

STOCK MARKET BEHAVIOUR AND ECONOMIC GROWTH: NEPALESE EVIDENCE

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial
fulfillment of the requirements for the Master's Degree

by

Erika Pajiyar

Campus Roll No.:-27/076

Exam Symbol No.:- 23316/20

T.U. Regd. No.:- 7-2-39-294-2015

Shanker Dev Campus

Kathmandu, Nepal

August, 2024

CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “**Stock Market Behavior and Economic Growth: Nepalese Evidence**”. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

.....

Erika Pajiyar

August, 2024

REPORT OF RESEARCH COMMITTEE

Mrs. Erika Pajiyar has defended research proposal entitled “**Stock Market Behavior and Economic Growth: Nepalese Evidence**” successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Asso. Prof. Dr. Kapil Khanal and submit the thesis for evaluation and viva-voce examination.

.....

Asso. Prof. Dr. Kapil Khanal

Dissertation Supervisor

Dissertation Proposal Defended Date:

.....

Dissertation Submitted Date :

.....

.....

Asso. Prof. Dr. Sajeeb Kumar Shrestha

Research Department

Dissertation Viva-voce Date:

.....

APPROVAL SHEET

We, the undersigned, have examined the thesis entitled “**Stock Market Behavior and Economic Growth: Nepalese Evidence**” presented by Erika Pajiyar a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the Vice voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

.....

Asso. Prof. Dr. Kapil Khanal

Dissertation Supervisor

.....

Internal Examiner

.....

Internal Expert

.....

External Expert

.....

Asso. Prof. Dr. Sajeeb Kumar Shrestha

Chairperson, Research Committee

.....

Asso. Prof. Dr. Krishna Prasad Acharya

Campus Chief

ACKNOWLEDGEMENT

This study entitled “Stock Market Behavior and Economic Growth: Nepalese Evidence ” has been conducted for the partial requirement for the degree of Masters of Business Studies (MBS) of Tribhuvan University. Every project whether big or small is the successful largely due to the effort of a number of wonderful people who have always given their valuable advice or lent a helping hand. I sincerely appreciate the inspiration; support and guidance of all those people who have been instrumental in making this study a success.

My foremost appreciation and thanks goes to my honorable Supervisor, Asso. Prof. Dr. Kapil Khanal for his close supervision and professional advice and encouragement during the research work. I am highly indebted and very thankful for his continuous support and constructive suggestions that have enabled this research project to achieve its present form. Moreover, I am also indebted and thankful to him for his patience, motivation, support, instruction and immense knowledge in completing my overall MBS degree. I could not have imagined having a better advisor and mentor for my thesis.

I would like to express cordial gratitude to Asso. Prof. Dr. Sajeeb Kumar Shrestha (Chairperson, Research Committee) and Asso. Prof. Dr. Krishna Prasad Acharya (Campus chief) for timely supervision and guidance to complete this work. I also highly appreciate the efforts of all teacher and other members of central department of management, libraries staffs who inspired and provided the needed materials to complete this thesis.

Last but not least, I would like to thank my family members, for their effort, cooperate in every step of thesis, advice and other friends for their affection and emotional support that has inspired me to achieve every success including this study. I would also like to take full responsibility of any kind of deficiency presented in this thesis.

Erika Pajiyar

TABLE OF CONTENTS

	Page No.
<i>Title page</i>	<i>i</i>
<i>Certificate of Authorship</i>	<i>ii</i>
<i>Report of Research Committee</i>	<i>iii</i>
<i>Approval Sheet</i>	<i>iv</i>
<i>Acknowledgements</i>	<i>v</i>
<i>Table of Contents</i>	<i>vii</i>
<i>List of Tables</i>	<i>viii</i>
<i>List of figure</i>	<i>ix</i>
<i>Abbreviations</i>	<i>x</i>
<i>Abstract</i>	<i>xi</i>

CHAPTER-I INTRODUCTION

1.1 Background of the Study	1
1.2 Problem Statement	6
1.3 Objectives of the study	7
1.4 Significance of the Study	7
1.5 Limitations of the study	8

CHAPTER II LITERATURE REVIEW

2.1 Theoretical review	9
2.2 Empirical Review	20
2.3 Research Gap	27

CHAPTER-III RESEARCH METHODOLOGY

3.1 Research Design	28
---------------------	----

3.2 Population and Sampling	28
3.3 Nature and Sources of Data Collection	29
3.4 Data Analysis Tools	29
3.5 Research Framework	34
3.6 Definition of Variables	35
CHAPTER-IV RESULTS AND DISCUSSION	
4.1 Results	37
4.1.1 Descriptive Statistics	37
4.1.2 Correlation Analysis	38
4.1.3 Regression Analysis	40
4.2 Discussion	44
CHAPTER V SUMMARY AND CONCLUSION	
5.1 Summary	47
5.2 Conclusion	48
5.3 Implications	48
References	

LIST OF TABLES

	Page No.
Table 1 Descriptive Statistics	39
Table 2 Correlation coefficient	41
Table 3 Analysis of regression	43
Table 4 Significance of the model	44
Table 5 ANOVA table	44
Table 6 Analysis of regression	45
Table 7 Significance of the model	46
Table 8 ANOVA table	46

LIST OF FIGURE

Page No.

Figure 1 Research Framework

34

ABBREVIATIONS

BCR	Bank to Credit Ratio
CR	Concentration Ratio
CSDs	Central Securities Depositories
EU	European Union
FDI	Foreign Direct Investment
FI	Foreign Investors
GDP	Gross Domestic Product
GNI	Gross National Income
IMF	International Monetary Fund
IP	Industrial Production
MC	Market Capitalization
MCR	Market Capitalization Ratio
NEPSE	Nepal Stock Exchange
NI	NEPSE Index
NRB	Nepal Rastra Bank
SAN	Shareholders Association Nepal
SEBON	Securities Board of Nepal
TOR	Turnover Ratio
VOLT	Volatility
VTR	Value Traded Ratio

ABSTRACT

The objective of the study is to analyze the stock market behavior and economic growth of Nepal for the period of 20 years from 2003/04 to 2022/23. This study used descriptive and casual research design to deal with the fundamental issues associated with stock market and economic growth of Nepal. This study has considered gross domestic product and gross national income as the proxies to economic growth and are used as dependent variables. The independent variables used in this study are market capitalization, NEPSE Index and concentration ratio. The regression model is estimated to test the impact and significance of the development of stock market on economic growth of Nepal.

This study concludes the market capitalization and the NEPSE Index shows a positive relation with GDP and GNI that significantly influence the economic growth of Nepal. Likewise, Concentration Ratio shows negative relation with GDP and GNI that significantly influence the economic growth of Nepal. The findings of this study provide important policy implications for the Nepalese government and regulators in their effort to stock market development and economic growth in the country.

Keywords: *Gross Domestic product, Gross National Income, Market capitalization, NEPSE Index and Concentration ratio*

CHAPTER I INTRODUCTION

1.1 Background of the Study

Stocks is a financial instrument that represents ownership in a company or corporation and represents a proportionate claim on its assets (what it owns) and earnings (what it generates in profits). Stocks are also called shares or equity. Share is a term or financial instrument to transfer ownership. Similarly, share market is a place where buying and selling of ownership are done. Private companies are not listed in share market because they act within close circle. They cannot trade on open market. But, public ownership companies are traded in share market where number of shareholders is large. Hence, the market where buying and selling of ownership of these public ownership companies is done, that market is known as share market.

Stock market is good source of investment even for government. If government has to develop public project like water treatment plant or public community service project, then government cannot fund all by themselves. If they want to invest all amounts by themselves then they have to collect huge amount of tax from citizen which government cannot do. So, Government Issue public bonds or government securities or securities bond and raise capital from public. The investments in these government bonds are secure, less risky and good for new investors on stock market. So, investors are more attracted and interested to invest in government bonds and securities.

Stock market influence economic performance of country. A person can know about the economic status of a country through the price of stock. Stock market gives the number to measure the economic growth of a country. The tool to measure the economic growth of country is the points of stock exchange. Nepal has NEPSE to measure the average stock price of overall country. If the growth rate is good in a country, then the chance of foreign investment in a country will be high. The foreign investors will invest in a Country where growth rate is increasing. So, the projects will have adequate money to be completed. So, Stock market promotes foreign investment.

Stock market is a place where an individual can enter through very low investment. An individual can be stockholder of established company and diversify the investment. An individual investor can easily buy and sell shares in Nepal share market. With 4/5 days, the price of buying and selling procedures will settled, so quick-in and quick-out is facilitated in Nepal Share Market. There is no complicated restriction, no competition in share market.

Share market is secondary source of fund for an individual. Why the huge investment among the world goes on share market? It is to save tax, to generate wealth quickly. In Nepal if we establish companies then the corporate tax is 25%, but we have to pay only 5% from the profit we get from share market. So, an investor will save 20% from investing in share market.

The stock market promotes economic growth by increasing investment and productivity. There exist a positive relation among stock market growth and economic growth, but in between, sometimes questions are raised. To reiterate, why did the share market rise even when the real economy of Nepal was weak in the past? The stock market is affected not only by politics but also by policy decisions around the world.

Nepalese stock market is characterized by small number of listed companies, low market capitalization ratio, low value traded ratio, low turnover ratio, high volatility, high concentration, illiquid and risky market. The main issues facing the Nepalese stock markets are lack of proper co-operation between Nepal Stock Exchange, Nepal Rastra Bank, Security Board of Nepal and Insurance Board; lack of required sufficient information of stock market; unavailability of CSDs service; weak SEBON and NEPSE institutional strengthening; low diversity of instrument; unethical transactions of stock, rapid policy changes; weak response from the government to promote the markets growth.

Stock market crises occur due to the rumor of frequent policies changes. Some of the variables which affect the stock market are monetary policies like adjustment in capital gain taxation, collateral loan, descriptions of property, modification of the policies formulated by SEBON as a requirement for companies listing, licensing requirement for stockbrokers and strengthening the institution. Various markets like commodity, derivative, bullion and share market, exist in developed nations. These various types of market are used for effectively diversify portfolio. However, Nepal has poor diversity instrument.

KC (2010) claimed that, on one hand, the stock market development in Nepal is made more difficult by the lack of transparency and accountability of organizations and sound governance and another negative actions in the market. Lack of coordination between the organizations is the issue for the stock market development. There must be good coordination between them, as these organizations are the policy makers and regulators. On the basis of the principle of economy, the changes on the stock markets came due to the changes on the operation of government companies. However, the other factors that affects on the prices of the share are political instability, rises the participation of people on the investment of equity, modification of the committee board, expectation of public, changes

in the legislature and technology etc. When the changes in price does not caused due to economic factors, it's normal to be relationship insignificant between the changes on GDP. In other words, economic variables do not guide the prices of stock in Nepal.

Stock price is determined in the market with sellers depending on the demand of buyers. But, unfortunately, there is no clean equation that tells us exactly what the stock price will do. Generally, there are three forces that move a stock up or down, that is: fundamental factors, technical factors and market sentiment (Rana & Thapa, 2014). The stock market price is an important factor affecting investment decision of the investors. The stock price is one of the most important indicators for investors to decide to invest in or not in a particular share. The market price are not fixed and change every day. The most obvious factors are demand and supply (Reilly& Brown, 1997).

Stock market is an important institutional mechanism which plays a crucial role in the economy by channeling investment where it is required. The trading activities of securities in the stock market is very important for the efficient capital allocation in the market (Adhikari, 2011). If the transmission mechanism of finance like stock markets are not efficient, there will be hindrance of the money flow to the real investment, and the activity level will fall below the potential (Ritter and Silber, 1993). The two competing mechanism for converting savings to the investments are stock market and banks. However, the banks are exceeded by the stock markets in terms of allocation efficiency. It distributes the money to investments that are potential to make more money. An efficient stock market help on the growth of the economy by supporting the growth engine by rapidly increasing capital and accelerating the growth engine by allocating resources more efficiently (Carporale et al. 2004).

An organized stock market stimulate opportunities by recognizing and financing productive projects that lead to diversify risk and facilitate exchange of goods and services (Mishkin, 2001). Similarly, the importance of stock market lies in raising capital for business, mobilizing saving for investment, facilitating company growth, redistribution of wealth, development of corporate governance, creating investment opportunities for small investors, increasing capital for projects development, and working as economic barometer. It is very important to identify if Nepalese stock market holds such importance.

Wang et al. (2010) identify investor perception of corporate fraud and recommended that regulators and auditors to be alerted to fraud. The stock market of Nepal is characterized by minimum volume of trading, lack of expert brokers, beginning stage of development, low changes in price of share, and less information for investors in business (Pradhan,

2006). Similarly, (Paudyal, 2010) claimed that the demand side is affected by the unstable macroeconomic environment as investors invest maximum in short-term securities. Small investors are not against in holding long-term stocks (Sullivan, 2011).

Investors and investment managers make investment decisions. Investors commonly perform investment analysis by making use of fundamental analysis, technical analysis and market sentiment. Investment decisions are often supported by decision tools. It is assumed that structure of information and the factors in the market systematically affect investment decisions of individual as well as market outcomes. Investor market behavior derives from psychological principals of decision making to explain why people buy or sell stocks. These factors will focus upon how investors interpret and act on information to make investment decision. Individual investments behavior is concerned with choices about purchases of small amounts of securities for his or her own account (Clark & Francis, 2002).

