MACROECONOMIC DETERMINANTS OF STOCK MARKET PRICES IN NEPAL

A Dissertation Submitted to the office of the Dean, Faculty of Management Tribhuvan University

By

Madhu Joshi

Kailali Multiple Campus

T.U. Regd. No.: 7-2-327-690-2014

Exam Roll No. : 19281/19

In the Partial Fulfillment of the Requirements for the Degree of Master of Business Studies (MBS)

Dhangadhi, Kailai

2024

ABSTRACT

This study looks into the "Macroeconomic Determinants of Stock Market Prices in Nepal." This study examines the correlation between the prices on the Nepalese stock market and its RGDP, IR, MS, IP, SMP, and trend. It also examines how Nepal's stock market prices are impacted by macroeconomic variables such as real GDP, the money supply, interest rates, and industrial production.

This study employs a descriptive and informal comparative research design. In order to determine the variables influencing liquidity in the commercial banks of Global IME Bank Limited, NMB Bank Limited, and NABIL Bank Limited, descriptive and analytical research methodologies were used in this study. A research design is a set of instructions for collecting and evaluating data that attempts to strike a balance between the study's objective and procedural economy. It's a method for obtaining and assessing data. It provides a series of benchmarks to assist the researcher in heading in the right directions and achieving the goal. This study's research design integrates case study, descriptive, and historical methodologies. Among the 19 commercial banks that served as a sample for this study was Global IME Bank Limited. The term "population" or "universe" in research refers to the totality of any well-defined class of people, things, or occurrences. A sample is an attempt, made in as many diverse ways as possible, to represent the complete population. A single organization's worth of data is examined through the application of descriptive and causal comparative approaches.

the trend lines representing bank stock market prices throughout a seven-year study period. Between fiscal year 2015/016 and fiscal year 2021/022, the price of stocks has dropped. the real gross domestic product trend line for banks during the course of the seven-year study period. There has been a decline in the real gross domestic product from the fiscal years 2015–2016 and 2021–2022. the bank interest rate trend line during the course of the seven-year study period. During the period from fiscal year 2015/016 to fiscal year 2021/022, interest rates have grown. The money supply ratio trend line for banks throughout a seven-year study period. Between fiscal years 2015–16 and 2021–022, there has been a decline in the money supply ratio.

CHAPTER-I
INTRODUCTION

1.1 Background of the Study

Financial institutions assist the nation's economy by accumulating capital to meet the financial needs of diverse economic and production sectors (Gupta, 1982). The two primary functional groups of financial markets are money markets and capital markets. Marketable securities or short-term debt instruments are exchanged in the money market, whilst long-term securities (bonds and stocks) are traded in the capital market (Kovács & Kajtor-Wieland, 2017). According to Ehrmann et al. (2011), the capital market is the financial market for long-term borrowing and lending and provides the financial system with long-term liquid funding such as government bonds, institutional bonds, and stocks. In contrast, the money market is the financial market for short-term borrowing and lending and provides the financial system with short-term liquid funding. According to Adam et al. (2016), the securities market, which uses the market's share issuance to directly generate money to support profitable firms, includes the stock market as a major component. By focusing investment where it is most needed and beneficial, the stock market is an essential economic tool that supports economic growth (Libermen & Fergusson, 1998). As a result, the stock market is used to channel the public's money toward commercial and industrial businesses. Put another way, stock markets are essential to the advancement of the economy since they guarantee that resources are allocated to the most lucrative investment opportunities.

The securities market is divided into two segments: primary and secondary markets. At the moment of issuance, the securities are sold on the main market. On the other hand, one way to conceptualize the secondary market is as a market for "used" securities. Stock exchanges trade already issued assets on the capital market. As a result, the stock market makes up a sizeable chunk of the securities market (Boehme & Colak, 2012). A stock market is the center of a network of transactions where buyers and sellers of securities meet at a set price, according to Bologna and Cavallo (2002). Due to the liberalized and globalized policies embraced by the majority of developed and rising states, It is necessary for the capital mobilization of developed and rising countries, which encourages the growth of trade and industry. One of the many indicators that stock market participants can use to determine whether to expect a higher or lower return when investing in the stock market is macroeconomic variables (Talla, 2013).

The Company Act, which was passed in 1964, the first government bond issue in 1964, and the establishment of the Securities Exchange Center Ltd. in 1976 were all significant developments in Nepal's financial markets. The Securities Exchange Center was founded with the intention of promoting and facilitating the growth of capital markets. Before it was turned into a stock exchange, it was the only capital markets company overseeing public issuance, brokering, underwriting, market making, and other financial services for government bonds. As part of a capital markets reform program, the government of Nepal renamed the Securities Exchange Center of Nepal the Nepal Stock Exchange (NEPSE) in 1993. NEPSE was established under the 1964 Company Act and administered under the Securities Exchange Act of 1983. Through its members, who function as market intermediaries such as brokers, NEPSE aims to provide government and corporate securities with free market ability and liquidity by facilitating trades on its trading floor. On January 13, 1994, the NEPSE trading floor opened for business. The Nepali government, Nepal Rastra Bank, Nepal Industrial Development Corporation, and its members are among NEPSE's owners (NEPSE, 2018).

