite under stable. Comparing PM and GDP it can be said that PM also influences GDP through saving and investment. So there is a link between size of the primary market and the national economic.

Figure4.4; when the comparison of Bank Credit with Macroeconomic variable such as Gross Domestic Product (GDP), Saving (S), and Investment (I) present a positive picture. Saving Investment and GDP are moving straight as the Bank credit. It can be said that

Bank credit may have the positive impact on saving, investment and GDP. If banks raise its credit in the market, the economy activities are increase in the market.

Figure 4.4: Presentation of log value of saving(S), Investment (I), Gross Domestic Product (GDP) And Bank Credit (BC) Over the Last fifteen Fiscal Year
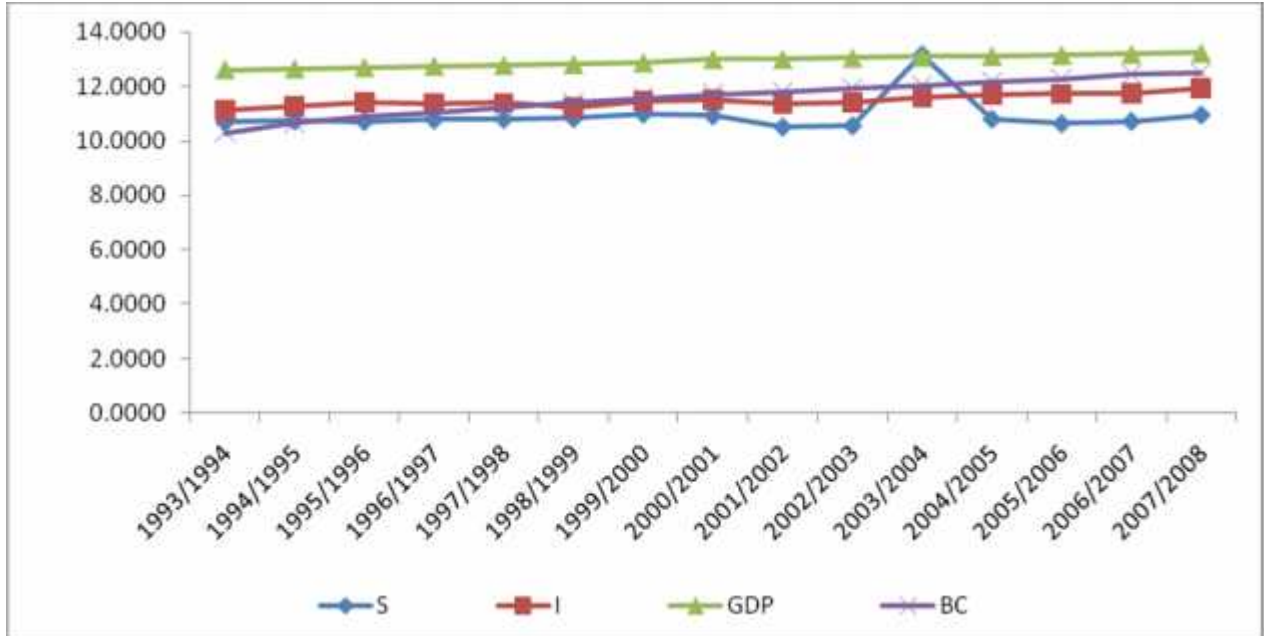
They utilize it as the capital which is the main cause to have positive impact on Investment and saving. If such investment turns out to be profitable, firms can earn retain earning for future use, which has the positive impact on saving. Comparing Bank Credit and GDP it can be said that BC also influences GDP through saving and investment. So there is the link between Bank Credit and the National Economic.

4.2 Correlation Analysis

With the data on each of the 10 variable from the fiscal year 1993/94 to 2007/08, the correlation is computed and the table 4.2 presents the result in the matrix form.

Table 4.2: Correlation Matrix

	GDP	CS	PG	S	I	PM	MC	VT	TO	V	BC
GDP	1	.414	.314	.209	.878**	.890**	.704**	.760**	.284	.315	.985**
CS		1	.198	-.109	.172	.417	.269	.247	.140	.220	.398
PG			1	-.029	.005	.107	.151	-.056	-.274	-.106	.304

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	GDP	CS	PG	S	I	PM	MC	VT	TO	V	BC
S				1	.192	.074	.099	.129	.203	-.347	.197
I					1	.926**	.690**	.747**	.239	.340	.876**
PM						1	.744**	.773**	.239	.498	.855**
MC							1	.696**	.155	.554*	.687**
VT								1	.741**	.655**	.724**
TO									1	.389	.244
V										1	.248
BC											1

Notes: GDP= Gross Domestic product, CS=Capital growth, PG=Productivity Growth, S=Gross Domestic Saving, MC=Market Capitalization, VT=Value Traded, TO=turnover, V=volatility, BC= Bank credit, PM=equity issued and approved in the primary market

The summary statistics presented in table 4.2 are five economic growth indicators, five stock market indicators and one Bank indicators. The following relationship is worth highlighting. Obviously, there is the strong correlation between GDP with PM, CS, I, MC, VT and BC with the coefficients .890 .412, .878, .704,.760, and .985 respectively. The correlation between MC and BC is .687 and MC and MC and I is .690, between MC and VT is .696 between MC and V is .554. Even with other growth indicators .The correlation of MC is worth nothing. with TO the coefficient is .155, with CS is .269,with PG is .151,with saving .099 .but the correlation of MC with the variable GDP, I ,VT, V and BC is meaningful . In the contest of this significant relationship few inferences can be made. First as the MC is the product of market prices of shares multiplied by the outstanding number of shares and if the firm is performing strongly in a bull market as it passes an optimistic message to the general investors who tend to invest more in the market and firms. On other hand, without having any productive and profitable investment project in hand firm cannot be able to such project. Firms need to capitalize their earnings which will increase their saving. The inference is that, as the shares are performing strongly in the market general investment as well as firm's trend. Saving their earning for future investment purpose ultimately increases the investment and capital stock. The MC is highly significant with Bank credit and highly significant with GDP. MC is also positively related with PG.