Most of the Nepalese stock investors are involved in hunch. Stock market is dominated by mandatory issue of financial institutions as per the provisions of Bank and financial institution Act, 2006 and directives of NRB. Securities issues of other than bank and financial institution are negligible. In one side, people seem interested to invest only on limited kinds of companies and another; most of them even do not have sufficient knowledge. It all shows that the development of Nepalese stock market is still in initial phase.

In comparison to other neighbor countries, Nepalese stock market is very small. In the economic development of a nation, there is a crucial role of capital. Nepal must do everything possible to effectively mobilize the available capital because it lacks capital. Securities are financial assets. A stock market is a mechanism designed to enable the trading of financial assets. That is why, to connect the buyers and sellers of Securities, there exist markets. Capital market is a mechanism created to enable the trading of financial assets by bringing orders of buyers and sellers of securities. In the modern world, the Stock market has become a global phenomenon.

Stock markets promotes the mobilization of nation's savings by increasing the range of financial instruments available to savers portfolio diversification. One of the important function of capital market in consolidating and mobilizing small savings across the country. By considering the main function of capital market in the economies of developing nations have given enough space for their development and expansion.

The main role of stock market are to provide and distribute capital resources to businesses, providing opportunities for profitable investment and providing liquidity to the peoples to

use their existing income or borrow against future income and thus, get their desired pattern of consumption. Since, investing is associated with uncertainty, capital market offers an opportunity to transfer risk between the parties to this transaction. There are similar cyclical patterns followed by both stock market and economic activity. In the Nepalese economy, because the risk transferring mechanism is absent, the demand and supply of capital to invest in profitable businesses is minimum, which could be a result of lack of strong stock market.

The capacity of stock market of creating liquidity can influence on the economic activity. A long-term commitment are necessary for many profitable investments, but investors are frequently hesitant to give up management of their savings over long periods of time. Investment becomes more attractive and less risky when there are liquid stock markets. They want to change their portfolio and need access to their savings. Company has a permanent opportunity to increase capital by issuing equity. Liquid markets that facilitate longer-term, more profitable investment, enhance opportunities for long term economic growth and improve capital allocation. Furthermore, stock market liquidity can encourage more investment by lowering risk and rising profit on investments. But in short, it can be said that, investors come when they can leave. According to this view point, the Nepalese stock market is least developed. Liquidity is almost absent, which prevents further economic investment.

Dividends, rapid growth, investment for saving purposes, quick profits through trading, professional investment management and long-term growth that affect individual investors' attitudes towards their investment decisions. Individual base their stock purchase decisions on; fluctuation in the price index, recent price movement in a firms stock and current economic indicators. Studies in developed capital market context like USA have well documented that the stock market can serve as a leading economic indicator. This implies that stock market can be used to provide a forecast of aggregate economy. The empirical observations also have shown that stock market shows a fall before recession starts in the economy and it shows an upward trend before a recovery starts in the economy.

There are a number of institutional bodies such as SEBON, NEPSE, SAN and listed companies are existing in capital market of Nepal. Around 350 companies such as Market of securities, Companies listed in NEPSE, Central Depository, bank of depositors, Mutual Investment Fund, Credit Rating Institution and Securities dealers with everyday expansion of capital market is regulated and supervised by security board of Nepal (SEBON). Nepal's

capital market has 1 stock Exchange, 14 Merchant Bankers, 1 Central Depository Company, 45 Members of depository, 1 Credit Rating Company and 50 Brokers of share.

1.2 Problem Statement

The Nepal Stock Exchange, the only stock exchange of Nepal, faces many problems, which creates barriers for the development of the stock market. NEPSE has not been flexible enough to provide service to its investors as it takes months for investors to get its stocks after purchase. Sometimes investors lose its dividends and capital gains for short-term investments due to delay of stock settlement. The stock market of Nepal also hugely focuses on the investors who live in the capital of the country. Most of the stockbrokers are situated in Kathmandu. So the overall market is very small. Even the government does not have good controlling body for the firms registered in NEPSE. The manpower required for accounting, supervision, auditing and checking are lot less than required for the market. Therefore, the country does not provide free flow of information to all stakeholders.

It is very important for the stakeholders to make decision from the information provided to them. Therefore, the country lacks providing information. Hence most of the individual in the country are not educated enough about the information provided to them. Therefore, they make rash decision creating imbalance in the economy.

As Nepal is poor in economic condition, about 23% (World Bank survey) of people are living below the poverty line and hardly surviving their daily expenses. People are unable to save their income for any disturbance that can happen in future. They are not able to take care of their health and medicine also. So, large number of people cannot invest their saving in stock market. When there is low investment, return is also low. So, the circle of stock market seems to be small in Nepal which can show very minimal relation of stock market with economy. This study is directed to resolve the issues:

- What is the structure and trend of market capitalization, NEPSE Index, concentration ratio, gross domestic product and gross national income of Nepal?
- Is there any relationship among market capitalization, NEPSE Index, concentration ratio, gross domestic product and gross national income of Nepal?
- What is the impact of market capitalization, NEPSE Index and concentration ratio on economic growth of Nepal?

1.3 Objectives of the Study

The main objective of the study is to investigate the impact of stock market behavior on the economic growth in Nepal. The specific objectives are as follows:

- To assess the structure and trend of market capitalization, NEPSE Index, concentration ratio, gross domestic product and gross national income of Nepal.
- To examine the relationship among market capitalization, NEPSE Index, concentration ratio, gross domestic product and gross national income of Nepal.
- To analyze the impact of market capitalization, NEPSE Index and concentration ratio on gross domestic product and gross national income of Nepal.

These objectives can be examined with the following alternative hypothesis:

1. H1: There exist positive and significant relationship between Market capitalization and Gross Domestic Product and Gross National Income.
2. H2: There exists significant positive relationship between NEPSE Index and gross domestic product and gross national income.
3. H3: There exists significant negative relationship between concentration ratio and gross domestic product and gross national income.

1.4 Significance of the Study

NEPSE Index is taken as a barometer of an economy. Growth in stock index is normally considered as a good sign since it implies the investors are confident about the future prospect of the economy. When stock market is blooming the economy is good and vice-versa. It is important to know that economic growth is determined by the industrialization of a nation. It helps in promoting investment to the economy. The study on the stock price behavior and economic development; Nepalese evidence are very significant to all the people related to stock market like investors, brokers, security dealers, issue managers, and the market makers.

This research work will help investors to know the overall scenario and guidelines of stock market. This research will be knowledgeable enough to know the factors affecting behavior of stocks in Nepal Stock Exchange. It may even help an individual to know what, why and how the stock market fluctuates and tries to make better decision regarding the investment. Nepal lacks educated and knowledgeable investors so this research may guide the investors through its facts. Through this research & finding, it may even help to create potential investors. Lastly, this research may even help to eradicate the barriers of effectiveness in

the stock market.

Studies have documented that stock market can serve as a leading economic indicator. This implies that stock market can be used to provide a forecast of aggregate economy. History showed that the price of shares is an important part of the dynamics of economic activity, and can influence or be an indicator of social mood. An economy where the stock market is on the rise is concerned to be an up-and-coming economy. In fact, the stock market is often considered the primary indicator of a country's economic growth, strength and developments. (Wales, 2011).

The study will support to the students of University, interested to gain more knowledge on the present condition of growth in stock market of Nepal, problems and obstacles the market faces as it develops. Likewise, this study is expected to be useful to the policymakers who are related to the growth of capital markets.

1.5 Limitations of the Study

The limitations of the study;

- The study covers the period 2003/2004 to 2022/2023.
- This study is totally based upon the data of secondary sources.
- Market capitalization, stock market index, concentration ratio, NEPSE index are only the variables which are taken as independent variables and GDP and GNI taken as dependent variables.
- Only statistical tools and techniques which are selected are used in this study.
- Finding and suggestion may not be applicable for all sectors.

CHAPTER II

LITERATURE REVIEW

A literature review is a comprehensive study of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to the particular area of research. It is advancement of existing knowledge and in-depth study of subject matter. This chapter provides both theoretical and empirical review of the study and deals with the review of relationship among stock market and growth of economy in Nepal. This chapter summarizes the theories and findings from the other different researchers that they had gone in the same field of study.

2.1 Theoretical Review

The theoretical literature review helps to develop new theories to identify and test the theories that are existing already. The whole framework theory or a single theoretical idea can be focused by the analysis unit.

The behavior of share market, its financial intermediaries function, liquidity on stock market, formation of capital, stability on price, growth of economy and creation of job are explained by various theories.

2.1.1 Finance and Growth: Schumpeter's View

The historical growth model focus on real factors like, labor, capital and investment. Schumpeter was the first to identify the significance of finance in economic growth who viewed credit creation function of bank as "the monetary complement of innovation" (Schumpeter, 1912) who focused on two important role played by the financial sector in the current economy. At first, by mobilization of savings, management of risk, supervising and analyzing projects for investment and cutting the cost of transaction, the financial sector improve the efficiency of the financial intermediation process between lenders and borrowers. Secondly, financial support the economy by providing credit. He asserts that banks serves as both credit providers and financial intermediaries. In modern economies, unless new purchasing power was not through credits, industrial development could not be financed. Thus, the financial sectors capacity to credit generation is too important and actually it becomes necessary to expand in contemporary credit money economies.

2.1.2 The Neo-Classical Perspectives

According to neo-classical theory, Says' law prevails and money is constant in the long run. The main factor that influence on investment is real saving, while the fundamental factor coordinating demand and supply for loans is interest rate. Since, the amount of money available for investment is set by price level, so it is not very important and has no long term impact on the real economy. Therefore, economic growth does not depend upon the financial sector's expansion of credit in order to create money. However, in the neoclassical framework, the completion of tasks like converting primary securities which is issued by companies into secondary securities, supervising and analyzing projects for investment, and disbursing payment systems justifies that the existence of banks and financial institutions. In the neo-classical framework, the role of financial institutions as lenders that injects the money into the economy through credit is rejected. There is no financial limitation for investment, only real savings are the thing that restrict real investment. However, this restrictions are entirely justified as it ensures that only the most profitable investment project will be financed. As long as there are no flaws in the market, projects that are bought to increase profits are unrestricted either financially or practically.

As a result, to eliminate market imperfections like information asymmetries and to lower transactions costs is the main task of financial institutions. Therefore, term analysis, despite the small role of money in the long-term analysis, financial activities may be essential because it improves the other economic transaction's efficiency. Since 1970s, the rational expectations hypothesis of (Lucas, 1972) has strongly influenced on the neo-classical macroeconomics. Consequently, by combining the hypothesis of rational expectation with the traditional theory of macroeconomic, new classical theory emerged. This perspective once more reduced the effect of monetary factors to the whole economy. Real variables was used to analyze economic growth in which the financial sector is expected to perform a supporting role and can be ignored without reducing explanatory power. On a macroeconomic level (Modigliani & Miller, 1958) supported this view and concluded that a company's financing process is different from its investment decisions. There are some notable deviations to neglect the finance in the neo-classical framework, initiated by (Gurley & Edward, 1960), and then expanded by (Goldsmith, 1996), (McKinnon, 1973) and (Shaw, 1973). But, these concept focused more on the role of financial mediating of financial market instead of on the creation of credit perspective promoted by Schumpeter and then after by the Keynesians.

2.1.3 The Modigliani-Miller Irrelevance Theory

According to the Modigliani-Miller approach, a company's investment decisions are different from the financial process, leading the neo-classical view that finance trivial in relation to real growth at a macroeconomic level. Two main ideas regarding the theory of finance are made by Modigliani and Miller. The study show that in fully developed capital markets with perfect competition, no transaction cost and taxes, and complete and symmetrical information among all investors, a company's share market valuation remains unaffected by its financing decisions. The potential for profit and underlying real estate risks will determine the company's market value, which will remain unchanged by its capital structure or the allocation of internal or external financial sources. It was also shown that real factors such as productivity, output demand, technological advancement, and the relative cost of labor and capital completely affect the company's growth and decision of investment. The development of financial sector simply enhance the efficiency of mediation process by eliminating possible gaps and funding in this context simply supports the investment process. Investment theory in corporate finance is represented by the neo-classical M-M theory.

The M-M theorem was also distinguished to one of the most well-known theorem of corporate finance, the picking order theorem, also known as the hierarchy hypothesis (Mayers & Majluf, 1984). It stated that companies would always prefer to collect money internally and if they had to use finance from outside, they began with debt at first, secondly, hybrid securities such as convertible debenture, and at last equity. In this analysis, company's capital allocation and dividend distribution policies are significant factors that have independent effects on its price of the stock.

The picking order view has been supported by new theoretical developments, which have rendered the M-M theorems invalid. It has been shown that company's capital structure becomes important when limiting assumptions such as absence of taxes and financial distress are relaxed. Companies seems to prefer debt financing with corporate taxation incentives which permit interest to be reduced as an expenses. However, during recession, a high level of debt financing may increase bankruptcies and financial difficulties. Because of the tradeoff, a company's stock market value must be maximized by maintaining an ideal debt-equity ratio. The importance of the allocation of capital and monetary decisions of the companies for the real economy is shown by more intricate

factors and latest theoretical advancements including asymmetric information among managers and creditors, shareholders, moral hazard, cost of agency, adverse selection problem, signaling and transaction costs.