Nepal's stock market is still in its infancy and hasn't grown to its full potential (Thapa, 2019). Buyers would choose to acquire primary stock and receive stock dividends instead of cash dividends. The size of the Nepalese securities market increased in Q3 of FY 2018–19 compared to the same time in the previous fiscal year, 2017–18. There was a noticeable increase in money mobilization in the primary market during the research period because there were more initial public offerings (IPOs), debentures, and mutual funds issued. Nonetheless, during the assessment phase, fewer right offerings were made. Comparing Q3 of FY 2018/19 to Q2 of the current fiscal year, the main market environment displayed uneven growth. This is because there have been fewer debenture issues and fewer FPOs during the review period. The number of right offerings and initial public offerings (IPOs) fell sharply in the first nine months of the current fiscal year compared to the same period in the previous fiscal year. A few secondary market measures, such as the number of listed companies and securities and float market value, exhibited a negative trend in Q3 of FY 2018/19 when compared to Q3 of the previous FY. Most signs during the evaluation period (Q3 of FY 2018/19) reversed to an uptrend when compared to Q2 of the same fiscal year. These metrics comprised the NEPSE index, market capitalization, listed companies, and quarterly securities turnover. The secondary market's positive momentum during the crisis is thought to have been caused by the regulators' initiative in enforcing the policy

recommendation made by the committee tasked with looking into the matter of the money and capital markets, as well as investors' optimism regarding the upcoming fiscal policy of the Nepali government.

The way that the country's resources are exploited and money is raised largely determines the state of the economy. The misuse of resources is causing the country to decline. Capital mobilization affects the economy as a whole both directly and indirectly because it is an essential tool for resource usage. Financial institutions contribute significantly to the national economy by amassing capital to meet the financial needs of different productive sectors. They engage in active participation in the money and financial markets as both suppliers and consumers of funds.

The hub that provides facilities and services for the buying and selling of financial claims and services is referred to as the "financial market". It includes, among other things, trading in financial securities including stocks, bonds, and debentures. Consequently, it really relates to the money and capital markets, which facilitate the transfer of savings to people who genuinely require them.

The short-term financial system, which increases securities' liquidity and marketability, is what the money market is all about. It provides an institutional structure that enables the trading of short-term securities. Credit unions, commercial banks, development banks, and financing firms are the entities that create the money market.

Through its involvement in the long-term financial market, the capital market makes the transfer of funds between savers and borrowers easier. With maturities longer than a year, it is the market for purchasing and selling financial claims and obligations. The other two groups into which it can be divided are primary and secondary markets.

Businesses can purchase and sell their existing shares on this market for long-term capital as well as raise new funds. By providing a secondary market for investors to sell their shares, it facilitates the raising of more capital on the new issues market. The stock exchange also provides a market for government securities and loans, and it is increasingly involved in the buying and selling of securities from outside companies. The main participants in the market are market makers, who deal in groupings of shares, and stock brokers, who operate as agents for their clients, the investors who are really purchasing and selling shares (Famma & Miller; 2002: 225). As a result, the stock exchange is one kind of secondary market where parties

trade shares of listed companies in order to raise capital for the economy's productive sectors. It generates and enhances the liquidity of the securities.

1.2 Statement of the Problem

It's probable that a very small percentage of stock market participants in Nepal are aware of the factors affecting share price. It suggests that most investors often make investments without conducting a comprehensive financial analysis, even though it's possible that they are unaware of the company's financial performance.

Participants in the secondary market actually make or lose money as a result of the natural occurrence of stock market price swings over time. Several macroeconomic factors impact the market price of stocks. On the other hand, investors disagree about what factors affect a company's stock price and profitability. Generally speaking, Nepalese investors purchase equities without having a solid grasp of macroeconomic factors. Therefore, market rumors which the majority of Nepalese investors use as a crucial analytical tool are one of the main causes of stock price swings in Nepal. It is undeniable that the Nepalese stock market is seeing an increase in investors every day. Most investors provide funding to ventures in which they do not anticipate a return on their investment. Even though the corporations are not producing anything, the market price of the share is increasing every day. Supply and demand also have an impact on stock price. Determining the extent to which such factors affect secondary market stock values is the aim of this study. More precisely, this research attempts to determine the answer of following research questions;

i. What is the trajectory of Nepal's stock market values in terms of RGDP, IR, MS, IP, and SMP?
ii. What is the connection between Nepal's stock market prices' RGDP, IR, MS, IP, and SMP?
iii. What effects do macroeconomic variables (real GDP, inflation, money supply, industrial production, and exchange rate) have on Nepal's stock market prices?

1.3 Objectives of the study

This study examines the relationship between stock market prices (NEPSE index) and three macroeconomic variables: real GDP, broad money supply, and interest rate, using an autoregressive distributed lag (ARDL) model. The model's objective is to provide an explanation for the NEPSSE index's behavior.

i. To determine the trends in Nepal's stock market pricing for RGDP, IR, MS, IP, and SMP.
ii. To analyze the correlation between Nepalese stock market prices' RGDP, IR, MS, IP, and SMP.
iii. To determine the influence of macroeconomic factors on Nepal's stock market prices, including real GDP, the broad money supply, interest rates, money supply, and industrial production.

1.4 Research Hypothesis

Testing hypotheses is a fundamental aspect of the theory of decision making. It includes the principles for making decisions required to infer population parameters in a probabilistic fashion.

H_1: There is a positive relationship between real gross domestic product and stock market prices.

H_2: There is positive relationship between interest rate and stock market prices.

H_3: There is positive relationship between money supply and stock market prices.

H_4: There is positive relationship between industrial production and stock market prices.

1.5 Rationale of the Study

The purpose of this research is to determine the relationship between the MPS of Nepalese commercial banks and key financial variables, including RGDP, INT, SM, IP, and SMP. This relationship is meant to show how Nepalese Commercial Banks are currently doing in regard to the variables that affect share price. These results may be helpful to prospective investors in assisting them in making more informed investment decisions. Similarly, this thesis provides information about the position of share price in the share market. Comparing certain banks to the industry average's various financial indicators is also helpful. The information provided here is expected to be helpful to the managers of the different banks. For the benefit of future academics, this thesis offers a wealth of information about the Nepalese Commercial Banks Share Market. It follows that this thesis is expected to have relevance for scholars in the future.