Another indicator of stock market development is Value Traded (VT) which is equal to the amount of turnover in the domestic stock market divided by GDP. VT has significant correlation with GDP, I, MC, TO, V and BC with coefficient of .760, .747, .696, 741, .655 and .724. And its correlation coefficient with saving (S), CS is .129 and .297 value traded measures the trading relative to the size of the economic. Higher traded value is regarded as the good indicator of stock market that contributes positively toward the GDP. Thus there is significant relationship of value trade to the size of the economic. Higher value traded is regarding as the good indicator of stock market that contributes positively toward the GDP .thus significant relationship of value traded to investment (I) and GDP is meaningful. Higher Value Traded (VT) means that the stock market is performing better with the maximum participation of the investors. If more investors are involved in the market saving and investment are likely to increase and hence the GDP. The value trade is also highly significant to bank credit. Banks credit facilitates the investment opportunities in the market. Therefore the positive significant relation is all but expected.

Another indicator of stock market development is Turnover (TO).Which is equal to the trading value of the stock in domestic share market divided by market capitalization. It measures trading relative to the size of the market. It has positive relationship with GDP, CS, S, I and significant correlations with Value Trade (VT). The more transaction of share in the indicator shows that the more investors are joining the market and resources are mobilized. Resources mobilization is also a factor to growth.

The relation between the size of the primary market (PM) and most of the economic growth indictors and bank credit is positive and significant. This indicates towards the strong relationship between stock market, bank and economic growth. For instance the coefficient of correlation between PM with GDP, CS, S, I, PG and BC are .890, .417, .074, .926, .107and .855. PM is highly significant with GDP, I, and Bank credit which strongly support the performance of secondary market and it is a cause of economic growth and bank credit. And PM is positively and significantly related to the major indicator of the secondary market i.e. market capitalization with the coefficient of .744. On the basis of these relationships, we can say that strongly performing secondary market is also a cause of growing activities in the primary market. The investors of the primary

markets also look for the productivity and profitable investment and invest in the firm's shares that are performing well in the secondary markets.

The relationship between volatility with most of the economic indicators is positive but it is negative with saving. It has positive relationship with GDP, CS and I with the coefficient of .315, .220, .340 but negative relationship with PG and S with the coefficient of -.106 and -.347. Relationship with bank credit is positive. Volatility of stock market as measured by standard deviation of monthly stock returns. To some extent stock market volatility is also a factor to growth.

Banking development is positively and robustly correlated with contemporaneous and future rate of economic growth. Relationship between bank credit with economic growth indicator and stock market indicators and most of the indicators are positive and significant. There is a strong correlation between Bank credit (BC) with GDP,I, MC, and VT with the coefficient .985, .876, .687, .724. Bank provides different financial services to the development of economic and stock market. Thus to understand the relationship between the financial system and long run growth is more important.

4.3 Regression Analysis

Regression of gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) Turnover (TO)

Regression Equations:

Log GDP=a+b1 log BC+b2log TO   … (5)

Log CS=a+b1 log BC+b2log TO   … (6)

Log PG=a+b1 log BC+b2log TO   …   (7)

Log S=a+b1 log BC+b2log TO   …   (8)

Table4.3: Regression of gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) Turnover (TO)

Independent variables				
Independent variable	GDP growth	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit	.308 (1.922*)	.280 (1.390)	.717 (1.349)	.154 (.543)
Turnover	.018 (.922)	.042 (.173)	-.681 (-1.264)	.191 (.573)
R^2	.971	.156	.217	.064
F	203.144*	1.105	1.388	.412

Observations	15	15	15	15

Table 4.3 present the four regressions, the dependent variable is GDP, Productivity Growth, Capital stock growth and saving respectively. The estimated coefficient of bank credit have positive sign in all variables like GDP, CS , PG , S and turnover have also positive sign except in productivity growth

The regression coefficient of bank credit is highly significantly related to the GDP and shows 100% increase in bank credit leads to about 308% increase in GDP. The relationship between bank credit and GDP, the value of R2 for the model (I e regression equation is .971mesning equation about 97%of the variability in GDP is explained by the variables included in the model) and f value of 203.144indicate the goodness of fit is highly satisfactory. And bank credit have also positive coefficient on CS, PG, S respectively , the value of R2 is also 15.6%, 21.7%and 6.4% . Which show there is a highly positive sign between bank credit and GDP?

There is also positive relationship between value turnover with GDP, stock market growth, and saving but negative relationship with productivity growth. the regression coefficient of value trade with GDP, CS, S is insignificant but R2 is 97.1%, 15.6% ,6.4% and F test is 203.144, 1.105, .412 with GDP , CS, S indicate the assumption are correct.