2.1.4 The Gurley and Shaw Propositions

Gurley and Shaw (1960) analyzed the relationship among the expansion of financial market activities and real economic growth and comes to the conclusion that innovation of finance is a dynamic procedure that both affect and is affected by the real sector's development. They noticed that savings of entrepreneurs is the main source of capital formation in a poor and impoverished environment. Self-financed capital investment eventually gives way debt financing mediated by banks and later to the appearance of stock markets as a means of obtaining external funding as the economy grows. Therefore, commercial banks are the main financial entities at low development level. Specialized financial intermediaries and stock markets develop and flourish along with the economy, which boosts towards the growth of industry and economic growth. The proposal of Gurley and Shaw expresses common flow of finance market and economic development.

2.1.5 Endogenous growth Framework and Finance

Endogenous growth model explains the relationship between the financial sector and growth in economy. The endogenous growth model takes into account technological progress as an endogenous factors rather than an exogenous one (Romer, 1986, and Lucas, 1988). In endogenous growth model the economic growth performance is related to financial development, technology and income distribution (Caporale et al.,2005).

Within the framework of endogenous growth, empirical works focus on the effect of financial markets in enhancing economic growth through increasing capital productivity, reducing the agency cost and increasing saving rate. All of the studies concentrated on the banking system's function in the intermediation process. Then, because of the general excitement around share markets in the 1990s, the focus turned to capital markets, particularly stock markets. A reorganizing of these mechanism to financial intermediation depend upon capital markets occurred as a result of breakdown of existing model of financial intervention via development finance institutions (DFIs) and the financial mediation based upon the banks in developing nations. The need of the nations to attract foreign investment in a non-debt generating way also gave an additional stimulation to develop equity markets globally. These all sparked interest in the academy in different

facets of stock market evolution. In 1995, significant empirical research along these lines started, when the world bank³ tries to find out in detail about the relationship between the performance of the stock market and economic growth.

2.1.6 The Keynesian Perspectives on Finance and Growth

There are different theories of Keynesians existing in the field of macroeconomics today. Keynes himself was unclear about the impact of financial development on the real economy. Although, he concerned towards the negative impact of speculative activity in the markets of finance on business. He also emphasized the significance of the financial process as a means in raising the level of development.

2.1.6.1 New Keynesian Perspective

The neo-classical theory which views that investment is determined by saving is rejected by Keynes, in his general theory. He claimed that expected demand and profit of the businessmen's determine the investment decisions. Interest rate lack the neo-classical theory's fundamental ability to effectively coordinate decisions about saving and investing for the entire economy. Therefore, from Keynesian perspective, raising the investment level needs raising the financial availability. The flow of investment is affected by the availability of financing as many investors have financial limitations that can only be alleviated by borrowing from banks and other financial institutions. These institutions plays a central role in the shift from a lower to a higher level of operations. The new Keynesians further developed this financial side of production. They disagreed with the Modigliani-Miller argument that the company's capital structure is not relevant to its actual growth. The new Keynesians demonstrated that, a company's plans for investment of growth may be limited by the availability of adequate financing. Therefore, the finance process is also important from the view point of the functioning of the real economy, and it cannot be ignored if the funding of the real capital and thus the growth procedure can be satisfactorily described. But still, from the Keynesian perspective, the growth of financial activities is not seen as an entirely positive things. When returns expectations become too optimistic or pessimistic, the economy is open to volatility and speculative bubbles." As bubbles on a continuous business, speculators do not harm. However, the situation become dangerous when the company turns into a speculative bubble. A job is probably poorly done when the development of capital in a nation is output of a casino's operations."(Keyness, 1996).

2.1.6.2 Post-Keynesian Perspective

Since 1980s, after the financial market began to show the sign of speculative practices, the negative side of the Keynesian analysis gained popularity between the post Keynesians. According to "crowding out hypothesis" framed by (Tobin, 1965), there will be a decrease in the fund available for real investments in when financial resources provides a higher profit than real investment projects. The real economy will suffer due to the negative multiplier effect. The "casino" hypothesis is another possibility for the negative impact of financial market (mainly share market). On stock markets, speculative bubbles occurs when the prices do not accurately reflect the underlying real factors. A casino may become the byproduct of such cases, leading to the development of speculative growth dynamics guided by irrational behavior and damaging the real economy. The short- term nature of financial markets was concerned by Keynes himself. Short-horizon speculative traders are frequently attracted by financial markets due to the ability to trade sequentially. Prices response very quickly to various information affecting expectations of financial markets. Financial markets prices, therefore, are unstable and offer opportunity for quick profit or losses. As the financial markets only value short-term success, managers use financial markets limited time horizon as a helpline when making their decision due to growing significance of financial markets. The long-term perspectives of companies may suffer if the financial markets undervalue long term investments, as investment manager will also undervalue them (Biswanger, 1999).

(Minsky, 1986) provides a more carefully formulated argument about the cause of financial instability. He claims that debt obligations begin to exceed the income flows required to pay them as they approach full employment during the economic booms. This is due to the overly optimistic expectations regarding real profit opportunities, which is limited by productivity growth but unrestricted by credit extension. Therefore, rather than being used to finance real investment projects, loans are increasingly being used for compensatory and speculative expenses. This leads to a growing fragile in financial structure, and the economic cycle ends with a debt deflation that induces a downturn. According to all these theories, there is negative correlation between the development of the financial sector and real growth of the economy. But, this negative relation does not intend to apply in whole economic circumstances, but describes a development time of economic when the growth in the sector of finance is expected at expenses of the real sector.

2.1.7 New Growth Theory and Finance

The new growth theories have recently emphasized on the co-movement of the financial and real sectors. Instead of recognizing the role of financial market as lender in Keynesian perspective, these models acknowledged that the financial markets function as a middlemen which direct towards investment from saving. The efficiency of this intermediation process is supposed to rise with the financial sector development. Different current growth models permit markets to solve many problems related to information and risk, resulting in real growth of productivity and long term economic. A number of mechanisms, including relaxation of liquidity constraints, diversification and reduction of risk, analyzing project and the use of corporate governance, have been identified by existing theoretical work as explaining the beneficial incidence of financial intermediation on economic growth.

2.1.8 Stock Market and Macro Economic Variable

The relation among macro economy and the stock market is away from being clear. In order to determine the nature of the relationship between the price of the stock and macroeconomic variables traditional models concentrated on correlation studies. With the introduction of tools for economic analysis such as co-integration, casualty and error correction models, seeking to determine the direction of the casual relationship between price of stock and macro variables.

2.1.8.1 Stock prices and money supply

The relationship between changes in the money supply and stock prices has to theoretical explanations: the portfolio disequilibrium hypothesis and the central bank intervention hypothesis. Central bank intervention hypothesis (Pearce & Roley, 1983) stated that central bank frequently response towards the sudden growth of money supply by absorbing liquidity which is excess from the market. Longer term yields immediately increased in response to these anticipated central bank intervention, which increased the expected short term interest rate in the future and had a negative effect on stock price. This is usually caused due to rising discount rate as a result of the rising interest rate. As a result of the assumption that stock prices represent the discounted present value of future benefits to the investors. In the absent of the corresponding increase in the forms future earning, share prices therefore decreases in response to the rising discount rate. The

portfolio disequilibrium hypothesis (Cooper, 1983) asserts a positive relationship between money supply and stock prices. Imbalance in portfolio of public money, financial and other resources caused due to an unexpected growth in the money supply will cause a rise in prices of stock. Investors move away from property to financial and other assets as a result of these portfolio imbalances, which raises the prices of these assets.

2.1.8.2 Stock price and Inflation

According to classical economic theory, the real value of stock has been affected by inflationary or deflationary in the price level. This implies that, in theory, a shift in the current monetary value would correspond to a shift in the overall price level in the economy. This conclusion was mainly based upon three principles- first, real income from owning capital goods changes in relation to the general level of price because these incomes are fundamentally determined by the production function, which includes the ratio of factors and input-output relationship, vary of the general price level. Second, the real value of these shares in the market asserts corresponds to capital invested at real interest rate. Third, there is a consistent correlation between the real interest rate and price level. The basic conclusion of the traditional approach confirmed by several studies holds that changes in the general level of price index will have a direct impact on the nominal prices of common stocks. In the 1980s, theoretical changes occur following the work of (Lintner, 1978). A negative relationship between expected and unexpected factors of inflation and stock price has been observed by several empirical studies. One of the hypotheses behind these inverse relationships is the knowledge effect. An unexpected increase in inflation frequently prompts the government or central bank to change in monetary or fiscal policy, either both. The central bank can use operation of open market, which would increase interest rates to slow the growth of the money supply. If companies reduce interest-sensitive investment, increasing interest rates can negatively affect cash flow in the long-term and increase interest costs of capital in the short term.

The portfolio Adjustment Hypothesis stated that higher inflation is supposed to raise the expectation of returns on alternative assets, just like the real assets (Summer, 1981). As a result, investors sell all their stock and to adjust their portfolio and use the freed up funds to buy other assets. A reduction in stock price results of this portfolio adjustment is the output of this portfolio adjustment. According to (Fama, 1970) proxy hypothesis, the negative correlation between return on equity and inflation serves as a stand-in-for the

positive correlation between return on equity and real factors, that are more basic factors influencing values of equity.

2.1.8.3 Stock Prices and Exchange Rate

Two important theories are explained for the potential relationship among the prices of the stock and exchange rates: the stock focused or Portfolio Balance model (Branson & Henderson, 1985) and the Flow Oriented or Goods Market Model (Dornbusch, 1980), which both explains small effect of the exchange rate on stock prices.

Fluctuation in exchange rates influences many firm's capital expenses and earnings value, which in turn affects a firm' competitiveness and stock prices. The foreign buyer's attraction to exporting goods increases or decreases with the depreciation or (appreciation) of local currency. The foreign demand for goods increases the income, value and stock price of the companies. At a macro level, the effect of fluctuation on rate of exchange on the stock market is based upon the importance of both the importers and exporters sensitivity to changes in the exchange rate.

According to the Portfolio Balance Model, it is assumed that there is exchange rate system that permits market mechanisms to determine exchange rates. In the market where demand and supply are free, thriving stock market would attract capital flows from foreign investors. These could raise demand for nation's currency, leading to an increase in value. A decrease in value of the currency result from an investor would attempt to sell their stock in order to ignore losses and converting funds into a foreign currency, so that they can leave the country, this would be the opposite of what would happen in the event that stock price decline.

2.1.9 Efficient Market Hypothesis

The efficiency market hypothesis (EMH) created by (Fama, 1991), has been studied for stock market responses to macroeconomic variables in more recent time. Mainly the stock market and money relationship is the context in which EMH is developed. It reduced the possibility of negative impact of the money supply on stock prices. According to the EMH and efficient stock market is assumed to reflect readily available information about money growth, interest rates and the outcome expectation. The only things that are likely to cause noticeable changes in stock prices are unexpected changes in these variables. When information about macroeconomic policies become public stock prices, if they are

informationally efficient, will quickly adjust to reflect any changes in the macroeconomic variables. In an efficient market, historical data about the variables is already included in past price, so it is not useful to explain current stock prices fluctuation. However, because there is a lag in how quickly stock prices adjust to new information, historical data can be used to forecast current stock price movements in an informationally inefficient market. Currently, efficiency is classified into three types: weak form, semi-strong form and strong form (Peevey, 1993). If current prices contain all the information in the past then it is considered as a weak form efficiency. If prices fully reflect information that is readily available to the public, including data on macroeconomic performance, statements made about fiscal and monetary policy, particular data of industry etc., market is considered as semi-strong form efficient. when investor are unable to generate excess returns by using information to which they have exclusive access, the market is considered strong. In this case, stock prices are unaffected by the historical price history of independent variables.

Thus, there are many different theoretical views of stock markets and economic factors like investment decision of a firm, risk coverage, saving mobilization, asymmetric information, speculation and efficiency of market. There is uncertainty about how finance affects the decisions of the economic units, despite the fact that modern theories have come to recognize the significance of finance in economic activities in contrast to the traditional view of the banality of finance.

Today's wave of global financial integration increases the complexity and criticality of this relationship. The current study is conducted within the new functional approach framework for the stock market. The independent effect of stock market developments on economic growth is tested by using an endogenous growth framework. The semi-strong form of the efficient market framework is used to study the casual relationship between stock prices and macroeconomic variables.

2.1.10 Determinants of Economic Growth

According to (Rodrik, 2003), many researchers prefer the neoclassical model because it makes it easy to identify the main factors affecting the growth of GDP. Furthermore, proponents of endogenous growth models praise their capacity to include factors of institution, policy and advancement in technology as the primary factors to influence growth of economy (Barrow, 1996).