Another essential component to a business's efficiency is the analysis of stock market pricing. When stock market price resources are not used effectively, corporate firms cannot

operate as intended. It is believed that the bank's ability to keep its stock price profitable is a requirement for its continuous existence. A bank must be solid financially and economically in order to enhance and raise the lives of the impoverished. It would be essential for the bank to continue existing and to have stable finances. The stock market price of Global IME Bank Limited is the subject of the current investigation. The bank's capacity to manage its assets has also been looked at.

Analyzing the relationships between the different financial statement components to gain a better understanding of the stock market price of the company is known as financial performance analysis. The assets mix or makeup of the company is typically taken into consideration while making investment decisions.

i. The assistance and feedback provided by this study will help the concerned company maximize revenue and minimize expenses.
ii. A business with comparable operational standards would find it advantageous.
iii. The research study can be useful to readers in general as well.
iv. It can be useful for relevant researchers as a review reference.

1.5 Limitations of the Study

i. Due to limitations in terms of money, time, and other resources, the study's scope is limited to the following areas:
ii. While this thesis looks at the main drivers of stock market values, it only looks at the share prices of commercial banks in Nepal.
iii. This analysis only looks at the relevant data from the five years, or Fiscal Years 2015/016 to 2021/022.
iv. The sole focus of this work is the SMP analysis for Nepalese commercial banks.
v. The foundation of the investigation is made up of secondary data. Therefore, the reliability and validity of the data are determined by its source.

1.6 Chapter Plan

This study has been organized into five Chapters.

Chapter I-Introduction

Chapter I discusses the primary issues surrounding Nepal's share market as well as the objectives, significance, and limitations of the study.

Chapter II: Review of Literature

This chapter includes a brief summary of the literature that is pertinent to this study. Included are a synopsis of the major research and an explanation of the conceptual framework. It offers an overview of earlier studies on the topic of this one.

Chapter III: Research Methodology

Research Methodology, Chapter three outlines the many approaches used in this investigation. This chapter includes a description and reference of data sources.

Chapter IV: Results and Discussion

This chapter presents and analyzes the data collected for the study. Several tools and approaches have been developed as a result of the purpose of data analysis.

Chapter V Summary, Conclusion and Implications

This chapter contains the study's summary, conclusion, and recommendations. Together with the findings, this chapter also includes their recommendations. Appendices and bibliography for the study are accessible at the end.

CHAPTER II
LITERATURE REVIEW

The study's primary goal is to examine how equities are priced on the Nepalese Stock Exchange. Thus, an attempt is made to review some of the literature regarding the market price behavior and the stock market in Nepal and abroad in this chapter. The trading activity and price behavior of the stock have a significant focus on security investments. Therefore, a deeper comprehension of these factors could boost investor trust in the stock market and improve how well corporations allocate their resources. As a result, worries over pricing behavior are growing, and the majority of books that address this issue include a paragraph or two. The fundamental concepts of the research study can be seen in earlier research papers, books, journals, and dissertations. They are examined under the headings of conceptual reviews, thesis reviews, and article reviews.

2.1 Conceptual Review

In the Nepalese environment, the stock market's growth and rules are relatively recent; the investment sector has been thriving recently with other economic sectors. With the aid of these investment sectors, the majority of developed nations today are increasing their economic activity. The current state of the nation indicates that the majority of the investment sectors are being impacted by various global activities. The global stock market is affected by events that occur in one region of the world. It seems sense to be familiar with a few technical words before delving into the cone notion of the elements influencing the stock price. These phrases are frequently used in capital market research. So in this section, some of the technical terms related to capital market are defined here.

2.1.1 Common Stocks

A company may raise the necessary capital by issuing common stock. Common stock is a symbol of a corporation's ownership interest. Common stock is the word used to describe ownership capital, also known as equity, that is offered to the public for subscription in the form of divvying up units of equal worth. In contrast to debt, a corporation is often under no obligation to redeem its common stock by buying back the shares from the investors. Common stock is typically granted with an endless life. The primary and secondary markets are open to the issuance and trading of these stocks. Trading begins as soon as the stock is listed on the stock exchange, and the initial issue occurs on the primary market where it is typically offered at face value and once the stock gets listed in the stock exchange, the

trading starts to take place and this particular market is called secondary market.

A corporation's ownership interest is called stock. A business's owners own a portion of their privileges and rights with each share of stock. A physical certificate of title to a portion of the corporation, a stock certificate is proof of that fractional ownership."The residual owners of a corporation are its common stockholders, who have the right to income and assets only after preferred stockholders and creditors have received their full payment. Consequently, the returns on an investor's assets are less assured than the return to a loan or favored stockholder. Conversely, unlike returns to other investors, the return to common stockholders is not capped at the upside. It is possible to authorize a share of common stock with or without par value. The par value of stock has little economic meaning and is only a declared amount in the corporate charter. According to Van Horne (1997), "a company ought not to issue stock at a price lower than par value, as stockholders who purchased stock at a lower price than par value would be responsible for the discrepancy between what they paid and the par value."

2.1.2 Common Stock Values

(a) Par Value or Face Value

The company's memorandum and articles of association both indicate the face value of the shares. The par value remains unchanged until a stock split or other similar action taken by the board of directors; in accordance with the company act of a reputable nation, the par value of a new issuance is typically Rs. 100.

(c) The Value of the Market

The secondary market's relationship between supply and demand determines market value. Numerous variables, including the state of the economy and industry, anticipated dividends and earnings, political speculative activity, and signaling effects such as significant domestic and international events, all have an impact on its value (Cheney and Mosses 1995).

(c) Book value

It shows the asset's value per share once all cooperation-related obligations have been fulfilled. It is computed by dividing the balance sheet's total common equity by the number of outstanding shares.