Overall we find that both the initial level of bank development and initial level of stock market liquidity have positive relationship with the future value of GDP growth, capital stock growth, and saving

Regression of gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) Value Trade(VT)

Regression Equations:

Log GDP=a+b1log BC+b2log VT … (13)

Log CS=a+b1log BC+b2log VT … (14)

Log PG=a+b1log BC+b2log VT … (15)

Log S=a+b1log BC+b2log VT … (16)

Table4.4: Regression of gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) Value Trade(VT)

Independent variable	Dependent variable			
	GDP	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit(BC)	0.289	0.329	1.443	0.21
	(13.153*)	-1.163	(1.925**)	-0.531
Value trade(VT)	0.018	-0.032	-0.574	-0.016
	-1.472	(-.199)	(-1.575)	(-.071)
R^2	0.974	0.156	0.273	0.039
F test	224.558*	1.111	1.874	0.244

Source: appendix
Note: (i)   Dependent variable: GDP, capital stock growth (CS), Productivity Growth (PG) and Saving(S)
*   (ii)   *, **, *** indicate the results are significant at 1percent, 5percent and 10 Level of significant*
*   (iii)   Log GDP= log value of gross domestic product; log BC=log value of Bank   Credit; log VT=log value of Value Trade; log CS=log value of Capital stock   Growth; log PG=log value of Productivity growth; log S=log value of saving*

The table 4.4 presents the same type of regressions as in the table 4 except we replace turnover with value trade. Again banking development indicators are significantly and robustly correlated with GDP and productivity growth. The sign of coefficient is positive of bank credit with all dependent variables as expected. Bank credit is significant related to GDP at 1%. The relationship between GDP with bank credit, the value of R2=.971 meaning that 97% of value the variability in GDP is explained by the variables included in the model. And f test of 203.144 also high meaning that the assumption is correct. Likewise bank credit has significant with productivity growth also at 5% and which shows there is positive relationship with bank credit and productive growth.

The coefficient of value trade with GDP is positive but insignificant. The value of R2is .974 and f test is 224.558 which shows that the overall regression model is significant. But relationship of value trade with other dependent variables like capital stock growth, productivity growth and saving has negative sign which indicate there no relationship between capital stock growth, productivity growth and saving .the regression equation presented above show the strong role played by bank credit and week role-played by value trade.

Regression of Gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) and Market Capitalization (MC)

Regression Equations:

Log GDP=a+b1log BC+b2log MC   … (21)

Log CS=a+b1log BC+b2log MC   …   (22)

Log PG=a+b1log BC+b2log MC   …   (23)

Log S=a+b1log BC+b2log MC   …   (24)

Table4.5: Regression of Gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) and Market Capitalization (MC)

Dependent variable				
Independent variable	GDP	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit(BC)	0.3 (13.951*)	0.289 -1.079	0.718 -0.925	0.235 -0.626
Market capitalization(MC)	0.01 -0.77	0 (-.002)	-0.114 (-.288)	-0.039 (-.175)
R^2	0.971	0.153	0.1	0.041
F test	199.055*	1.088	0.554	0.258

Source: appendix

Note: (i)   Dependent variable: GDP, capital stock growth (CS), Productivity Growth (PG) and Saving(S)

      (ii)   *, **, *** indicate the results are significant at 1percent, 5percent and 10 Level of significant

      (iii)   log GDP= log value of gross domestic product; log BC=log value of Bank   Credit; log MC=log value of Market capitalization; log CS=log value of   Credit; log MC=log value of Market capitalization; log CS=log value of   Capital stock Growth (CS); log PG=log value of Productivity growth; log   value of saving(S)

  The above table shows bank credit has positive relationship with dependent variables. The sign of bank credit with all dependent variables are as expected. Bank credit is highly significantly related to GDP. The regression coefficient of Market capitalization with GDP is positive but insignificant, the value of R2 = 97.1%, which show the meaning that about 97%of variability in bank credit. And the value of f= 199.055 also shows that the regression equation is positive

  All the results, however should be viewed very skeptically because all the result are based only on 15 observation (1993/94 to 2007/08).the relation of GDP with MC is that MC is the market value of the listed outstanding share and price element is associated with it .if price of stock is increase, it shows that listed firm on an average have got good

investment project in their hands and expected to be turned into profitable. the investment is to increase and overall optimism in the economy which help GDP growth but the relation of MC with other dependent variables like CS, PV, and S has negative coefficient which indicate there is no relationship between these variable .this may be surprising that Levine (1996) study found that there is opposite association between market capitalization with Capital stock growth and productivity growth.

Regression of gross Domestic Product (GDP), Capital stock growth (CS), Productivity Growth (PG) and saving(s) on Bank credit (BC) and Volatility (V)

Regression Equations:

Log GDP=a+b1log BC+b2log V   … (29)

 Log CS=a+b1log BC+b2log V   … (30)

Log PG=a+b1log BC+b2log V   … (31)

Log S=a+b1log BC+b2log V   …   (32)

Table 4.6: Regression of gross Domestic Product (GDP), Capital stock growth (CS), Productivity Growth (PG) and saving(s) on Bank credit (BC) and Volatility(V)

Independent variable	Dependent variable			
	GDP	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit(BC)	0.305	0.264	0.896	0.291
	(20.307*)	-1.323	-1.459	-0.278
Volatility(V)	0.016	0.066	-0.401	-0.28
	-1.573	-0.483	(-1.065)	(-1.588)
R^2	0.975	0.17	0.185	0.206
F test	229.524*	1.225	1.133	1.553

Source: appendix

Note: (i)   Dependent variable: GDP, capital stock growth (CS), Productivity Growth
*   (PG) and Saving(S)*

*   (ii)   *, **, *** indicate the results are significant at 1percent, 5percent and 10   Level of*
significant

*   (iii)   log GDP= log value of gross domestic product; log BC=log value of Bank*
*   Credit; log V=log value of Volatility; log CS=log value of Capital stock*
*   Growth; log PG=log value of Productivity growth; log S=log value of saving*

The table 4.4 presents the relationship between Bank credit, volatility to the GDP, capital stock growth, productivity growth, and saving. Form table it can be seen that the

relationship of bank credit is statistically significant and consistent with the GDP .the coefficient of .305 is significant below 1%but the relation of BC with CS, PV, S are insignificant but their F test and R^2 shows the regression equation is positive.