According to (Levine & Renelt, 1992) and (Sala-i-Martin, 1997), the classical economists

too emphasize on the significance of the savings towards the nation considering savings and investment as the most important factors. Although, public sector investment provides the infrastructure needed for the economic growth, private enterprise is often seen as the engine of economic development. As noted by (Howells & Keith, 2000), both private and public sector investment have close linked because public venture can crowd out private investors by providing infrastructure or raising their cost of capital. Private sector investments can be affected by public sector investment either in a positive or negative way (Sala-i-Martin, 2003). The activity of individual company is developed by the positive side effect created by the saving of the community in human capital. Therefore, it clearly shows that savings and GDP growth are positively correlated (Barro, 1991, 1996, 2003; Artadi and Sala-i-Martin, 2003). Another factor that is feel to have positive correlation with economic growth is foreign aid. It eases the restriction which can occur on the economy (Bachha, 1990). The limited saving occurs, which is likely to happen when there is low GDP per capita in a nation. These nations have low savings, which are insufficient in mobilizing investments to the public sector. It plays an important role in easing household saving limits. (Kathurimn, 2010) showed the limit because of the foreign exchange, resulting from requirement for capital goods and services imported and income from foreign exchange can be very small; this type of foreign exchange includes help in allowing large import into the nation. Savings are affected by fiscal decisions; foreign aid support to finance in public investment, which prevents the government from generating income to financing deficit budget; aid is useful to alleviate these constraints. But, (Chenery and Strout, 1996) note that foreign aid for the support of technology can alleviate this criticism and improve performance of economy in less developed nations. Therefore, from the discussion above, we can say that aid and investment are directly related and cause economic growth (Hjertholm, Laursen, and White, 2000). (Gomanee, Morrisey, Mosley, & Verschoor, 2005) showed in their research that by financing public investment, foreign aid can boost GDP growth particularly in developing nations. According to (Elbadawi, 1999), exchange rate is negatively affected by aid in East African nations because it leads to its appreciation, which makes it more expensive and slow down GDP growth.

Another factor which affecting private investment and GDP growth is export. Endogenous theory states that nations with free trade experience a number of advantages like, technology transfer, increased specialization of work and increased efficiency of

multinational companies, economies of scale from business expansion; and knowledge gained from globalization (Piazolo, 1995; Zhang and Zou, 1995; Harrison, 1996; Frankel and Romer, 1999). Furthermore, the highest competition resulting from the openness may have negative impact on the domestic firms' performance or even cause them to collapse (Harrison, 1996). Although, imports serves as intermediary goods, represent imported technology, and can be invested to accelerate economic growth, most studies in this field focus mainly on exports.

2.2 Empirical Review

2.2.1 International context

Gursoy and Tuncer (1998) examined the stock markets and economic growth: a casualty test. The time series data compiled from 20 countries for the year 1981 through 1994 have been obtained from United Nations Monthly Bulletin of Statistics. Gross domestic product was taken as dependent variable and market capitalization, and turnover ratio as independent variable. Sims' causality test based on Granger definition of causality was used in this study. Nevertheless there was slightly stronger evidence supporting a closer link between stock market and real economic indicators in developing countries.

Filer et al. (2000) evaluated on the issue do stock markets promote economic growth? Time series for the study view from the period of 1985 to 1997 using Granger causality tests. The data were from the International Finance Corporation for financial markets while growth rates per capita GDP were obtained from International Monetary Fund's International Financial Statistics. Stock market developments were measured by two variables: turnover velocity and the changes in the number of domestic share listed. The conclusion from this study was there is little relationship between stock market activity and future economic growth, especially for the lower income countries in our sample.

Levine (2000) evaluated the financial development and structure, from 11 selected countries of sub-Saharan Africa from 1992-2002. GDP, stock market capitalization, stock market turnover, private capital formation, private bank credit. And inflation rate and government consumption are used as variables in this study. The regression model is used as statistical tool used in the study. These results show that private capital stock market development measured by private bank credit have positive significant correlations with per capita output.

Biswal and kamaiah (2001) assessed the stock market development, banks and economic growth in India. The study has used the data for the period of 1991 to 2000. Market capitalization ratio, value traded ratio, turnover ratio, volatility, bank to credit ratio, and industrial production (IP) are the six variables used in this study. The Granger causality test and the co-integration technique is employed to show the long-run relationship. The result shows relation among stock market development and economic growth is unidirectional from stock market development towards economic growth, as evidenced from the Granger Causality test. But there is insufficient evidence to suggest an association between bank development and economic growth.

Deb and Mukherjee (2008) examined the impact of stock market development on economic growth, Indian economy context. The time series data over the period of 1996-2007 was collected from the CMIE Business Beacon Database, Handbook of statistics on Indian Economy published by Reserve Bank of India. Granger causality test was to calculate the results. Growth rate of real GDP, real market capitalization ratio, efficient allocation of investment resources were used as the variables for the study. The result shows that there is strong casual flow from the stock market development to economic growth.

Wai-Mun et al. (2008) investigated the stock market and economic growth in Malaysia: causality test. The data studied in this research are of economic and financial time series of Malaysia from 30 annual observations covering the period from 1977 to 2006. The data for Kuala Lumpur Composite index was obtained from Bursa Malaysia and GDP data was collected from International Financial Statistics, published by IMF. Vector Autoregressive model was used as statistical tool to derive the result from collected data. The result of this paper shows that the stock market does support to forecast economy for the future.

Antonios (2010) examined stock market and economic growth: an empirical analysis for Germany. The data for the period of 1965-2007 using a Vector Error Correction Model were obtained from World Bank indicator and journals. Gross Domestic Product is used as dependent variable and stock market as independent variable. The empirical analysis suggested that the variables that determine economic growth present a unit root. Once a co-integrated relationship among relevant economic variables is established, the next issue is how these variables adjust in response to a random shock.

Boubakari and Jin (2010) investigated on the role of stock market development in economic growth: evidence from some euro next countries. The time series data for the period of 1995-2008 using granger casualty test were collected from World Development Indicator

website. The data include Gross Domestic Product as dependent variable and Foreign Direct Investment, Stock Total Traded value, Turnover Ratio and Market Capitalization as independent variables. The results of the study suggest that the stock market growth and economic growth have long-run relationship. It reveals that the stock market liquidity help to improve the future economy.

Oskooe (2010) assessed the emerging stock market performance and economic growth. The time series data for the study were taken from the Central Bank of Iran and Iran stock market web sites, consisting of 45 observations covering the period from 1997- 2008. Real Gross Domestic Product (GDP) and Iran stock market index are taken as variables in this study. This study represented a systematic investigation of the relationship between stock market performance and economic growth in Iran by conducting causality tests within the Vector Error Correction Model framework. The results from the Johansen co-integration test indicate that stock price movements are influenced by the level of real economic activities in the long run in Iran.

Ahmad et al. (2011) evaluated the stock market development and economic growth: A comparative study of Pakistan and Bangladesh. To collect the data, the supplement source used was World Bank Indicators over the period of 1990 to 2009. Gross domestic product is taken as dependent variable and market capitalization, total value of stock traded and stock turnover ratio are taken as independent variable. Regression model is used as the statistical tool used in this study. The study revealed that the stock markets in Pakistan and Bangladesh do not play a major role in the economic growth.

Mohtadi and Agarwal (2011) assessed the stock market development and economic growth: evidence from developing countries. Historical panel data approach is obtained covering the period of 1977 to 1997 were obtained from the Emerging Markets Database⁷ (EMDB) provided by the International Financial Corporation (IFC). Market capitalization, total value of shares traded, turnover ratio were taken as stock market variables and growth foreign direct investment, secondary school enrollment, investment were taken as other variables. The results suggest a positive relationship between several indicators of the stock market performance and economic growth both directly, as well as indirectly by boosting private investment behavior.

Carp (2012) investigated on can stock market development boost economic growth? Empirical evidence from emerging markets in central and eastern Europe. The time series

data for the period of 1995 to 2010 were collected from World Bank Development database and Granger causality test was used as the model in this study. GDP growth rate, market capitalization, turnover ratio, stock value traded and real investment were used as variables in the study. The results concluded that the market capitalization and stock value traded do not exert any impact on economic growth rates, emphasizing the low level of development of the stock market.

Ogboi and Oladipo (2012) evaluated the stock market and economic growth: the Nigerian experience. Ordinary least squares regression (OLS) was used taking the data from 1980 to 2000. The data collected in this study is based on secondary data- Central Bank of Nigeria's Statistical Bulletin and Annual Report and statement of Account of Nigeria Stock Exchange 2009 edition. GDP, Market capitalization, new issues, and value of transaction and banks total assets are the variables used in the study to measure the data collected. The evidence provided in this study based on the empirical findings, showed that stock market has positive effect on economic growth in Nigeria.

Kasimu and osamwonyi (2013) assessed the stock market and economic growth in Ghana, Kenya and Nigeria. The time series data consists 16 annual observations covering the period from 1990 to 2009 from three African countries - Ghana, Kenya and Nigeria using Granger causality tests. The data were taken from Annual Reports of Securities and Exchange Commission and Statistical Bulletin of Nigeria and Ghana, Authority of Capital Market of Kenya, Association of African Securities Exchanges, World Federation Exchange data base, World Bank development indicators data set, Central Banks of relevant countries, journals and other publications. Gross Domestic Product was taken as dependent variable and stock market capitalization, value traded, turnover ratio, no. of listed securities, stock market index as independent variables. In Ghana and Nigeria, causal relation among stock market development and economic growth is not existing; but there is in the Kenyan economy. Bidirectional causal relation exist among the stock market developments and economic growth.

Jahfer and Inoue (2014) assessed the financial development and economic growth: the role of stock market in Japan. Quarterly data for the Japanese economy for the period 1957 to 2011 were collected from International Financial Statistics published by the International Monetary Fund and the reports of Tokyo Stock Exchange. This study have defined GDP as dependent variable and money supply, domestic outstanding bank loan, domestic claims, claims for private sector and firms' short and long term borrowing from financial institutions as independent variable. Co-integration test and Vector Error

Correction Model (VECM) are applied in this study. The results demonstrate that there is a long-run equilibrium relationship between the financial development, stock market development and economic growth in Japan.

Srinivasan and Prakasam (2014) examined the stock market development and economic growth in India: an empirical analysis". The ARDL bounds testing approach was used to investigate the long-run equilibrium relationship among the selected time-series variables in India. The study uses the co- integration and causality tests for the period June 1991 to June 2013. Stock Market Capitalization (MC), Stock Market Turnover Ratio (TR) and Index of Industrial Production (IIP) were the variables approached in this study. The empirical results shows that the indicators of stock market development have a positive impact on the growth of economy in India.

Badr (2015) assessed the stock market development and economic growth: evidences from Egypt. Time series data for the period of 2002 to 2013 was used to derive the relation between stock market development and economic growth. The variables for the study were gross domestic production (GDP), foreign direct investment (FDI) and stock market capitalization, VAR, Granger Causality test was used to find the relationship between the examined variables. The results does not shows a causal relation among the stock market development along with the economic growth. But, the results indicates a relation among stock market development and foreign direct investment and economic growth.

Abubakar (2016) examined the economic growth impact of Indian stock market: an economic investigation. Data on the variables were sourced from the Handbook of Statistics on Indian Economy, 2014 and World Bank Indicators. The data are in annual series and were collected for the period 1982 to 2013. Real GDP, domestic investment, total labor force, human capital, interest rate and stock market capitalization are the Variables used in this study. The study adopted the Vector Error Correction Model (VECM) methodology in estimating the long run and short run relationship among the variables. Findings of the study showed stock market to have a negative effect on economic growth in the long run, while in the short run, it is found to have a positive effect on economic growth of India.

Bilal1 et al. (2016) investigated the impact of stock market development on economic growth: evidence from lower middle income countries. All the panel data used in this study were collected from World Development Indicators for the time period of 1990 to 2012. GDP, Market Capitalization, Total Value Traded, Turnover Ratio, Financial Depth, Investment, Foreign Direct Investment, Trade openness and Inflation are the variables

used. When researcher used approaches of panel data, they have to run Hausman's specification test for analysis. Whole results recommend positive and significant effect of stock market development on economic growth.

Kajurova and Rozmahel (2016) evaluated the stock market development and economic growth: Evidence from the European Union. Panel data techniques including co-integration tests, vector error correction models and Granger causality tests were applied to indicate the nature and direction of causality. The data from 1927 to 1936 were collected from 22 EU countries. Stock market indices and GDP were taken as the variables for the study. The empirical findings bring up implications for macroeconomic stabilization and development policies. The indicated relations also play a role in predicting economic growth and stock markets' development.

Nguyen and Bui (2019) examined the stock market, real estate market, and economic growth: an ARDL approach. The time series data for the year 1988 to 2005 using Granger causality test were sourced from state securities commission of Vietnam and General Statistics Office of Vietnam. Stock Market efficiency, net trading value, real estate market, and economic growth were used as variables to measure relationship between stock market, real estate and economic growth. The findings reveal that economic growth is positively associated with stock market and real estate market. With respect to stock market, the result that economic growth (GDP) is more influenced by stock market efficiency (SME) than net trading value by foreign investors (FI) is a novelty of this study. Osaseri and Osamwonyi (2019) studied the influence of stock market development on economic growth in BRICS. This study is based on secondary data, as the data were sourced from World Bank indicators, particularly from 1994 to 2015, the period of study. Real GDP growth rate is explained as dependent variable and market capitalization, turnover ratio, total value of traded ratio inflation rate as independent variable. The study employs inferential statistics for the purpose of data analysis. The study revealed that there is a positive correlation between stock market development indicators and BRICS's economic growth.

Shakhaowat and Islam (2019) evaluated the stock market development and economic growth in Bangladesh: an empirical appraisal. The time series data used in this study was taken on annual basis from World Development Indicators, which covers the period from 1989 to 2012. Economic growth was proxy by the growth rate of gross domestic product and the market capitalization is used as a proxy for stock market development. The result indicates that a long run relationship exists between stock market development

and economic growth in Bangladesh. The causality test results suggest a unidirectional causality from stock market development to the economic growth.

2.2.2 Nepalese Context

Though there is not enough research done in Nepal about the relation between Nepalese economy and stock market, there are few studies which help the researcher to summarize the past situation of Nepalese economy and stock market. Hence, the summary of Nepalese stock market and economic growth.