2.1.3 Theories of Stock Price Movements

Regarding the behavior of stock prices, three broad hypotheses exist. Stock price fluctuation, put simply, is the movement of the price of stocks in the secondary capital market, i.e., when market value exceeds book value, when market value falls short of book value, and when market value exceeds book value as a result of various internal and external variables. Market value is flexible. Since the entire world has become a border, any movement in one place will inevitably have an impact on other areas when we attempt to research the Nepalese security market. This is because of globalization, liberation, and modernization. Theory is a set of guidelines for the explaining process that goes beyond the point at which a concrete subject can be deduced. The following are these theories:

2.1.4 Efficient Market Theory

There are several ways to describe efficiency, including informational efficiency, operational efficiency, and allocation efficiency. When market efficiency is discussed in the finance literature, it usually refers only to informational efficiency in stock pricing. When the current market price instantly and completely reflects all pertinent information that is currently available, the market is considered to be informational efficient. A share's market value could be overpriced or undervalued. When shares are constantly priced correctly and outperforming the market is not feasible, the market is said to be efficient.

According to the efficient market hypothesis, a stock price in a free and ideal competitive market will always reflect all available information and will instantly respond to any new information that becomes available. Only price changes resulting from new knowledge would occur in an efficient market, right? "A large number of knowledgeable and profit-maximizing independent buyers and sellers, new information generated randomly, and investors adjusting the information rapidly" (Reilly, 1986) is a fundamental and crucial foundation of an efficient market. As a result, while determining a price, an efficient market uses all available information. The efficiency metric derived from the idea of perfect

competition, which is predicated on the availability of instantaneous and free information, rational investors, and the absence of transaction and tax expenses. The following conditions must be met for a securities market to be considered efficient:

i. The price must be reasonable in order to attract new investors and stimulate demand for a company's shares by raising its price and luring in capital providers.
ii. In order for all investors to respond to new knowledge, information needs to be shared openly and promptly throughout the country.
iii. Transaction costs are disregarded, such as securities sales commissions.
iv. It is believed that taxes have little discernible impact on investment strategy.
v. All investors have the same interest rate when borrowing or lending money.

To wish to put money where it is most required, investors need to be logical and able to identify efficient assets. (that is, in investments that yield comparatively high returns) (Bhalla, 1983).

This is the domain of the capital assets pricing model, also known as the efficient market theory. The efficient market has two aspects of price adjustment since it deals with the securities market's pricing mechanism. The first is the kind of information being responded to, and the second is the rate and caliber of security adjustments made to the data. As any haphazard influx of data, whether it happens instantly or in profitable lags. In order for pricing to accurately approximate its inherent value, it need not only be immediate but also discount the accuracy of the information. Thus, Keane correctly noted, "If the information in fact warranted a substantial reduction in price, it would be clearly an add interpretation of efficiency if a doubling in the price of a share were regarded as an efficient reaction to new information, simply because the movement was instantaneous" (Kene, 1983). Francis and Taylor agreed, pointing out that "market efficiency refers to the financial asset's ability to quickly adjust and reflect all relevant information in its price." Francis (1986) As a result, it makes the assumption that all securities are always priced accurately by the market. According to the hypothesis, this means that securities cannot be overpriced or underpriced for an extended length of time in order to generate profits.

(a) Levels of Market Efficiency

There exist three tiers of market efficiency, contingent on the nature of the information incorporated into the pricing. Put differently, the way that the market price of shares reflects

information that is accessible to the public determines the types of markets. The ultimate level of market efficiency is represented by the claims that prices accurately represent all available information. It is helpful to differentiate between three levels of market efficiency, as Fama stated.

Poor-form effectiveness: - Technical analysis approach involvement in the market becomes fertile if the pricing into the stock market has reflected all information discovered in the record of prior prices and volume. This is regarded a weak type of efficiency.

Semi-strong-form efficiency:- The market is semi-strongly efficient if the current prices of stocks reflect additional publicly available information in addition to all the information found in the history of prices and volume. Because participants would have promptly and accurately discounted the information when it was given, even basic examination of published accounting information is worthless in the market.

Strong-form efficiency: A market is said to possess strong-form efficiency when stock prices accurately represent all pertinent information that is available, both publicly and privately. Insider knowledge cannot outperform the market in this situation since no player has exclusive access to such information.

The three efficiency levels mentioned above are sequentially higher order in terms of market efficiency; they are not indifferent to one another. Since historical price data is one type of disclosed information that must have been impounded in the price, if the market is semi-strongly efficient, it must also be efficient in the weak sense. In the event that the market is not weakly efficient, it may be possible to predict future prices using historical price data and take advantage of abnormal profits. It suggests that not all of the information from previous prices has been properly represented in the current pricing. Similar to how a market must be efficient at both semi-strong and weak levels in order for it to be strongly efficient; otherwise, prices would not reflecting all relevant information.

(b) Theory of weakly efficient market or random walk Hypothesis

"The weak form of efficient market hypothesis stipulates that historical price and volume data for securities contain no information which can be used to earn a trading profit above what could be attained with a native buy-andhold investment strategy" (Francis 1986, p. 543).

Keane states, "If share prices accurately represent the information suggested by all previous price movements, the market is efficient in the weak sense. Effects of price fluctuation are entirely unrelated to movements in the past. It is implied that there are no pricing patterns with prophetic meaning when a price movement in effects is completely independent of earlier movements (Keane 1983:10).

It is commonly known as the Random Walk Theory, which is the weak version of the Efficient Market Hypothesis (EMH). The Random Walk Theory explains how previous prices can be used to forecast future prices. According to Fama, the Random Walk Theory suggests that a security's price level will follow a route that is no more predictable than a sequence of accumulated random integers. The sequence of price fluctuations is immutable, implying that historical data cannot be meaningfully utilized to forecast future events (Fama 1956:34).

It indicates that the magnitude and direction of price changes as they occur now are a fair and independent result of earlier price changes. Stated differently, the prices seemed to exhibit a random walk behavior, suggesting that successive price changes are unrelated to one another.