The relation of volatility with GDP and CS is insignificant but positive .the relation between BC and GDP, the value R^2 of =.975 which tell that 97% of the variability in GDP is explained by variables included in the model. F test also indicates that assumption under which the model is formed is also good. That is, the goodness of fit is satisfactory. The positive relationship of GDP with volatility of stock is measured by standard deviation of monthly stock return. This may be a bit surprising but is consistent with the Levine (1996) study in which he found that to some extent stock market volatility is also factor to growth.

The relation of volatility with capital stock growth sign of coefficient is positive but not statistically significant. In the relation of CS r2=170 meaning 17%of the variability is explained by the model which is included in the model: F test =1.225 tells us that the assumption might have been wrong .the relationship of volatility with productivity and saving is negative and insignificant. Values of R2=.185 and .206 and F=1.133 and 1.553 shows the facts that the equation is rather insufficient in explaining the movement of PG and S .it can be concluded that the assumptions might have been wrong.

4.4 Analysis of Primary Data

This section includes analysis of primary sources of data collected through the questionnaires to achieve the objectives of the study set in the chapter one. The questionnaire has been distributed to 30 managers, officers, stock brokers and investors. It specially analyes the relationship between various measure of the stock market development, banking development and long run economic growth in Nepal. The major findings of the survey are as follows:

Table 4.7 Stock market and banking development is necessary for the development of the economy.

Stock market and Bank development necessary for economic development	No of Respondents	Percentage
Yes	30	100%

No	0	0
Don't Know	0	0
Total	30	100%

The first and second questions were asked to know about the stock market and banking development is necessary for the economic growth. 100% respondents agreed that stock market and banking development is necessary for the development of the economy.

Table 4.8 Most important sector for the economic development

Important sectors for economic growth	No of Respondents	Percentage
Banking	10	33.33%
Stock Market	0	0
Agriculture	20	66.67%
Total	30	100%

The third question is related to important sectors for economy development i.e. bank, stock market agriculture. Majority of the respondent (66.66%) state that agriculture sector is the most important sector for economic growth in Nepal. 33.33% respondent stated that banking sector is important for economic growth. Where as no one respondent agree with stock market is important sector for economic development in the contest on Nepal.

Table 4.9 Stock market size is linked with economic growth.

Stock market size linked with economic growth	No of Respondents	Percentage
Yes	20	66.66%
No	5	16.67%
Don't Know	5	16.67%
Total	30	100%

The fourth question was asked to know economic growth linked with stock market size. Majority of the respondents (66.66%) agreed with stock market size is linked with economic growth where 16.67 respondents disagreed with stock market size is linked with economic growth and 16.17% of the respondent opined that they have no idea about relation.

Table 4.10 Factors to measure the development of bank

Factors to measure the development of bank	No of Respondents	Percentage
Bank Credit	0	0
Deposit ratio	13	43.33%
Liquidity ratio	7	23.33%
Ratio of non performing assets	10	33.33%
Total	30	100%

Which factors mainly measure the development of bank was asked to the respondents. majority of respondents 43.33% stated that deposit ratio is the main factors for the development of bank likewise 33.33% respondents stated that ratio of non performing assets measure the development of bank and 23.33% respondent agreed liquidity ratio is the factors to measure the development of bank. And no one agreed with bank credit is

Table 4.11 Most important factor affecting economic growth of the country

Factors affecting economic growth o f the country	No of Respondents	Percentage
Development of agriculture sector	12	41%
Development of industrial and tourism sector	8	26.67%
Development of banking sector	6	20%
Development of capital market	4	12.33%
Total	30	100%

Another question is related to the most important factor affecting economic growth of the country and most of the respondent (41%) state that development of agriculture sector affect the economic growth where 26% respondents view that development of industrial and tourism sector affect the economic growth similarly 20% and 12.33% respondent view that banking and capital market affect the economic growth of the country.

Table 4.12 Relation among capital accumulation, productivity growth, and private savings

Relation among capital accumulation, productivity growth and savings	No of Respondents	Percentage
Yes	17	56.67%
No	8	26.67%
Don't Know	55	16.67%

| Total | 30 | 100% |

The ninth question was asked about relationship among capital accumulation, productivity growth and private saving .majority of the respondents 56.67% agreed with this relationship whereas 26.67% respondents disagreed with this relation and 16.67% respondents said they don't know about this relationship.

Table 4.13 Banking development and stock market liquidity both is good predictor of economic growth, capital accumulation and productivity growth.