G.C. and Neupane (2006) examined the stock market and economic development: a causality test. The data for this study consists of 18 annual observations covering from 1988 to 2005 using Granger causality tests. Real GDP, nominal GDP, and stock market index and market capitalization are included. The data sources consist many issues of Economic Survey published by Government of Nepal, Finance Minister, and Quarterly Economic Bulletin published by NRB. The results are consistent with current theoretical foundation as examples of rational expectations hypothesis and wealth effect. But, the impact of stock market liquidity is not found significant on the cause of economic growth. Regmi (2012) evaluated the stock market development and economic growth: empirical evidence from Nepal. The study found that there is causal relation among the development of stock market and economic growth of Nepal for the period of 1994 to 2011 which were sourced from NEPSE. Economy and stock market are the variables used in this study. Unit root test, co-integration and vector error correction models are the tools used in this study. The researcher recommend that in Nepal, economic growth is significantly influenced by stock market development.

Phuyal (2016) analyzed the relationship between long-term stock market movements and macroeconomic variables. Using the vectorauto regression (VAR) model, the study reports a long-run equilibrium relationship with a set of macroeconomic variables, like inflation rate, interest rate, and remittance flow with the short-term disequilibrium corrected by 1.79 percent on monthly basis. Monthly data from January 2003 to December 2012 were used with a set of six for the observation.

Bist (2017) studied the stock market development and economic growth in Nepal: an ARDL representation. The data over the period of 22 years from 1993 to 2014 were sourced from NEPSE. Economic growth, market capitalization, gross capital formation And inflation are the variables used in this study. Autoregressive distributed lag (ARDL) is used for co-integration analysis. This study concludes that development of stock

markets and economic growth has positive long run co-integrating relationship in Nepal. Bhattarai et al. (2021) evaluated the stock market development and economic growth: empirical evidence from Nepal. This study period covers annual time series data from 1994 to 2019. The data were sourced from secondary data- NEPSE. Market capitalization and GDP are the variables used in this study. Autoregressive distributed lag (ARDL) is used to find the result. The researcher concluded that there exists a long run unidirectional causality relationship running from stock market development index to economic growth. Gurung (2022) examined the status of stock market concentration and the turnover in Nepal Stock Exchange. This study period covers time series data from 2003/04 to 2019/20. The data was sourced from secondary data. Augmented Dickey-fuller test is used to follow the unit root test of market concentration and value of the stocks traded ratio. The researcher concluded that there is negative association between market concentration and stock turnover.

2.2 Research Gap

There are still many research opportunity available in various topic related to growth of Nepalese stock market and economic growth, although some valuable studies of the country's stock market and economic growth is done. Many studies have not done previously, particularly when it comes how economic factors effects on the fluctuation of stock market. The gap of time period existing is covered in this research.

The study has taken tools which differs from those previous studies. The relation among Nepalese stock market and economic growth is covered in this study. In present, with the implementation of new rules and bylaws, enhancement on trading infrastructure, entrance of mutual funds and market makers, stock market of Nepal has also been changed significantly. By the use of updated data of Nepalese stock market, the goal of this study is to cover the gap of the research by examine the relation between NEPSE index and economic variable.

Thus, it seeks to fill up the gaps in the existing literature. This study attempts to provide empirical evidence on the predictability of GDP growth using real stock market returns. It uses lagged real stock return rather than market capitalization as a proxy of the financial market variable. It also attempts to explore the association of GDP growth on its lag and lagged stock returns.

CHAPTER III

RESEARCH METHODOLOGY

The research methodology consists of research design, population and sample, data collection tools, data analysis tools and concluded at the end. Research design comprises of overall framework of research on “how” and “what” activities are conducted for the research. Population and sample consists of number of sample banks for the research. Data analysis tools considers place from where the data are conducted. Data analysis tool contains tools required and used for research.

3.1 Research Design

Research design is whole framework for the activities to be done during a period of research study. It guides the collection and analysis of data, research instruments to be utilized, sampling plan to be followed, organized approach, integrated system that leads the researcher to formulate, implement and control the study. Basic elements of research design are problem or subject for investigation, methodology, data gathering, data analysis and report writing.

This study has employed descriptive and casual comparative research designs. Descriptive research aims to accurately and systematically describe a population, situation or phenomenon. Descriptive research is a study of status and is widely used in education, nutrition, epidemiology, and the behavioral sciences. Its value is based on the premise that problems can be solved and practices improved through observation, analysis, and description. A causal-comparative design is a research design that seeks to find relationships between independent and dependent variables after an action or event has already occurred. Causal-comparative research provides a viable form of research that can be conducted when other methods will not work.

3.2 Population and Sample

The resaearch is depend upon secondary sources of data and designed to measure the impact of stock market behavior in economy of Nepal. Thus, the population has been defined in the study as the data obtained about market capitalization, stock market index and concentration ratio. Data related to the market index of stocks like market capitalization, NEPSE index and concentration ratio are taken from the annual report published by NEPSE, the website of NEPSE and the data related to economic growth

like GDP, GNI are collected from the macroeconomic indicator books published by NRB.

3.3 Nature and sources of data Collection

This section enlighten on how data were collected for this study purpose. This study has been designed to determine the relationship of stock market and economy of Nepal. The data from the year 2003/2004 to 2022/2023 has been collected. This study has been designed to understanding the scenario of Nepalese economy and stock market of Nepal.

This study is based on the secondary data. This study use data of 20 years i.e. from 2003 to 2023 and these data are sourced from annual report of NRB, website of SEBON, NEPSE, World Bank and so on. The time series data are employed on this study. This study defines Gross Domestic Product and Gross National Income as dependent variable and Market Capitalization, NEPSE Index and Concentration Ratio as independent variable.

3.4 Data Analysis Tools

In order to draw certain conclusion and make inference, the systematic and careful examination of existing facts is done which is known as analysis. Most of the researches are involved in testing the relationship among the stock market and economic growth. And for this reason, various tools and techniques has been used for. Correlation analysis, regression analysis and another instruments are used for the analysis. The empirical results were evaluated by using annual data for the year 2003/2004 to 2022/2023 period in this study.

Descriptive Statistics

Mean

Arithmetic Mean, commonly used term in statistics, is the average of the numerical values set and is calculated by firstly calculating the sum of number in the set and then dividing resultant by count of those numbers. Mean is used in this study to find the average of the stock market indicators and economic growth which includes market capitalization, NEPSE Index, concentration ratio, and GDP & GNI through the study period of 2003/2004 to 2022/2023. The arithmetic mean is defined by the following formula:-

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

Where,

\bar{x} = Arithmetic Mean

$\sum X$ = Sum of values of all items, and

N = Number of items

Standard Deviation

Standard Deviation is the positive square root of the variance. Standard Deviation is the degree of dispersion or the scatter of the data points relative to its mean, in descriptive statistics. It tells how the values are spread across the data sample and it is the measure of the variation of the data points from the mean. The standard deviation of various variables used in this study from year 2003/04 to 2022/23 is calculated. Mathematically, the standard deviation is written as:-

$$\text{Standard Deviation (S.D)} = \sqrt{\frac{\sum(X-\bar{x})^2}{N}}$$

Where,

S.D. = Standard Deviation

$\sum(X-\bar{x})^2$ = Sum of Squares of the deviation measured from arithmetic average, and

N = Number of items

Minimum

The number is the value that is less than or equal to all other values in our set of data. At the time of arranging our data in ascending order, first number in our list would be the minimum. Although the minimum value is a unique number by its definition even it could be repeated in our data set. There cannot be two minima because one of these number must be smaller than the other.

Maximum

This number is the value that is greater than or equal to all other values in our set of data. At the time of arranging our data in ascending order, the last number in our list would be the maximum. There cannot be two maxima because one of these values would be greater than the other.

Correlation Analysis

The suitable statistical techniques to calculate relation among the variables in quantitative terms is correlation analysis. Correlation demonstrates the degree of relation among the variables. It can be expressed as the square root of coefficient of multiple determinations. It can be either positive or negative. When the value of variables are directly related, the correlation is said to be positive and vice-versa. But the correlation coefficient always stay within the range of +1 to -1. Mathematically, Correlation coefficient is calculated by using given formula:-

$$\text{Coefficient of correlation (r)} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2} \sqrt{n(\sum y^2) - (\sum y)^2}}$$

Where,

r = correlation coefficient

n = no. of year

$\sum x$ = Sum of series X

$\sum y$ = Sum of series Y

$\sum xy$ = Sum of the product X and Y

$(\sum x)^2$ = Sum of squares of series X

$(\sum y)^2$ = Sum of squares of series Y

In this study, coefficient of correlation is calculated between various indicators of stock market, such as market capitalization, stock market index, and concentration ratio and various indicators of economic growth such as, gross domestic product and gross national income.

Computation of correlation does not have any significance, it is important that we know what is meant by coefficient, what it tells about the data. To have answer generally the coefficient of correlation is interpreted in verbal description.

It is important to note that correlation does not provide information about the cause and effect. The correlation does not speak of the influence on variable has over the other. It is also to be understood that correlation is not equal to causation.

Multiple Regression Analysis

In statistical model, regression analysis is a set of statistical tools used to calculate the relation between a dependent and independent variables. Regression analysis helps one to understand how much the value of the dependent variable changes when any one of the independent variables is changes, being other independent variables constant. Most commonly, regression analysis is used to estimate the value of the dependent variable while the independent variables are constant or the conditional expectation of the dependent variable given the independent variables. Often, concentration is on the quintile of the conditional distribution of the independent variable or some other location parameter based on the independent variables. In every condition, the estimator is a function of the independent variables known as the regression function. Characterizing how dependent variable varies around the regression function which a probability distribution can explain is also very important in regression analysis.

In this study, basically economic growth indicators are dependent variables and stock market indicators are independent variables. To find the relation among the stock market and economy growth is the main aim of this study. The variables which is taken in the models are Gross Domestic Product (GDP), Gross National Income (GNI), Market Capitalization (MCR), NEPSE Index (NI) and Concentration Ratio (CR).

Theoretical proposition of the model is that GDP can be considered conditioned by the limits of various associated with stock market. To approximate the theory, the function can be expressed as follows;

$$\text{GDP} = f [\text{MC}, \text{NI}, \text{CR}] \dots \dots \dots (3.1)$$

Where,

GDP = Real gross domestic product at producers price

MC = Market Capitalization

f = Function

NI = NEPSE Index

CR = Concentration Ratio

The equation which is estimated has been defined as below:

$$\text{GDP} = a + b_1\text{MC} + b_2\text{NI} + b_3\text{CR} + e_t \dots \dots \dots (3.2)$$

Likewise, the statement of the theory is that, GNI can be considered conditioned by the limits of various associated with stock market. To approximate the theory, the function can be expressed as below;

$$\text{GNI} = f[\text{MC}, \text{NI}, \text{CR}] \dots \dots \dots (3.3)$$

Where,

GNI = Gross National Income

The estimated equation has been defined as follows:

$$\text{GNI} = a + b_1\text{MC} + b_2\text{NI} + b_3\text{CR} + e_t \dots \dots \dots (3.4)$$

When the independent variable is 0, the constant value which is the intercept model shows the average level of dependent variable. In other word, it is important to realize that the constant 'a' represents the average or mean impact of all the variables omitted from the model on the dependent variable. In the study, constant of the regression is determined to select dependent and independent variables listed in the model 3.4.

While maintaining the effect of all independent variables in the constant model of regression, the coefficient of each independent variable shows the marginal relation among the variable and the value of the dependent variable. It is also known that a constant number which find the changed value of dependent variable per unit affects on the value of independent variables.

With the help of regression equations perfect prediction is practically hard to predict. Standard error of estimate is a measure of the reliability of the estimating equation, indicating the variability of the observed points around of regression line, or the degree in which numbers on the regression line differs from expectations. The dot will be closer with the regression line and the estimates depend upon the equation line will be better if SEE is lower. There will be no variation in the line and perfect correlation is SEE is 0. Therefore, to ascertain good and representative regression line as a description of the average relationship between two series is

possible by the help of SEE.

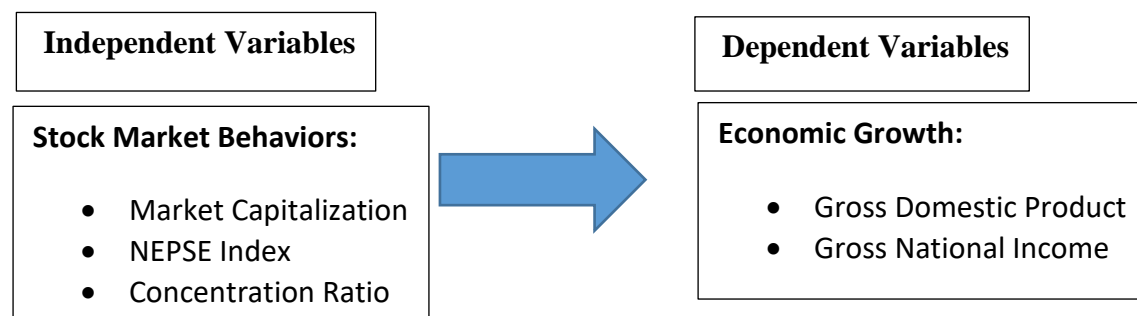
3.5 Research Framework

Research framework is a scheme of concept (variables) which help us to identify what is important or significant and provide research questions and objectives to help co-ordinate and focus our research effort. A measure characteristic that assumes different values among subject is a variable. Variable that is manipulated by researcher in order to determine its effect of influence on another variable is independent variables and dependent variable attempts to indicate the total influence arising from the influence of the independent variable.