According to the random walk model, past variations in price or return cannot be used to forecast future variations in any of these variables. This indicates that subsequent price changes are independent, meaning we will not be successful if we try to anticipate future prices in absolute terms using only historical price change information. Because of their independence, prices should always, on average, reflect the security's inherent value. In the event that a stock's price diverges from its inherent value due to various factors, such as varying investor assessments of the available data or differing perspectives on the company's future prospects, both proficient investors and astute non-experts will capitalize on any brief or sporadic departures from the intrinsic value and the questionable stock's sale will drive the price back to its equilibrium level. Lastly, the efficient market theory maintains that there is no benefit to be obtained from any kind of study, whether it be technical or fundamental, because price reflects all available information and information arrives randomly. It is predicated on the idea that all data, both fresh and old, has been gathered and analyzed by thousands of investors, and that the price accurately reflects this information. Analyzing previous data—either technical or fundamental—cannot boost returns because it has no bearing on current or future pricing (Fisher and Jordan, 2000:553).

While academics and researchers have recently been very interested in the topic of market

efficiency, there is an equally persuasive argument made by those who oppose the efficient market theory, arguing that the stock market is neither efficient nor competitive. According to Chandra (1994:589), the critics argue that the effectiveness and competitiveness of the stock market are compromised by one or more of the following causes.

Insufficient Information

No one involved in the stock market has access to information at all times or in a timely manner. Additionally, businesses are making a deliberate effort to spread "misinformation".

Limited Information Processing Capabilities

The ability of humans to process information is severely constrained. According to Herbert Simon, Nobel Laureate: "Every human organism lives in an environment which generates millions of new bits of information every second, but the bottleneck of perceptual apparatus certainly doesn't admit more than a thousand bits per second and possible much less" .

Unreasonable Actions

This theory often assumes that market prices and intrinsic value will closely correlate due to the rationality of investors. This might not hold true in real life. According to J.M. Keynes, "Market values actually take into account a variety of factors that have no bearing whatsoever on future yields. L.C. Gupta noted something similar: According to our research, the market evaluation procedure operates in an almost random manner, much like a blind man pulling a revolver. Instead of being based on well-informed opinions about the long-term prospects of certain businesses, the market appears to operate primarily on a hit-or-miss basis (Gupta, 1981:20).

Monopolistic Influence

According to this theory, there is fierce competition in the market. It is not intended for any one party to exert undue influence over the price. In reality, large players and influential institutions have a lot of sway on the market. The market's competitiveness is weakened by their monopolistic strength. Ultimately, there are numerous reasons to doubt the realism, validity, and authenticity of efficient market theory as a result of the difficulties raised by its detractors. Similar to Nepal's comparatively underdeveloped capital market, this seems to be the case. The information and operational efficiency of the Nepalese capital market is still lacking.

2.1.5 Fundamental Analysis Theory

To determine the intrinsic value of a company's securities, the fundamental analysis approach entails examining a variety of factors, including industry dynamics, government actions, the firm's financial statement, its competitors, and relevant company data like product demand, earnings, dividends, and management. A fundamental analyst, often known as a fundamentalist, is an analyst who bases their analysis on fundamental data in order to ascertain the stock's intrinsic worth. Fundamentalists predict stock prices based on business statistics and the state of the economy. In the end, earnings and value with a risk-returns framework based on earning potential and the economic climate serve as the primary decision variables. "Fundamental analysts delve into company's earnings, their management, economic outlook, firms competitors market conditions and many other factors" (Francis 1986, p. 398).

Evaluating security's inherent value is the goal of fundamental security analysis. The genuine economic labor of financial assets is known as their inherent worth. "The fundamentalist maintain that any points of time every stock has an intrinsic value which should in principle be equal to that present value of the future stream of income from that stock discount at an appropriate risk related rate of interest." Bhalla (1983: 283) As a result, it is believed that the true cost of a security depends on a range of expectations. Prices fluctuate in response to shifts in expectations, which are influenced by fresh information. Stated otherwise, when a new piece of information is published, the intrinsic values of securities will shift, and the market price of securities will move in the direction of the new values.

"The value of common stock is simply the present value of all the future income which the owner of the share will receives"Francis (1986:398) Additionally, the stock's intrinsic value that is, its strong forecast of cash flows and capitalization rate should be impacted by the actual price over time. However, in reality, first, the proper discount rate for a certain stock is never known ahead of time. As a result, fundamentalists evaluate their worth by carefully researching every topic pertaining to the business. "The study would involve examining its sales earnings, profit margins, dividends, management proficiency, industrial and business outlook, labor competence any factor that would have a bearing on its performance in the future" (Raghu, 1991, p. 167).

Fundamentalists estimate a company's future earnings and earning potential based on this

kind of research, and they may reasonably predict what a company's share price should be. We refer to this projected cost as intrinsic value. The stock's intrinsic worth is typically higher than its current market value. As a result, there is a distinction or gulf between them. By comparing this value to the current market price, fundamentalists make investment decisions based on the belief that the price will rise. Fundamentalists will buy shares in this scenario because the differential gives them a chance to profit. On the other hand, the share is deemed overvalued and fundamentalists are advised to sell if the intrinsic value is less than the market value. After these rules, they think that since the market prices shares inefficiently, an above-average return can be obtained.

Therefore" The fundamental analysis work to find new information before other investors so they can get into a position to profit from price changes they anticipate" (Francis, 1986:603).

"Fundamental analysis uses different models like Top-Down versus Bottom- Up forecasting, probabilistic forecasting econometric models, financial statements analysis etc. to estimate the value of security" (Sharp, Alexander, and Bailey, 2001, pp. 850-853) As a result, the fundamental analyst uses these analytical techniques to inform their investment decision.

Many security analysts and potential investors utilize the fundamental research approach, which is labor-intensive, to assess a stock's value using a risk-return framework based on earning potential and the state of the economy. According to Raghu Palat, the following are some of the basic analysis approach's drawbacks: (Raghu, 1991: 168).