Banking development and stock market liquidity both good predictor of economic growth capital accumulation and productivity	No of Respondents	Percentage
Yes	20	66.67%
No	4	13.33%
Don't Know	6	20%
Total	30	100%

Banking development and stock market liquidity both is the good predictor of economic growth, capital accumulation and productivity growth, this question was asked to the respondents where majority of the respondents (66.67%)stated in the favor of this relationship where 13.33% stated there is no relation among these variables and 20% respondents were unknown about this relationship.

Analyzing the answer to opened ended question on stock market, bank and economic growth.

The respondents were asked to give their opinion on stock market, bank and economic growth. Out of 30 respondents only 18 give their view for the issue. Some of the respondent thought that stock market is the financial intermediates' for the investors and capital seeker where bank id the financial institution operating with the objective of credit creation and provide different service. Similarly some respondents view that stock market and banking development need for the sustainable economy growth. Firm needs capital to grow and finance their investment. It requires more efficient way of rising funds. For this stock market play the vital role for rising liquidity and productivity. Stock market works as vehicles for raising capital for assets. The more resources allocated to the firm the

more rapid will be economic growth. And also bank based financial system may be more able to promote long term growth than capital market based ones

4.5 Conclusion remarks

This study utilized the time series method to reexamine the relationship between economic growth banks and stock market development. , while controlling for the effects of commercial banking sector and stock market volatility. Both stock market and bank seem to have made important contribution to output growth. Bank based financial systems may be more able promote long term growth than capital based one. The principal objective of the study is to analyzing the well function of stock market, bank to promote long run economic growth. to measure the stock market liquidity ,size ,volatility is robustly correlated with current and future rate of economic growth , capital accumulation , productivity improvement and saving rate and also determine the factor affecting stock market development , banking development and economic growth.

The main task of the bank is to accumulate all scattered capital and investment in the productive sector. If bank investment has been diversified to different sector such as transportation, road, hydropower, communication, hotel and industry, this has helped increasing lot of employment opportunities. When these are directly reaping benefits from banks earnings. They play taxes to the government, who finally collects revenues. Therefore when banks focus on consolidation rather than expansion, it impacts all overall national economy.

Nepalese stock market is gradually increased over the year which shows positive impact on GDP. Economic growth variables show positive with the size of primary market. Investment, GDP and saving are in increasing trend but very slow which show that positive relationship between stock market and economic growth variables. Compassion of bank credit with macro variable like GDP, saving investment is positive relation it can be said that bank credit may be positive impact on economic growth, if bank rise bank credit in the market the economic activities are increase in the market therefore the relation of bank credit is both positive and robustly correlated with future rate of economic growth.

Primary analysis of the study depicts that for the   economic growth of the country banks play the vital role in economic. In the contest of Nepal stock market has been growing gradually both in term turnover as well as the capital investment so that stock market may be not play the major role but it is positive impact in the economic variables. In the developing economy like Nepal, the stock market is not sensitive to the macroeconomic variables. So that most of the respondents stated that banking and agriculture sector is most important sector for the Nepalese economic it is because Nepal is a agriculture dominated economy agriculture has been the highest priority because economic growth was dependent on both increasing the productivity of existing crops and diversifying the agriculture base for use as industrial inputs. but they also agreed that stock market size is linked with economic growth.

CHAPTER V

3.0 SUMMARY, CONCLUSIONS AND RECOMMENDATION

4.0 5.1 Summary

For The development of stock market, bank is the necessary factors for modern day economy. Therefore, it is obvious that stock market and bank well-functioning for the sustainable economy growth. Firm needs 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 the present day economies .Stock market also help agents manager liquidity and productivity risk by eliminating premature capital liquidation which also increases the firm productivity .stock market works as vehicles for raising capital for assets. And the companies enjoy permanent access to capital fund raised through equity issues. The growth in the economy only occurs if the society investment and maintains a sufficient amount of capital in firm that augment human capital and technologies. The more resources allocated to the firms, the more rapid will be economic growth. Efficient stock markets perform this role by reducing the liquidity risk to the investors The relationship between stock market development, bank and economic growth has received attention of academicians and policy makers in the present decade both in the developed and developing countries as a result of the emerging equity market phenomenon and of the need to provide liquidity for privatization linked equity issues.

Considerable debate exists on the relationships between the financial system and economic growth. Historically, economists have focused on banks. Bagehot (1873) and Schumpeter (1912) emphasize the critical importance of the banking system in economic growth and highlight circumstances when banks can actively spur innovation and future growth by denitrifying and funding productive investments. In contrast, Lucas, Jr. (1988) states that economists "badly over-stress" the role of the financial system, and Robinson (1952) argues that banks respond passively to economic growth. Empirically, King and Levine (1993a) show that the level of financial intermediation is a good predictor of long-run rates of economic growth, capital accumulation, and productivity improvements.

This study utilized the time series method to reexamine the relationship between economic growth and stock market development, while controlling for the effects of the commercial banking sector and stock market volatility. They show that stock market may be able to contribute to long term output growth; there influence is, at best, a small fraction of that of the banking system. specifically ,both stock market and banks seem to have made important contributions to output growth in France, Germany and Japan ,even though the latter's contribution has ranged from about one seventh to around one third of the latter .finally ,the link between financial development and growth in the united kingdom and the United states was found to be statistically week and ,if anything, to run from growth to financial development .thus their finding are consistent with the view that bank based financial systems may be more able to promote long term growth than capital market based ones. The principal objective of this study is to analyze the well-functioning of stock market, bank to promote lung run economic growth To measure of stock market liquidity, size, volatility is robustly correlated with current and future rate of economic growth, capital accumulation, productivity improvement and saving rate and also to determine the factor affecting of stock market development, banking development and economic growth.