Hence, based on above theories and literature, independent variables are market capitalization, NEPSE Index and concentration ratio whereas, dependent variables are Gross Domestic Product and Gross National Income which develop research framework of this study. Figure 3.1 shows the relationship between dependent variables and independent variables.

Figure 1

Research framework



The objective of this study was to know the growth of economy by the performance of stock market; market Capitalization, NEPSE Index and Concentration Ratio. Gross Domestic Product and gross National Income was dependent Variables

3.6 Definition of variables

Gross Domestic Product

Gross Domestic Product is a measure of macroeconomic of the total value created through the production of the final goods and services in a country during a certain period. GDP is the monetary value of the finished goods and services made in a nation during a specified time. GDP provides an economic snapshot of a country's economy and growth rate. Economists can use GDP to assess whether an economy is growing or experiencing a recession. Real GDP must be corrected for population growth if the interest is not just how much the output of the whole economy increase overtime, but also how much produced output per person increases overtime (Kathurimn, 2010).

Gross National Income

Gross National Income is another measure of economic growth. It is the total income earned by the nation, regardless of whether the underlying economic activity takes place domestically or abroad. It represents the value generated by a country's economy in a given period of time, whether the sources of the value created is domestic production or receipts from outside the nation. The GNI is largely considered as a better indicator to account for the income available to the dwellers of a country because it captures the incomes related to the mobility of factors of production (Osamwony & Abudu, 2013).

Market Capitalization

Market Capitalization is the total value of company's outstanding common shares owned by stockholders. It is equal to the market price per common share multiplied by the number of common share outstanding. Market capitalization is the most important indicator of stock market which help the investors to determine the risks and returns in the share. It helps the investors to choose the stock that can meet their risk and diversification criterion (Nazir, 2010).

NEPSE Index

NEPSE Index is an index that measures a stock market, or a subset of the stock market, that helps investors to compare current stock price levels with past stock price to calculate market performance. The calculation of market index value comes from the price of

underlying holding. Some indexes have values based on market-cap weighting, revenue-weighting, float-weighting, and fundamental-weighting (Naik & Pdhi, 2012).

Concentration Ratio

Stock market concentration is related with the degree to which a small number of firms dominate a market. The market concentration is the ratio of the total market capitalization to the market value of the top ten companies as reported by NEPSE. High market concentration leads to decrease competition and strengthening dominant firms, but low market concentration suggest a more competative market with many players in the market (Gurung, 2022). So, high concentration is not required due to its negative impact on the market liquidity. There is low concentration in more developed market whereas quite large in less developed market (Risal, 2016).

CHAPTER IV

RESULTS AND DISCUSSION

This chapter presents the results analyzed from the consolidated data of the stock market and economic indicator of Nepal for the period between 2003/2004 to 2022/2023. All the twenty years data are taken as sample. A regression analysis is undertaken to determine the impact of selected exogenous factors on GDP and GNI. According to the study various factors have been found to determine the GDP and GNI of Nepal for the period under study.

4.1 Results

4.1.1 Descriptive Statistics

Descriptive statistics are brief descriptive coefficients that summarize a given set of data, which can be either a representation of the entire or a sample of a population. Descriptive analysis was used in this study to give comprehensive description of the data used in this study by determining the minimum value, maximum value, mean and Standard deviation. Presentation of Minimum Value, maximum value, mean and Standard Deviation of the stock market development and economic growth indicators which are selected are shown on table 1.

Table 1

Descriptive Statistics

Variables	Numbers	Minimum	Maximum	Mean	Std. deviation
GDP	20	5.7	6.7	6.25	.329
GNI	20	5.7	6.7	6.26	.330
MC	20	4.5	6.6	5.75	.635
NI	20	2.3	3.5	2.91	.342
CR	20	28	90.7	56.57	23.44

Source: Appendix II

Table 1 represent the clear figure of statistics summarized on the indicators of economic growth and stock market development. The data contain the period from 2003/04 to 2022/23 of Nepal. The table demonstrates that the minimum value of GDP, GNI, MC, NI and CR are 5.7, 5.7, 4.5, 2.3 and 28 respectively and maximum value are 6.7, 67, 6.6, 3.5 and 90.7 respectively.

The arithmetic mean of GDP, GNI, MC, NI and CR are 6.25, 6.26, 5.75 and 56.57 respectively and the standard deviation of GDP, GNI, MC, NI and CR are .329, .330, .635, .342 and 23.44 respectively. The standard deviation of MC is higher than others. So, the stock market have high risk.

4.1.2 Correlation Analysis

The correlation coefficients between dependent variables and independent variables are calculated to find out any kind of relation exist between them. The dependent variables are gross domestic product and gross national income whereas the independent variables are market capitalization, NEPSE Index and concentration ratio for the period of 2003/04 to 2022/23.

Table 2 shows the association among the variables studied in this study. The coefficients provide calculation of the intercepts and slope coefficients. The column of standard error provides the standard deviation of calculated regression coefficients. The results of correlation are shown in the form of matrix in table 2.

Table 2*Correlation coefficient*

	GDP	GNI	MC	NI	CR
GDP	1				
	.000				
GNI	1.000**	1			
	.000				
MC	.963**	.964**	1		
	.000	.000			
NI	.881**	.882**	.942**	1	
	.000	.000	.000		
CR	-.775**	-.774**	-.725**	-.590**	1
	.000	.000	.000	.004	

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Appendix II

Table 2 presents the correlations between the study variables. The correlation coefficient is a value between +1 and -1. A correlation coefficient of +1 indicates a perfectly positive correlation and -1 indicates a perfectly negative correlation. The following correlations are worth highlighting. The correlation coefficient among MC and GDP is .963. The correlation coefficient of MC and GNI is also 0.964 which indicates that there is perfectly positive relationship of MC with GDP and also with GNI. The correlation coefficient of MC with growth variable is meaningful. Few interferences can be made in the context of this significant relationship. As the MC is the product of market price per shares multiplied by number of outstanding shares and if the companies are doing good in a bull market, it sends a positive message to the general public who tend to invest more in the market and

companies. The result is that MC is significantly and positively correlated with GDP and GNI.

Similarly, the correlation between NEPSE index and GDP is 0.881 and correlation between NEPSE Index and GNI is 0.882 which shows that the relationship between stock market index and Economic growth is perfectly positive. The relation demonstrates that higher NI is considered as a good indicator of stock market which involve positively to the economy. Thus, higher NI in stock market leads towards the higher GDP and GNI. Hence, there is certainty of high positive correlation.

Likewise, the correlation between Market concentration ratio and GDP is -0.775 and with GNI is -0.774 which indicates towards the negative relation between the CR and economic growth. The result of this study shows that there exist inverse relation among CR and economic growth, showing that as concentration on stock decreases, there is increases in GDP and GNI during the study period.

Therefore, there is close relation among the efficiency of market and the economy except ignoring some of the coefficient values. The relations existing among the indicators of stock market and of economic growth is just as respectable and acceptable.

4.1.3 Regression analysis

Regression analysis is the statistical tool, with the help of which we can predict the unknown value of one variable from known value of any other variable. Regression analysis is carried out to determine whether the dependent variable is influenced by the given independent variable or not.

To investigate the causality among the indicators of stock market and economic growth, two regression have been run. The variables that are taken into the regression are gross domestic product, gross national income, market capitalization, NEPSE index and concentration ratio.

Having indicated the Pearson correlation coefficients, the regression analysis has been carried out to examine the impact of variables towards other variables. More specifically, the estimated regression results of GDP and GNI have been tabulated. The result is depend upon time series data for the study period of 2003/04 to 2022/23.

Impact of NEPSE Index, Market Capitalization and Concentration Ratio on Gross Domestic Product

The impact of stock market variables like; Market Capitalization, NEPSE Index and Concentration Ratio on Gross Domestic Product has been estimated and the results are tabulated as follows:

Table 3

Analysis of regression

	Model	Coefficients	Standard Error	t-stat	Sig.
1	(Constant)	3.790	.335	11.304	<.001
	MC	.506	.119	4.265	<.001
	NI	-.115	.188	-.611	.550
	CR	-.002	.001	-1.457	.165

Table 3 represent the coefficients of independent variables. The model of regression can be expressed as:

$$GDP = 3.790 + .506b_1 + (-.115b_2) + (-.002b_3)$$

The regression coefficient of GDP on MC is positive i.e. 0.506 which demonstrate that rise in MC leads to rise in GDP. This regression coefficient has .119 as SE, which measures the variability of the values observed around the fitted regression line. The coefficient's t-statistic is 4.265 and P-value is less than 0.001. So, t-statistic is insignificant and P-value is significant at 5% significance level.

Coefficient of regression GDP on NI is negative i.e. -.115 which represent that the rises in NI leads to decline in GDP. This regression of coefficient has .188 as Standard error, which calculates the variability of the observed value around the fitted regression line. The coefficient's t-statistic is -.611 and P-value is 0.550. So, t-statistic is insignificant and P-value is insignificant at 5% significance level.

Coefficient of regression of GDP on CR is negative i.e. -.002 which represent that rise in CR leads to fall in GDP. This regression of coefficient has .001 as Standard error that measures the variability of the observed values around the fitted regression line. The

Coefficient's t-statistic is -1.457 and P-value is .165. So, t-statistic and P-value is significant at 5% significance level.

Table 4

Significance of the model

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.971	.942	.931	.0864

Table 4, shows that the R-square value is 0.942 which indicated that the model is good fit for the study variables. Hence, R-square = 0.942 means that the model using stock market variables of this study explains 94.2% of the variability of economic growth. And, the remaining are explained by other variables which are not under study. The adjusted R-square increases when the new term improves the model by less than expected. Here, the value of adjusted R-square is 0.931 which indicates the model is good fit.

Table 5

ANOVA Table

Model		Sum of Square	d.f	Mean Square	F	Sig.
1	Regression	1.943	3	.648	86.795	.000
	Residual	.119	16	.007		
	Total	2.062	19			

a. Dependent Variable: GDP

b. Predictors: (Constant), CR, NI, MC

Table 5 presents that to test the significance of the findings, analysis of variance (ANOVA) is done. A P-value of 0.000 is registered indicating that the relationship between economic growth and stock market was significant at 1% level of significance level. The F-value of 98.719 with a corresponding-value of 0.0 also confirms that estimated regression model is well fitted statistically.

Impact of Market Capitalization, NEPSE Index and Concentration Ratio on Gross National Income

The impact of stock market variables like; Market Capitalization, NEPSE Index and Concentration Ratio on Gross National Income has been estimated and the results are tabulated as follows:

Table 6

Analysis of Regression

Model		Coefficients	Standard errors	t-stat	Sig.
1	(Constant)	3.773	.333	11.322	<.001
	MC	.510	.118	4.326	<.001
	NI	-.117	.817	-.628	.539
	CR	-.002	.001	-1.420	.175

Table 6 represent the coefficients of the independent variables. The regression model can be expressed as:

$$GNI = 3.773 + .5103b_1 - .117b_2 - .002b_3$$

Coefficient of regression of GNI on MC is positive i.e. .510 which demonstrates that rise in MC guides to rise in GNI. This regression of coefficient has 0.118 as Standard error, that measure the variability of the values observed around the fitted regression line. The coefficient's t-statistic is 4.326 and p value is less than 0.001. Thus, t-statistic is insignificant and p value is significant at 5% significance level.

Coefficient of regression of GNI on NI is negative i.e. -.117 which demonstrate rise in NI guide to decline in GNI. This regression of coefficient has .817 as Standard error, that measures the variability of values observed around the fitted regression line. The coefficient's t-statistic is -.628 and p-value is .539. Thus, t-statistic and p-value is insignificant at 5% level of significance.

Coefficient of regression of GNI on CR is negative i.e. -.002 which demonstrate rise in CR leads to fall in GNI. This regression of coefficient has 0.01 as SE, which measures the variability of the values observed around the fitted regression line. The coefficient's t-statistic is -1.420 and p-value is .175. So, t-statistic is and p-value is insignificant 5% level of significance.

Table 7*Significance of the model*

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.971	.943	.932	.059

Table 7 shows that the R-square value is 0.943 which indicated that model is good fit for the study variables. Hence, R-square =0.943 means that the model using stock market variables of this study explains 94.3% of the variability of economic growth. And, the remaining are explained by other variables which are not under study. The adjusted R-square increases when the new term improves the model by less than expected. Here, the value of adjusted R-square is 0.932 which indicates the model is good fit.

Table 8*ANOVA Table*

Model	Sum of square	d.f.	Mean Square	F	Sig.
1 Regression	1.952	3	.651	100.267	.000
Residual	.118	16	.007		
Total	2.070	19			

a. Variables: GNI Dependent

b. Predictors: (Constant), CR, NI, MC

Table 8 presents that to test the significance of the finding, analysis of variance (ANOVA) is done. A P-value 0.000 is registered indicating that the relationship between economic growth and stock market was significant at 1% level of significance level. The F-value of 88.251 with a corresponding-value of 0.000 also confirms that estimated regression model is well fitted statistically.

4.2 Discussion

On the basis of data presentation and analysis in above sub chapter, the study has mainly focused on the relationship between stock market behavior and economy of Nepal. This chapter is devoted to analyze and present result derived from the use of secondary data. The study considered the variables like GDP, GNI, MC, NI and CR. The result has been derived by using descriptive statistics, correlation analysis and multiple regression analysis.