The method, while reasonable and grounded in fundamental financial data, has limitations that need to be acknowledged in order for it to function well.

i. It frequently disregards market behavior and counts on the market's rationality. Rarely does the market do so. For the most unlikely of circumstances, prices spike or fall.
ii. A logical, scientific study of the facts forms the foundation of the entire essential approach. Rarely is the market logical.
iii. The data and analysis might be flawed in and of themselves.
iv. A lot of businesses conceal their true earnings using inventive and imaginative accounting techniques.
v. It's possible that the fundamentalists' assessments of intimate worth are off. This is not only conceivable, but also more likely than not, as he frequently has to project

growth, profit, and other variables without fully understanding the situation.

vi. Given the number of outside variables, the fundamentalists could not have a complete understanding of the sector or the economy.

vii. In addition, there's always a chance that the market won't go in the direction of intrinsic value and instead not in the way fundamentalists anticipate.

viii. A further challenge is figuring out corporate activity.

To put it briefly, the fundamental approach is quite effective in identifying the company's intrinsic worth. It is not a particularly reliable method for making short-term profits because it is not very good at predicting future price fluctuations."By nature the fundamentalist are conservative in approach and is generally unwilling to take a quick loss he would rather adopt a buy and hold policy" (Yahasway, 1992, p. 155). According to Francis' Venerable Present worth Model, "the method used to determine a security's value varies with the type of security." However, the fundamental economic model that may be used to value any security (with differing degrees of success) is the present value formula as follows:

$$Present\ Value0 = Cash\ flow\ /(1-k)^1 + Cash\ flow\ /(1-k)^2 + Cash\ flowr/(1-k)\ t. \text{(i)}$$

According to the present value model represented by equation (i), the discounted present value of all of the investment's future cash flows at times t=1,2,3,…T, where T is the terminal (or final) period in the investment's life, equals the present value at time = 0. An adjusted discount rate for risk is represented by the convention k. Cash dividends from common stock could be one of the cash flows (Francis, et al., 2003: 208). "Economists who have studied the intrinsic-value random-walk model have accepted and/or modified it in varying degrees," according to Samuelson's Continuous Equilibrium Model. For example, Nobel Prize-winning economist Paul Samuelson has proposed theories regarding how stocks prices would respond in the event that the securities markets were "perfectly efficient" or "perfectly competitive."

Perfectly efficient prices are defined by Samuelson as market prices that incorporate all available information, adding to the intrinsic value random-walk model. According to Samuelson, a security in "continuous equilibrium" would have fully efficient prices. But with time, this continuous balance won't remain unchanged. The intrinsic worth of a security will fluctuate with each new piece of information that is made public, and the market price of the security will reflect this shift. The effectiveness of a pricing is determined by how quickly it

is adjusted. A completely efficient security price is in a state of continuous equilibrium where the market price always equates to the security's fluctuating intrinsic value, and the security's intrinsic value vibrates at random times. A imbalance, even if it is momentary, indicates that the price of the security is not entirely efficient. Of course, because different securities analysts tend to provide varying value estimates to any particular security, actual market prices are not entirely efficient.

Since the value estimations of securities experts varies, the actual market price of a given security can only aim for a consensus estimate of its intrinsic worth. The consensus value estimate may only differ by a tiny amount if the value assessments of the majority of securities experts are comparable at any one moment. The price of the security will be nearly completely efficient in this scenario since it will only move within a small range around its shifting equilibrium economic value (Francis, et al.; 2003: 214-215).

In a similar vein, Professor James E. Walter contends that "dividend policies nearly invariably impact the enterprise's value. Contrary to what MM stated, a company's dividend policy and investment philosophy are inextricably linked. The relationship between a firm's internal rate of return (r), or the return on its investment, and its cost of capital (k) serves as the main justification for the model's pertinent statement. Retention will boost the stock price and it will fluctuate inversely with dividend payout as long as the internal rate is higher than the cost of capital (k).

2.1.6 Technical Analysis Theory

For many people, the term "technical analysis" seems like nonsense. However, it is a different strategy from stock price behavior prediction found in investment management literature. Because technical analysis is a philosophy based on the market, it might focus more on the forces of supply and demand for share as they are represented in market behavior than on the inherent value of share. Technical analysts, often known as technicians, are analysts or potential investors who examine a security to forecast its future share price based on historical price movements (Fisher & Jordan, 2000). "The technician thinks that trade volume and price trends represent the forces of supply and demand. Through the analysis of these patterns, one may forecast the direction and magnitude of price movements (Fisher and Jordan, 2005:510).

Technical analysis is therefore based on the patterns or trend in the price. A variety of charts

are created to identify patterns and predict whether prices will grow or decline. Technicians frequently focus in the past.The technician typically offers suggestions regarding the timing of buying and sales of either individual stocks, groupings of stocks (such as industries), or stocks in general by attempting to forecast short-term price fluctuations. There is a saying that technical analysis is meant to answer the question "when," whereas fundamentals analysis is meant to explain "what?" Sharpe, Bailey, and Alexander (2001:844).

Technical analysts identify historical patterns or trends that they predict will recur in the future and suggest for the profitable holding and disposal process in good time. or that, depending on its prediction of a profitable pattern, advises short-term speculation. Stated differently, technical analysis is a backward-looking process that determines a stock's worth by utilizing historical data. Historical patterns are important. Technical analysts do not assess values; they estimate prices. They focus on different supply and demand indicators that they have created, largely ignoring basic facts like the firm's dangers and earnings growth rates. The idea behind this is that prices follow patterns, and it is more likely for those trends to persist than to revert. Veteran investor and scientist Benjamin Franklin once said, "Show me the man who does not believe in history and I will show you a fool." This statement is not worthy of mentioning here. Technical analysts hold the belief that history is reliable and repeats itself. As a result, the foundation of all of their forecasts and graphs is history. Future events are predicted using historical data and trends.