With the purpose of aggregate analysis all the data on economic variable and stock market variables are transformed into logarithm. It is done in order to have the comparison and relation simple and more interpreting. Another reason was to have the analysis of simple line trend on the basis of log values because these processes showed the direction of change more clearly than the magnitude of change. The correlation analysis is also performed so as to understand the simple association between the different variables; this analysis is done with the help of correlation matrix. Finally the regression analysis is performed to find the causal association between stock market variable and economic growth variables. Thought the result obtained from this analysis on the aggregate economic and stock market variable should be viewed quite skeptically and while drawing conclusion, a cautious and calculative process is required. The main reason for this is that the observation period for the study is only 15 (1993/94 to 2007/08). And as the annual data are used, an observation period of 15 years is not the

sufficient for the regression analysis. But due to unavailability of quarterly data, yearly data have been used. The major findings of the study are summarized as follows:

➢ Nepalese stock market is gradually increased over the year which is measured by amount of equity issue in primary market. Size of the secondary stock market as measured by market capitalization is also in constantly increasing trend in the size of the market except for the year 2005/ 05 but of that it increased very fast. This is encouraging. These activities have positive impact on GDP.

➢ Market capitalization is the equal value of listed domestic share on domestic exchange and it measured size of the secondary stock market. It is also in increasing trend. Turnover has been fluctuating up and down with a zigzag pattern but it is increasing which also shown more liquidity in market and more source mobilization.

➢ Economic growth variables are positive with the size of primary market. Investment, GDP, and saving are in increasing trend but very slow. It shows that positive relationship between stock market and economic growth variables.

➢ When the comparison of bank credit with macroeconomic variable like GDP, Saving, Investment is positive it can be said that bank credit may be the positive impact on economic growth. If bank rise bank credit in the market the economic activities are increase in the market. So there is a link between bank credit and national economy.

➢ The relation of bank credit is both positive and robustly correlated with future rate of economic growth. The relation between bank credit with economic growth indicators and stock market indicators are positive and significant. The coefficient of correlation between bank credit with GDP, capital formation ,Productivity growth, saving Investment, Market capitalization , Value trade are .985, .398, .304, .197, .876, .697, .724, of which all the correlation relation coefficient is GDP income market capitalization, Value trade is strongly signification.

➢ Comparison of the relation between market capitalizations with various economic growth related variables shows positive and quite significant relationship. The coefficient correlation with GDP, Capital stock growth, productivity growth, Saving, Investment are .704, .269, .151, .099, .690 respectively.

➢ Likewise the relationship of size of primary market with the economic variable is also quite remarkable. The coefficient of correlation ship with GDP, Capita stock growth, productivity growth, saving, investment .890, .417, .107, .074, and .926. Relationship

with GDP and investment has highly significant with Bank credit and PM is also significant correlated of .855

➢ The relationship of the value trade with economic variable such as GDP, Investment has significant coefficient of .760 and .747. Value trade with Market Capitalization and Primary market are also significant correlated with Bank credit has also significant correlated with coefficient of .724

➢ Other significant relationships of Primary market with value trade, turnover, and volatility has negative correlation with coefficient -.056, -.374, -.106. Likewise the relationship of volatility and saving with coefficient of .347, but significant relationship with market capitalization and value trade.

➢ The study of the Bank credit with GDP is positive and significant related. This relation tells that if the Bank credit is increase the size of the economy as measured by GDP also increase. Bank provide well- functioning for the sustainable economy growth.

➢ Other relationships of bank credit with other economic variable are insignificant but positive influences on capital stock growth, productivity growth, and saving. These results are consistent with the assumption.

➢ The relations of Turnover with economic variable are quite surprising, insignificant but positive relation with GDP, Capital stock and saving. This tells us that Turnover has positive effect on GDP, capital stock growth and saving. But relation with productivity growth is negative, through statistically in significant and it against the theorized relationship.

➢ Value trade has positive but insignificant relation with GDP. But it is negative with other economic variable such as capital stock growth; productivity growth and saving are quite surprising and not consistent with assumption.

➢ The size of the secondary market revealed that market capitalization and gross domestic product are positive and significantly related. The relation tells that with the increase in the size of market as measured by market capitalization, the size of the

economic as measured by GDP also increases. The support the theoretical assumption of Levine and Zervos (1998) but the relation of market capitalization with economic variable such as capital sock growth, productivity growth, and saving has negative. Though statically insignificant and against the theorized relationship these may be other factor such very small observation period, data distortions and other invisible factors.

➢ Though the relationship of volatility is positive with GDP and Capital stock growth. But it is negative, though insignificant relation with productivity and saving. It is consistent with the Levise (1996) study in which he found that to some extent stock market, volatility is also factor of growth.

5.2 Conclusions

➢ This paper studied the empirical relationship between various measures of stock market development, banking development, and long-run economic growth. We find that even after controlling for many factors associated with growth, stock market liquidity and banking development are both positively and robustly correlated with contemporaneous and future rates of economic growth, capital accumulation, and productivity growth. This result is consistent with the view that a greater ability to trade ownership of an economy's productive technologies facilitates efficient resource allocation, physical capital formation, and faster economic growth. Furthermore, since measures of stock market liquidity and banking development both enter the growth regressions significantly, the findings suggest that banks provided different financial services from those provided by stock markets. Thus, to understand the relationship between the financial system and long-run growth more comprehensively, we need theories in which both stock markets and banks arise and develop simultaneously while providing different bundles of financial services to the economy. We find no support for the contentions that stock market liquidity, international capital market integration, or stock return volatility reduces private saving rates or hinder long-run growth. This paper finds a strong, positive link between financial development and economic growth and the results suggest that financial factors are an integral part of the growth process.