The result explains that stock market of Nepal increases progressively over the time which represent that the impact on GDP and GNI is positive. Variables economic growth show positive relationship with primary market's size. GDP and GNI are increasing which shows the positive relation with MC and NI and negative relation with CR. Comparison with macro variables like GDP and GNI, it is possible to say that stock market can have positive influence on economic growth, when stock market increase credit in the market, the activities of economy rises in the market. Hence, bank credit relation is both positive and negative correlated with future rate of economic growth.

Bist (2017) analyzed the effect of stock market development and economic growth in Nepal which was consistent among the objectives of these two studies. But, Bist (2017) adopted Autoregressive distributed lag (ARDL) but this study applied descriptive, Correlation analysis and multiple regression analysis which are contradictory point between these two studies. Also Bist (2017) while researching stock market index and macroeconomic variables in Nepal, researcher had taken data from 1993 to 2014 but for this study data from 2003 to 2023 were taken for study. Thus, there were contradiction between the study of Bist (2017) and the particular study. In the same way, the study analyzed the factors of stock market development and economic growth rate in Nepal which was similar to the study of Bhattarai et al. (2021).

The nature of the relation among stock market returns and GDP and GNI of Nepal is examined in this study. The results show that there was significant relationship between economic growth in Nepal. This result is consistent with Boubakari (2010) that observes that this association in a variety of countries at various stages of economic and development of finance. However, non-significance coefficient of stock market returns with control variables estimates shows that the Nepalese stock market is not yet totally aligned with the economy to predict the output growth with current market performance.

To sum up, in the economy of Nepal, the relationship existing between the performance of GDP, GNI is significant with the stock market performance. This leads to request to all the shareholders involved to rise their efforts in improving the performance of stock market. Overall, the result of regression analysis shows a significant relationship among the stock market performance and economic growth as measured by GDP and GNI.

The calculated coefficient of correlation of market capitalization with GDP and GNI is 0.963 and 0.964. Also the correlation coefficient of NEPSE Index with GDP and GNI is 0.881 and 0.882 respectively. The coefficient is positive and significant. The relation show that, with the rise in the market size as measured by MC and NI, the economic size as

measured by GDP and GNI also rises. This result helps in the assumption theories of (Bilal et al., 2016) and (Gabriel, 2020). These results were consistent with the assumption.

The estimated correlation of Concentration ratio with GDP and GNI with CR is -0.775 and -0.774 respectively. The correlation is negative which tells us that, if CR increases, the economic size measured by GDP and GNI decreases. This results is consistent with past empirical evidence like Gurung (2022). It implies that increase in CR limits the diversification opportunity, reduce the competition, and increases the systematic risk which effect on the overall performance of the stock market and economic growth of Nepal.

The estimated coefficient of GDP and GNI on MC have positive and expected sign with 0.506 and 0.510 respectively. The value of t-statistics of MC is significant at 5% level of significance.

The estimated coefficient of GDP and GNI on NI have negative with unexpected signs with value -.115 and -.117 respectively. Also the coefficient of GDP and GNI on CR have negative and unexpected with value -.002. The value of t-statistics of NI and CR are insignificance at 5% level of significance which is unexpected part of the study. The casual relation tells that with the increase in the size of the market as measured by NI, the size of the economy as measured by GDP and GNI decreases. This result is supported by the study of Abubkar (2016) and (Kandari, Roumi, & Roomy, 2020) which concluded correlation between economic growths and NI and CR was unexpected.

CHAPTER V

SUMMARY AND CONCLUSION

This chapter presents an overview of the study in the summarized form along with major findings and conclusion. Accordingly, it is organized in three sections i.e. summary, conclusion and implication.

5.1 Summary

The basic objective of this research study was to understand the basics of the stock market and to take an overview of the Nepalese stock market. Furthermore, this study was done in order to investigate the impact of stock market behavior on the economic growth in Nepal. This study is categorized into five chapters. The first chapter deals with the background of the study, statement of problem, objective of the study, significance of the study, theoretical framework, and limitation of the study. The second chapter deals with the review of the related literatures and available studies written by the expert and researcher related to the stock market behavior and economic growth. The third chapter deals with the research methodology which presents the methodology used in this study. It deals with research design, population, sample size, sampling technique, nature and sources of data, data collection procedure and tools used for analysis of the data. Descriptive research design was used in the study. The fourth chapter fulfills the objectives of the study by presenting the data and analyzing them with the help of various statistical tools and techniques. The study examines whether there exist any relation among Nepalese stock market behavior and economic growth over a twenty-year period from 2003/04 to 2022/23 using a test of cause. The data needed are collected using the variables such as GDP, GNI, MC, NI and CR. The study was totally based on the secondary data. Based on related theories and literature, the research framework of this study has been developed by market capitalization, NEPSE index, Concentration Ratio as independent variables and Gross Domestic Product and Gross National Income as dependent variables. To examine the correlations between GDP, GNI and stock performance, SPSS software was used. Descriptive statistics, correlation, regression and analysis were used to determine the relationship between the variables. The fifth chapter summarizes the whole study along with conclusion and implications.

The general objective of the study were to find out the relationship between stock market and market economy. The result showed that the stock market is one of the indicators of the situation of the country and the relationship between performance of GDP and GNI with stock market indicators is significant in Nepalese economy.

5.2 Conclusion

The major conclusion of the study is that market capitalization and NEPSE index have shown a very strong relation with GDP and GNI that significantly influences the economic growth of Nepal. Furthermore, the result shows that the stock market capitalization has positive impact on economic growth which resembles with the findings of Bist (2017), Bhattarai et al. (2021), Boubakari and Jin (2015). Similarly, the study shows that NEPSE index has negative impact on economic growth of Nepal. Likewise concentration ratio have negative correlation with GDP and GNI that shows positive impact on economic growth of Nepal which supports the result of Risal (2016). In this study different macroeconomic indicators are seems to be the core indicator for the movement of the stock market. From the above statement, it can be clearly seen that the macroeconomic factor plays a significant role for the stock movements.

Finally, the study concluded that there is a significant impact of stock market development on economic growth of Nepal. It reveals that the high the stock market capitalization, NEPSE index and low Concentration Ratio, higher would be the economic growth of Nepal.

5.3 Implications

The study has investigated the stock market behavior and economics growth in Nepal. There exist many ground scope in term of data, model and methodology for studies in coming days. On the Basis of above result of the study, following implication can be drawn out:

- The Securities Board of Nepal regulates the whole securities market in Nepal. To make the Board functional, the number of staff members must be sufficient and well trained in all aspects of the securities market. It should bring new and emerging stock market regulatory systems to match international standards.

- To participate in the stock market, market makers and investment bankers should be encouraged.
- To improve the stock market, more foreign investors, operators of the informal sector, and private limited liability companies should be encouraged to join. State-of-the-art technology such as automated trading and settlement procedures, electronic fund clearing, and the elimination of physical share transfers should also be maintained. It contributes to a growth in the number of listed businesses, which raises GDP.
- Nepal has only one secondary market, the Nepal Stock Exchange, based in Kathmandu and a few other places. Thousands of investors outside of these designated cities are suffering owing to a lack of convenient access to the secondary market. All investors outside of these specified cities should be able to participate in securities transactions. They have no alternative method to participate in the secondary market. This increases the stock market's trading turnover. It is expensive and risky. As a result, secondary markets in each province should expect to extend their offerings.
- Nepal's political and economic stability has improved investment opportunities for public, private, and global firms. This will definitely enhance market capitalization, which will increase GDP and GNI.
- To promote active stock trading, high transaction costs should be addressed. Investors should have access to the most information, transparency, and corporate governance at the lowest possible cost.
- Participating firms must communicate information on a timely and regular basis. Provisions should be implemented to require organizations to report their financial information at least periodically. All required organisms should be established to ensure the market's efficient operation, and prospective and existing investors should be made more aware of the market's functioning mechanism. It will improve the performance of the Nepal Stock Market and its index.
- To further understand the behavior of Nepal's stock market and economic growth, additional factors such as saving, inflation rate and fixed capital formation should be added by employee other statistical methods and increasing the study period.

REFERENCES

- Abubakar, A. B. (2016). Economic growth impact of Indian stock market: an econometric investigation. *Pacific Business Review International (Finance section)*, 1(1), 18-54.
- Adhikari, N. (2011). Securities Market Development in Nepal. *The Nepalese Management Review*, 16(1), 59-67.
- Ahmad, Z., Khan, A.A., & Tariq, A. (2011). Stock market development and economic growth: A comparative study of Pakistan and Bangladesh. *African Journal of Business Management*, 6(8), 2985-2989.
- Antonios, A. (2010). Stock market and economic growth: an empirical analysis for Germany. *Business and Economics Journal*, 2010, 1-12.
- Anyamele, O. D. (2010). The role of stock market in Sub-Saharan African economies. *International Journal of Business, Accounting, & Finance*, 4(2), 129- 143.
- Artadi, E.V., & Sala-i-Martin, X. (2003). The Economic Tragedy of the XXth Century: Growth in Africa. NBER Working Paper Series, 9865.
- Bachha, E.L. (1990). A Three-gap model of foreign transfers and the GDP growth rate in developing countries. *Journal of Development Economics*, 32(1): 279-296.
- Badr, O. M. (2015). Stock market development and economic growth: Evidences from Egypt. *International Journal of Trade, Economics and Finance*, 6(2), 96-101.
- Barrow, R.J. (1996). The stock market and investment. *Review of financial studies*, 3, 115-131.
- Bhattarai, J.K., Gautam, R., Chettri, K.K (2021). Stock market Development and Economic Growth: Empirical Evidence From Nepal. *Global Business Review*, 25(3), 33-48.

- Bilal, B., Chen, S. & Komal, B. (2016). The impact of stock market development on economic growth: evidence from lower middle income countries. *Management and Administrative Sciences Review*, 5(2), 86-97.
- Bist, J.P. (2017). The stock market development and economic growth in Nepal: an ARDL representation. *Journals of Finance and Economics*, 5(4), 164-170.
- Biswal, P. C., & Kamaiah, B. (2001). *On stock Market development, banks, and economic growth in India*. Bangalore, India: Institute for Social and Economic Change.
- Biswanger, M. (1999). *Stock markets, speculative Bbubble and economic growth*. London: The MIT Press.
- Boubakari, A.A., & Jin, D. (2010). The role of stock market development in economic growth: evidence from some euro next countries. *International journal of financial research*, 1(1), 14-20.
- Branson, W.H., & Henderson, D.W. (1985). The specification and influence of assets markets. In R.W. Jones, & P.B. Kenen, *In Handbook of International Economics* (pp. 749-805). Amsterdam: Elsevier.
- Carp, L. (2012). Can stock market development boost economic growth? Empirical evidence from emerging markets in Central and Eastern Europe. *Procedia Economics and Finance*, 3, 438-444.
- Carporale, G.M. & Peter, G. (2004). Stock market development and economic Growth: The casual Linkage. *Journal of Economic Development*, Chung-Ang University, Department of Economics, 29(1), 33-50.
- Carporale, G.M., Howells, P. & Soliman, A.M. (2005). Endogenous Growth Models and stock Market Development: Evidence from Four Countries. *Review of Development Economics*, 9, 166-176.
- Chen, S., & Komal, B. (2016). Impact of stock market development on economic growth: evidence from lower middle income countries. *Management and Administrative Sciences Review*, 5(2), 86-97.

- Cooper, R.V. (1983). Efficient capital markets and the quantity theory of money. *Journal of finance*, 29(3): 887-908.
- Deb, S. G., & Mukherjee, J. (2008). Does stock market development cause economic growth? A time series analysis for Indian economy. *International Research Journal of Finance and Economics*, 21(3), 142-149.
- Dornbusch, R.A. (1980). Exchange rates and the current account. *American Economic Review*, Vol. 70., No. 5, 3-20.
- Elbadawi, I.A. (1999). External aid: help or hindrance to export orientation in Africa. *Journal of African Economies*, 8(4), 576-616.
- Fama, E.F. (1970). Efficient Capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2), 383-417.
- Fama, E.F. (1991). Efficient capital markets: II. *Journal of finance*, XLVI(5), 1575-1617.
- Filer, R.K., Hanousek, J., & Campos, N.F. (2000). Do stock market promotes economic growth? *William Davidson Institute Working Paper Series*, (267). *William Davidson Institute at the University of Michigan*.
- Frankel, J. A., & Romer, D.H. (1999). Does trade cause growth? *American Economic Review*, 89(3): 379-399.
- GC, S. B. & Neupane, S. (2006). Stock market and economic development: a causality test. *The Journal of Nepalese Business Studies*, 3(1), 159-231.
- Goldsmith, R.W. (1996). *Financial structure and economic development*. New Haven: University Press.
- Gomanee, K., Morrissey, O., Mosley, P., & Verschoor, A. (2005). *Aid, pro-poor Government Spending and Welfare*.
- Gurley, J.G, & Shaw, E.S. (1960). Money in a theory of finance. *Washington D.C.:* *Brooking Institution*.
- Gurley, J.G., & Edward, S.S. (1960). *Money in a theory of finance*. Washington D.C.: Brookings Institution.