"According to technical analysts, price fluctuations occur due to shifts in the pressure from buyers and sellers. The price of a share at any given moment, or the Present Price, is the equilibrium reached by both parties. Numerous internal and external factors—such as profits, the political climate, forecasts, and the like are to blame for this. Prices level out relative to a historical record of price fluctuations over time. Given that the entire theory is predicated on the idea that history repeats itself. that since human nature is unchanging, people would probably continue to behave in the same ways they have in the past" (Raghu, 1991:172).

The following are the fundamental presumptions that underpin technical analysis, according to Edwards and Magee (Edwards and Magee, 1958:86).

i. Supply and demand interactions alone define market value.
ii. A variety of both rational and irrational factors influence supply and demand.
iii. Variations in supply and demand are what lead to trends to change.
iv. Share prices follow trends that hold true for a considerable amount of time,

notwithstanding small swings in the stock market.

v. Changes in supply and demand, regardless of the cause, can eventually be seen in market action charts.

vi. A few chart patterns have a tendency to recur.

Essentially, technical analysis makes predictions based on the idea that historical patterns of market behavior will recur in the future.

2.2 Market prices of shares as the output of the Demand and Supply

"One asset into which money can be invested is stocks and shares, which are mostly traded on the securities market. The fact that the investment has a liquid quality makes it even more appealing to most people. However, the relationship between supply and demand has the greatest impact on stock price (Doodha, 1962:10).

Regarding the interplay between supply and demand, Ackerman believes that "supply and demand determine the price of a given stock alone. Converting one of these stocks when the market is anticipated to have supply and demand pressure in the future and the price and volume of its previous transactions provide a significant indication of a beneficial association that this link is the key factor influencing which way prices are likely to move (Ackerman 1980:10).

These are brief conceptual summaries of the theories behind the behavior of stock prices. The floor price of a share is set by the interplay of supply and demand in the market. The point of equilibrium between supply and demand sets the price; any movement in this balance leads to constant price adjustments as researchers look for ever-changing new equilibriums. The price of the market then fluctuates. While there are many factors that influence stock price fluctuations, market, non-market, and economic factors account for the majority of them. Dividends are one factor used to determine stock prices. The ability of the businesses to make money has a big impact on dividends. The relationship between dividends and company earnings is quite strong. Interest rates have a significant impact on earning power, which in turn has an impact on stock price fluctuations. Changes in corporate earnings, along with interest rates and business cycle trends, are the primary economic factors that affect stock price fluctuations. The next category of influencing factors is non-economic factors, which includes things like changes in the weather and other natural conditions, changes in

political conditions like war or administrative changes, and changes in cultural conditions like technological advancement and the like. The third category of influencing factors is market factors, or internal factors of the market, which includes the mood of the market and supply-demand relations. When company prosperity leads to a high stock price, the market tone is a way of overestimating a stock's inherent value while underestimating it during a market drop. The volume of transactions directly reflects the linkages between supply and demand, but institutional investors' activities and other factors also have a significant impact. For example, margin transactions increase purchases when stock prices rise. They become a selling element as soon as the price starts to diminish, which speeds up the price decrease. Nepal has not yet adopted the financial practice of margin" (Sharma, 199 6:63-64).

"Over the past few years, Nepal's security business has grown significantly. The amount of trade has grown in volume. The market's dimensions have expanded. The overall population of investors has increased. The public is increasingly being used to raise funds. The development of market consciousness has, above all, made investors more aware of the availability of current corporate information on investments, as well as the dangers and potential returns. The market appears to be losing investor trust. Stocks have limited liquidity. There aren't many floating stocks available on the market. The investor and investment management services continue to lack professionalism. It is assumed that a system of speculative trading predominates, with the main goal being to profit from short-term price swings. It seems that only a very tiny portion of transactions seem to be made by actual investors. The speculative motive is what propels the others. The business community is still hesitant to promptly disseminate information. Only common and preference shares are available for trading in the securities market. These are a few of the significant issues that are currently plaguing the market (Sharma, 1996:65–66).

2.3 Review of Previous Studies

"Our stock-exchange Act has numerous flaws. This makes investors uneasy. Nimrod Pharmaceutical firm was a firm that floated in shares a few years ago. Where are they now? Likewise, Bansbari Leather Age has been allotted shares for over a year now; yet, why hasn't the company listed its shares on a public exchange? Gorkhkali Rubber Udyog has not called for its AGM in the last three years. The government has said nothing in any of these situations. Because of this, neither institutional nor common investors in the stock market feel comfortable doing so (Business Age, Jan 2000:25).

2.3.1 Review of Journal and Articles

The arbitrage pricing theory (APT), which examines stock market returns and economic variables, reveals the connection between stock prices and economic variables (Ross, 1976). The relationship between systematic risk and expected return for assets, especially equities, is characterized by the Capital Asset Pricing Model (CAPM). It is extensively used in finance to determine costs of capital, generate predicted returns for assets based on their risk, and price hazardous securities. According to Sharpe (1970), the CAPM is an idealized representation of how financial markets price securities and, consequently, calculate projected returns on capital investments.

Bachelier (1900) it covered how to assess stock options using Brownian motion is the first publication in history to apply sophisticated mathematics to finance research. The researcher came to the conclusion that the creation of a theory of price formation and its empirical testing did not precede the market or security price. The growing body of evidence in the middle supported the theory's growth, showing that a random walk could accurately simulate the behavior of common stock and other price speculation.

Paudel (2008) concluded that the NEPSE index demonstrated improved performance and a consistent increase in the later months of the trial period. Throughout the study period, the capital market's stock market performance was less stable. Financial development is irrelevant, according to KC (2004), and the stock market does really promote economic expansion. Regretfully, the financial sector in Nepal has seen substantial development despite its roughly five-year history. Nonetheless, the majority of the advancements were limited to the financial industry. Because the government has made financial reform a top priority, the stock market has essentially remained stagnant. Numerous indicators of the growth of the stock market suggest that Nepal's stock market is immature and has not had a significant impact on the country's economy as a whole. Due to its small scale, the market is susceptible to price-rigging and manipulation. The value-traded to volatility ratio, low turnover ratio, high concentration ratio, and high volatility show that the Nepalese stock market is both volatile and liquid. Because the stock market is a less dependable source of funding for them, investors typically shun it until they have no other choice. This has kept banks at the center of Nepal's financial system.