5.3 Recommendations

 Based on the findings of the study, the following recommendations are made:

➢ Growth of market capitalization has played important role in increase GDP. So government as well as private, public and all sectors should be concerned in development of stock market to enhance nation economy.

➢ In the contest of Nepal banks play a significant role in the economic growth because it provides liquidity in the market so that more resources can be mobilizing in the market for this government should help to develop the banking sector.

➢ Market capitalization measures the stock market size ability to mobilize the capital and helps to diversity the risk. But if few company dominate the market. They can manipulate the market price formation process and in the contest of Nepal it should me analyzing parts. Because Nepal stock exchange is bank dominants.

➢ Financial development facilitates economic development by providing cheaper fund to growing industries so that related authorities should help to develop these sectors.

➢ A healthy macroeconomic environment supported by favorable economic policies leading to increase saving and investment in the prerequisite a stable and healthy growth of capital market

➢ Capita markets are highly information sensitive. In a limited market (Nepal) it is probable the price manipulation takes place. Due to insider information which extremely difficult to prove and take action upon.

➢ Banking sector needs to be taken to a newer height through adopting the best international practices both on governance and risk management fronts. Its also requires new technology, products, services and distribution channels so that people access to finance can increase considerably.

➢ Banking sector should be healthy and fair. There should be an effective monitoring, supervision and regulatory mechanism of the central bank.

- Although Nepalese stock market is in infant stage but the study suggest that stock market development leads to higher growth because it reduces both liquidity and productivity shocks.

- Timely and regular disclose of the information should be made necessary for the participating firm. Provisions should be made so as to necessary for the participating firm. Provision should be made so as to necessary for the organization to disclose their financial data at least quarterly.

- Maximum possible information should be made available to the investors at minimum possible cost.

- Prospective and incumbent investors should be made more aware about the functioning mechanism of the market.

- Market maker and investment bankers should be encouraged to participate in the stock marker.

- For rapid growth and efficient operation of stock market, instantaneous actions are required to install automated trading mechanism in NEPSE.

- All the necessary organisms should be set up for the efficient functioning of the market.

- The level of knowledge of the Nepalese investors was very low. So, the concerned authorities should conduct various research studies and disseminate the information relating to the share trading activities to increase the understanding of the investors in using financial tools to estimate the intrinsic value of share of a company before making investment decision.

- The demand by banks and financial institutions for information that allows analysis of the sustainability of profits and leads to an appropriate credit rating of a company.

- In Nepalese market it has been observed that farsighted investors sell their securities to less informed public. This is because of weak information and lack of awareness about

the unhealthy activities such as insider trading; hence the concerned bodies should protect the interest of minority.

➢ The development of stock market, bank and economic growth are also dependent on political stability of the country. Thus government should try to maintain the political stability to help the development of security market.

5.4 Direction for future research

There are several avenues for future research in the area of stock market, bank and economic growth. One extension of present study is to cover the empirical relationship between stock market development and economic growth, controlling for the effect of the banking system and stock market volatility. A second avenue of research is to compare the relationship between stock market development and financial intermediaries, corporate finance decisions, and economic growth. Third, direction for future research is to compare of income, interest, and money have given sufficient attention to important reciprocal relationships between real development and financial development.

Appendix I

Data relating to the various indicators of the stock market development such as market capitalization (MC), Value Traded (VT), Turnover (TO), Volatility (V), and the Size of Primary Market (PM) from the Year 1993/94 to 2007/2008

Year	Market Capitalization (MC)	Value Trade (VT)	Turnover(TO)	Volatility(V)	Size of Primary
1993/94	13872	0.19	3.18	68.87	227.9
1994/95	12963	0.444	8.13	18.85	173.96
1995/96	12295	0.087	1.75	11.16	293.74
1996/97	12698	0.86	3.28	10.89	332.2
1997/98	14289	0.079	1.41	6.98	369.36
1998/99	23508	0.572	6.38	16.23	178
1999/00	43123	0.411	2.68	50.01	537.06
2000/01	46349	0.512	5.06	59.69	634.29
2001/02	34703	0.621	4.44	38.61	941.33
2002/03	35240	0.752	5.75	42.01	556.54
2003/04	41424	1.23	5.18	46.02	727.5
2004/05	61365	3.36	7.35	54.23	1326.82
2005/06	96813	2.024	3.57	61.25	1593.28
2006/07	186301	2.706	4.48	67.16	1645.5
2007/08	366247	4.23	6.23	71.26	7718.2

Appendix II

Basic data relating to Saving (S), Investment (I), Capital Formation (CF), Capital Stock Growth (CS), Productivity Growth (PG), Change in Inventory (CI) and Gross Domestic Product (GDP) for the period of 1993/94 to 2007/08 in Real Terms.