- Gursoy, C.T. & Tuncer, C. (1998). *Stock markets and economic growth: A Casualty Test*. Institute of social science, Istanbul Technical University.
- Gurung, R. (2022). Status of the stock market concentration and Turnover at Nepal Stock Exchange. *Pravaha*, 28(1), 71-76.
- Hailemariam, A., & Guotai, C. (2014). Stock market development and economic growth: Empirical evidence for emerging market economies. *International Journal of Economics, Finance and Management Sciences*, 2(2), 171-181.
- Har, W. M., Ee, C. S., & Tan, C. T. (2008). Stock market and economic growth in Malaysia: Casualty test. *Asian Social Science*, 4(4), 86-92.
- Harrison, A. (1996). Openness and growth: A time series, cross-country analysis for developing countries. *Journal of Development Economics*, 48(3): 419-447.
- Hjertholm, P., laursen, J., & White, H. (2000). Foreign aid and the macro economy. *Foreign Aid and Development, London*, 351-371.
- Hossain, S., & Kamal, M. (2010, August). Does stock market development cause economic growth? A time series analysis for Bangladesh economy. In *International conference on applied economics* (pp. 299-305).
- Hossin, M. S., & Islam, M. S. (2019). Stock market development and economic growth in Bangladesh: An empirical appraisal. *International Journal of Economics and Financial Research*, 5(11), 252-258.
- Howells, P., & Keith, B. (2000). *Financial markets and institutions*, 3rd Edition. Prentice Hall.
- Jahfer, A., & Inoue, T. (2014). Financial development and economic growth: The role of stock market in Japan. *International Review of Business Research Papers*, 10(2), 46-61.
- Kajurova, V. & Rozmahel, P. (2016). Stock market development and economic growth: Evidence from the European Union. *Acta Universitatis Agriculturae et Silviculturae Mendelianar Brunensis*, Mendel University Press, 64(6), 1927-1936.

- Kapaya, S. M. (2020). Stock market development and economic growth in Tanzania: an ARDL and bound testing approach. *Review of Economics and Political Science*.
- Kasimu, A., & Osamwonyi, I. (2013). Stock market and economic growth in Ghana, Kenya and Nigeria. *International Journal of Financial Research*, 4(2).
- Kathurimn, C.K. (2010). The perceived benefits and challenges of demutualization of the NSE. University of Nairobi.
- KC, B. (2004). Development of Stock Market and economic growth: A case of Nepal. *SEBON Journal*, 1, 25-37.
- Keynes, G.M. (1996). *The general theory of employment, interest and money*. Macmillan, London.
- Levin, R. (2000). Financial development and economic growth: views and agenda, *Journal of economic literature*, 35(2), Pp. 539-568.
- Levine, R., & Renelt, D. (1992). A sensitivity analysis of cross-country growth regression. *American Economic Review*, 82(4), 942-963.
- Linter, J. (1978). Distribution of incomes of corporations among dividends, retained earnings and taxes. *American Economic Review*, 46(8): 97-113.
- Lucas, R. (1972). Expectation and the neutrality of money. *Journal of economic theory*, No. 4, 103-124.
- Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22, 3-42.
- Mayers, S.C., & Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*. No. 13 (2 June), 187-221.
- McKinnon, R. (1973). *Money and capital in economic development*. Washington D.C: Brookings Institution.
- Minsky, H.P. (1986). *Stabilizing an unstable economy*. New Haven and London: Yale University Press.

- Miskin, F.S. (2001). *The Economics of Money Banking and Financing Markets*. New York Addison Wesley Longman.
- Modigliani, F., & Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, Vol. 48, 261-297.
- Mohtadi, H., & Agarwal, S. (2011). Stock market development and economic growth: Evidence from developing countries. [On line] Available at: <http://www.researchgate.net>.
- Muslumov, A., & GURSOY, C. T. (2000). Stock markets and economic growth: A casualty test. *Dogus University Journal*, 2, 124-132.
- Nguyen, M. L. T., & Bui, T. N. (2019). Stock market, real estate market, and economic growth: an ARDL approach. *Investment Management & Financial Innovations*, 16(4), 290-302.
- Nzomoi, J. N., & Ikiiki, S. M. (2013). An analysis of the effects of stock market development on economic growth in Kenya.
- Ogboi, C., & Oladipo, S. O. (2012). Stock market and economic growth: The Nigerian experience. *Research Journal of Finance and Accounting*, 3(4), 103-110.
- Osamwonyi, I. O., & Kasimu, A. (2013). Stock market and economic growth in Ghana, Kenya and Nigeria. *International Journal of Financial Research*, 4(2), 83.
- Osaseri, G., & Osamwonyi, I. O. (2019). Impact of stock market development on economic growth in BRICS. *International Journal of Financial Research*, 10(1), 23-30.
- Oskooe, S. A. (2010). Emerging stock market performance and economic growth. *American Journal of Applied Sciences*, 7(2), 265.
- Paramati, S. R., & Gupta, R. (2011). An empirical analysis of stock market performance and economic growth: Evidence from India. *Paramati, SR and Gupta*, 133-149.

- Paudyal, S. (2010). Nepalese Stock Market: Development impediments and challenges. *SEBON Journal*, 4, 95-103.
- Pearce, D.K., & Roley, V.V. (1983). The reaction of stock prices to unanticipated changes in money: a note. *Journal of Finance*, 38(4): 1323-1333.
- Peevey, R.U. (1993). The individual investor in a market: Forming a belief regarding market efficiency. *Financial services review*, Vol. 2, 87-96.
- Piazolo, M. (1995). Determinants of South Korea. *International Economic Journal*, 9(2): 109-133.
- Pradhan, R.S. (2006). Stock market behavior in small capital market: A case in Nepal. *Research in Nepalese Finance, Second edition*, 106-135.
- Regmi, U.R. (2012). Stock market development and economic growth: Empirical evidence from Nepal. *Administration and Management Review*, 24(1), 1-28.
- Reilly, F., & Brown, C. (1997). Investment analysis and portfolio management (5th ed.). *New Jersey: Prentice Hall Inc.*
- Risal, N. (2016). A critical assessment on capital market development in Nepal. *NCC Journal*, 4(1), 331-340.
- Ritter, L.S., & Silber, W.L. (1993). Principles of Money. *Banking and Financial Market, United States.*
- Rodrik, D. (2003). Growth strategies. *Centre for economic policy research.*
- Romar, P., & Rivera, B. (1989). International trade with endogenous technical change. *Chicago: University of Chicago.*
- Romer, P. (1986). Increasing returns and long-run growth. *Journal of political economy*, 9(5), 1002-1037.
- Sala-i-Martin, X. (1997). Regional Cohension: Evidence and theories of regional growth and convergence. *European Economic Review* 40(5): 1325-1352.
- Sala-i-Martin, X. (2003). Regional Cohension: Evidence and theories of regional growth and convergence. *European Economic Review*, 40(5): 135-155.

- Schumpeter, J. (1912). The theory of economic development. *Harvard University Press*.
- Shahbaz, M., Ahmed, N., & Ali, L. (2008). Stock market development and economic growth: ARDL causality in Pakistan. *International Research Journal of Finance and Economics*, 14(1), 182-195.
- Shakhaowat, H. & Islam, S. (2019). Stock market development and economic Growth in Bangladesh: An empirical Appraisal. *International Journal of Economics and Financial Research*, 5(11), 252-258.
- Shaw, E.C. (1973). Financial deepening in economic development. *New York: Oxford University Press*.
- Srinivasan, P., & Prakasam, K. (2014). Stock market development and economic growth in India: An Empirical analysis. *International Journal of Finance & Banking Studies, Center for the strategic Studies in Business and Finance*, 3 (3), 30-46.
- Sullivan, P. (2011). For small investors lure of private deals is hard to resist. *International Herald Tribune*, 9.
- Summer, L.H. (1981). Inflation, the stock market and owner-occupied Housing. *American Economic Review*, 71(2): 429-434.
- Tachiwou, A. M. (2010). Stock market development and economic growth: the case of West African monetary union. *International journal of economics and finance*, 2(3), 97-103.
- Thapa, K., & Rana, S.B. (2014). Investment management (3rd ed.). *Kathmandu: Asmita Books Publishers & Distributors Privated Ltd*.
- Tobin, J. (1965). Money and economic growth. *Journal of the econometric society*, 85(6): 55-67.
- Wai-Mun, H., Chun-Siong, E., & Chai-Thing, T. (2008). Stock market and economic growth in Malaysia: casualty test. *Asian social science*, 4(4), 86-92.

Wang, Y.T., Winton, A., & Yu, X. (2010). Corporate fraud and businesses conditions: Evidence from IPOs. *The Journal of Finance, American Finance Association*, 6(65), 2255-2290.

Zhang, X., & Zou, H. (1995). Foreign technology imports and economic growth in developing countries (English). *Policy Research working paper, WPS1412*. Washington, DC: World Bank.

Appendix I

Financial Indicators (Rs. In Billion)

Fiscal Years	GDP	GNI	MC	NI	CR
2003/04	536.8	535.1	35.2	204.9	90.7
2004/05	589.4	591.1	41.4	222	80.3
2005/06	654.1	659	61.4	286.7	85.3
2006/07	727.8	735.3	96.8	386.8	90.4
2007/08	815.7	823.6	186.3	683.9	83.6
2008/09	988.3	1000	366.3	963.4	67.1
2009/10	1192.8	1201.9	512.9	749.1	37.3
2010/11	1366.9	1374.5	376.9	477.73	37.5
2011/12	1758.4	1770.7	323.5	362.85	48.1
2012/13	1949.3	1962.4	368.3	389.74	54.1
2013/14	2232.5	2265.3	1057.2	1036.1	84.9
2014/15	2423.6	2457.9	989.4	961.2	43.3
2015/16	2608.2	2642.2	1890.1	1718.2	80.4
2016/17	3077.1	3108.1	1856.8	1582.7	53.4
2017/18	3455.9	3478.6	1435.1	1212.4	35.3
2018/19	3858.9	3898.8	1567.5	1259	35.8
2019/20	3888.7	3934.7	1792.8	1362.4	34.9
2020/21	4352.6	4375.8	4011.1	2883.4	31.8
2021/22	4933.7	4962.6	2869.3	2009.5	29.2
2022/23	5381.3	5424.3	3082.5	2097.1	28.0

Source: Economic Survey, 2022/23

Appendix II

Log values of GDP, GNI, MC and NI

Fiscal Years	GDP	GNI	MC	NI
2003/04	5.730	5.728	4.547	204.9
2004/05	5.770	5.772	4.617	222
2005/06	5.816	5.819	4.788	286.7
2006/07	5.862	5.866	4.986	386.8
2007/08	5.912	5.916	5.270	683.9
2008/09	5.995	6.000	5.564	963.4
2009/10	6.077	6.080	5.710	749.1
2010/11	6.136	6.138	5.576	477.73
2011/12	6.184	6.187	5.510	362.85
2012/13	6.229	6.233	5.711	389.74
2013/14	6.293	6.300	6.024	1036.1
2014/15	6.384	6.391	5.995	961.2
2015/16	6.416	6.422	6.276	1718.2
2016/17	6.488	6.493	6.269	1582.7
2017/18	6.539	6.541	6.157	1212.4
2018/19	6.586	6.591	6.195	1259
2019/20	6.590	6.595	6.254	1362.4
2020/21	6.639	6.641	6.603	2883.4
2021/22	6.693	6.696	6.458	2009.5
2022/23	6.731	6.734	6.489	2097.1

STOCK MARKET BEHAVIOUR AND ECONOMIC GROWTH: NEP...**By: Erika Pajiyar**As of: Jul 29, 2024 12:44:52 PM
17,004 words - 89 matches - 6 sources

Similarity Index

9%Mode: **sources:**923 words / 5% - from 23-Nov-2023 12:00AM
elibrary.tucl.edu.np226 words / 1% - from 18-Jan-2024 12:00AM
elibrary.tucl.edu.np178 words / 1% - Internet from 06-Jul-2019 12:00AM
pt.slideshare.net117 words / 1% - Internet from 04-Jun-2020 12:00AM
www.scribd.com95 words / 1% - Internet from 26-Jan-2023 12:00AM
www.researchgate.net87 words / 1% - Internet from 23-Sep-2022 12:00AM
meral.edu.mm**paper text:**

ABSTRACT The objective of the study is to analyze the stock market behavior and economic growth of Nepal for the period of 20 years from 2003/04 to 2022/23. This study used descriptive and casual research design to deal with the fundamental issues associated with stock market and economic growth of Nepal. This study has considered gross domestic product and gross national income as the proxies to economic growth and are used as dependent variables. The independent variables used in this study are market capitalization, NEPSE Index and concentration ratio. The regression model is estimated to test the impact and significance of the development of stock market on economic growth of Nepal. This study concludes the market capitalization and the NEPSE Index shows a positive relation with GDP and GNI that significantly influence the economic growth of Nepal. Likewise, Concentration Ratio shows negative relation with GDP and GNI that significantly influence the economic growth of Nepal. The findings of this study provide important policy implications for the Nepalese government and regulators in their effort to stock market development and economic growth in the country. Keywords: Gross Domestic product, Gross National Income, Market capitalization, NEPSE Index and Concentration ratio

CHAPTER I INTRODUCTION

1.1 Background of the Study Stocks is a financial instrument that represents ownership in a company or corporation and represents a proportionate claim on its assets (what it owns) and earnings (what it generates in profits). Stocks are also called shares or equity. Share is a term or financial instrument to transfer ownership. Similarly, share market is a place where buying and selling of ownership are done. Private companies are not listed in share market because they act within close circle. They cannot trade on open market. But, public ownership companies are traded in share market where