Year	GDP	Saving	Investment	Capital Formation	Change in Inventory	Productivity Growth	Capital Stock Growth
1993/94	287701.7	43877	67038	63115	3923	12750	63115
1994/95	295436	45678	77710	68057	9653	2792.3	68057
1995/96	312158	44891	88693	73129	15564	11650	73129
1996/97	327818	47624	86444	73390	13054	15399	73390
1997/98	338941	48465	87400	70461	16939	14052	70461
1998/99	354184.1	49972.6	75191	70048	5143	15656.1	70048
1999/00	375868.1	59088.9	94694	75249	19445	16483	75249
2000/01	441519	55142	98649	84751	13898	56148.9	84751
2001/02	442048	36659	84808	84863	-55	417	84863
2002/03	459488	38445	90298	88069	2229	14234	88069
2003/04	481004	52551	106047	90949	15098	18636	90949
2004/05	497739	49069	116084	91427	24657	16257	91427
2005/06	514485	41510	121233	101570	19663	6603	101570
2006/07	531682	45309	123029	103512	19517	15255	103512
2007/08	560129	57234	149809	109758	40051	22201	109758

Appendix III
Regression of gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) Turnover (TO

Independent variables				
Independent variable	GDP growth	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit	.308 (1.922*)	.280 (1.390)	.717 (1.349)	.154 (.543)
Turnover	.018 (.922)	.042 (.173)	-.681 (-1.264)	.191 (.573)
R^2	.971	.156	.217	.064
F	203.144*	1.105	1.388	.412
Observations	15	15	15	15

Appendix IV
Regression of gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) Value Trade(VT)

Dependent variable				
Independent variable	GDP	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit(BC)	0.289	0.329	1.443	0.21
	(13.153*)	-1.163	(1.925**)	-0.531
Value trade(VT)	0.018	-0.032	-0.574	-0.016
	-1.472	(-.199)	(-1.575)	(-.071)
R^2	0.974	0.156	0.273	0.039
F test	224.558*	1.111	1.874	0.244

Appendix V
Table4.5: Regression of Gross Domestic Product (GDP), Capital Stock Growth (CS), Productivity Growth (PG) and Saving(s) on Bank Credit (BC) and Market Capitalization (MC)

Dependent variable				

Independent variable	GDP	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit(BC)	0.3 (13.951*)	0.289 -1.079	0.718 -0.925	0.235 -0.626
Market capitalization(MC)	0.01 -0.77	0 (-.002)	-0.114 (-.288)	-0.039 (-.175)
R^2	0.971	0.153	0.1	0.041
F test	199.055*	1.088	0.554	0.258

Appendix VI

Regression of gross Domestic Product (GDP), Capital stock growth (CS), Productivity Growth (PG) and saving(s) on Bank credit (BC) and Volatility(V)

Dependent variable				
Independent variable	GDP	Capital stock growth(CS)	Productivity growth(PG)	Saving(S)
Bank credit(BC)	0.305 (20.307*)	0.264 -1.323	0.896 -1.459	0.291 -0.278
Volatility(V)	0.016 -1.573	0.066 -0.483	-0.401 (-1.065)	-0.28 (-1.588)
R^2	0.975	0.17	0.185	0.206
F test	229.524*	1.225	1.133	1.553

Annexure VI

Pro Forma of Structured Questionnaire

A survey on stock market, bank and economic growth of Nepal.

This study is undertaken as in partial fulfillment of the requirements for the degree of Master of Business Studies (M.B.S.)

Your response will be highly appreciated and acknowledged in the study. It will also be treated as confidential and result of analysis will be presented in aggregate or group basis.

Name (optional):   **Position/Profession:**

Institution:

1) In your opinion, do you think stock market helps economic growth of the country? (Please make a tick-mark)

a. Yes   (   )   b. No (   )   c. Don't Know   (   )

2) In your opinion, do you think banking development is necessary for the development of the economy? (Please make a tick-mark)

a. Yes   (   )   b. No (   )   c. Don't Know   (   )

3) In your opinion, which of the following sectors are most important for the economic development?

a) Banking sector (   )b) stock market (   )   c) Agricultural sector

4) Do you think stock market size is linked with economic growth?

a. Yes   (   )   b. No (   )   c. Don't Know   (   )

5) Which is the following factor mainly measure the development of bank?

a) Bank credit   (   )   b) Deposit ratio   (   )   c) Liquidity ratio (   )

d) Ratio of non performing assets (   )

6) Please consider the following factor affecting economic growth of the country and rank in order of their importance.

S.N	Statements	1	2	3	4
a	Development of agriculture sector				
b	Development of industrial and tourism sector				
c	Development of banking sector				
d	Development of Capital Market				

7) How far do you agree or disagree with the following observation on the stock market, bank and economic growth of Nepal (Please tick mark at the appropriate number as per following.

1 = strongly agree   2 = Agree   3 = Do not know

4 = Disagree   5 = Strongly Disagree

S.N	Statements	1	2	3	4	5
a	Banking development is more important than stock market					
b	Stock market provide investment opportunity to company					
c	Stock market is a agent manager of liquidity					
d	Stock market help to reduce liquidity risk to the investor					
e	Stock market helps to increase productivity of the company					

8) Is there any relationship among various measures of the stock market development, banking development and long run economic growth?

a. Yes　(　)　　　　　　　　b. No (　)　　　　　　　　c. Don't Know　(　)

9) Is there any relation among capital accumulation, productivity, growth and private saving?

a. Yes　(　)　　　　　　　　b. No (　)　　　　　　　　c. Don't Know　(　)

10) Are Banking development and stock market liquidity both good predictor of economic growth, capital accumulation and productivity growth?

a. Yes　(　)　　　　　　　　b. No (　)　　　　　　　　c. Don't Know　(　)

11) Please, give your opinion on stock market, bank and economic growth.

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Thanks a lot for your kind co-operation