Pradhan and KC (2010) stated that the Nepalese stock market may not be characterized as "weakly efficient" in terms of share pricing, where market efficiency is defined as the price

of a security reflecting all previous information. According to the respondents, dividends, retained earnings, bond shares, and right issuance were the primary variables influencing share prices. The findings showed that, in the context of the Nepalese stock market, the prices of less traded equities are consistent with the random walk hypothesis, which holds true for less traded stocks.

Hossein, et. al. (2011) determined that there are relationships between macroeconomic variables and the stock market indices in China and India that are both short- and long-term. Long-term price hikes for crude oil have a favorable effect in China but a negative effect in India. The money supply has a negative effect on the Indian stock market, but a positive one in China.Industrial production has a beneficial impact in India but a negative one in China. In both countries, rising inflation has a favorable impact on both stock indices. The price of crude oil has a positive simultaneous effect on India in the short term. In China, this effect is negligible and detrimental. Money supply has a negative concurrent effect on India's present Chinese stock. All these effects, though, are negligible. However, the current Chinese stock index (SSE) is positively and significantly impacted by inflation concurrently.

Eita (2012) Using a vector error correction model (VECM) econometric model, researchers examined the macroeconomic factors that influence Namibia's stock market price. Their findings showed that economic activity, interest rates, inflation, money supply, and exchange rates have a significant impact on Namibian stock market pricing. The study employed quarterly data spanning from 1998 to 2009. The money supply and interest rates would not quickly adjust to remedy the disequilibrium and return the system to equilibrium, the researcher discovered, if stock market values moved away from equilibrium. The relationship between the stock price and inflation, income, and currency rates is positive. Soti (2015) used monthly data from January 2005 to December 2014 to examine the relationship between macroeconomic indicators and the Nepalese stock market. ADF and ARDL models were employed by the researcher. Despite some short-term swings, this analysis finds that the NEPSE index and the Consumer Price Index (CPI), money supply, and interest rate variables have a long-term link.

Shrestha and Subedi (2014) studied the factors influencing Nepal's stock market performance using monthly data from mid-August 2000 to mid-July 2014. They proposed the idea that stock investors in Nepal saw equities as a hedge against inflation and as a different kind of

financial instrument. Moreover, low interest rates and the availability of liquidity support the Nepalese stock market's performance. More importantly, it has been discovered that the stock market reacts strongly to changes in the political climate and Nepal Rastra Bank policies. These results aid in the development of policies aimed at stimulating or stabilizing Nepal's share market.

Phuyal (2016) Using vector auto regression (VAR) and vector error correction model (VECM) to examine the relationship between these variables, researchers studied the relationship between macroeconomic variables and long-term market movements in the Nepalese capital market from January 2003 to December 2012. They discovered that the Nepali stock market had 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% on a monthly basis. It also demonstrated the Granger causality that existed between them. According to the Wald test, remittance income and the lag values of the NEPSE index up to six levels had an impact on the stock market index in the short term. These results have policy-related practical ramifications.

Azeez and Obalade (2018) stock markets are said to be sensitive to the state of the economy in which they function. Consequently, it is said that macroeconomic factors have an impact on how the stock market develops. According to some academics, the banking industry supports the stock market and vice versa, which encourages investors to make investments in any country where they believe the financing environment is advantageous. According to a Nigerian study, John (2019) found no evidence that currency rates have an impact on stock market investments. According to Owiredu et al. (2016), the Ghanaian stock market was unaffected by private capital flows, inflation, real income, or domestic savings. (Errunza & Hogan, 1998) state that the volatility rate in the European region varied by nation.

Devkota and Dhungana (2019) investigated the connection between Nepal's stock market index and four macroeconomic factors. Time series data covering 24 years, from 1994 to 2018, were used by the researcher. The study, which used the ARDL bound test approach, asserted that there is a long-term correlation between Nepal's stock market and macroeconomic indicators. They added that the money supply and interest rates had a positive and negative impact, respectively, on the Nepalese stock market, but that the gold price and exchange rate had no such effects. The study came to the conclusion that the Nepali stock market is unstable due to a lack of derivative products and that investors have no other options.

Based on the foregoing literature analysis, it can be shown that a number of qualitative and quantitative factors influence stock market prices both internationally and in Nepal. Numerous studies have shown that macroeconomic factors have a significant impact on the economy's stock prices. Changes in macroeconomic policy have an effect on how businesses operate, how much money they make, and eventually how much their share prices are worth. The literature review presented above demonstrates the wide range of studies conducted by different scholars covering a variety of stock price variables at different times. However, there aren't many studies on the key factors influencing Nepal's stock market price movement. Therefore, the study attempts to close this gap in the literature review.

2.3.2 Review of Nepalese Studies

Numerous master's degree theses, or dissertations, on stock price have been written by different researchers. A few of these dissertations are examined here for a literature study. These are listed in the following order:

Aryal (1995) carried out an investigation into "The General Behavior of Stock Market Price". Determining the laws governing stock market price volatility was the study's main goal. The goal of this work is to conceptually examine how the random walk model predicts price changes in the stock market. to create an empirical probability distribution of the market's overall subsequent price fluctuations for a single common stock market. to determine whether or not the stock market's subsequent price changes are independent of one another. The random walk model of security (speculative) price behavior predicts the assumption of independence, which accounts for a significant portion of the overall behavior of prices for twenty-one securities on the Nepal Stock Exchange (NSC). As a result, the model of this type has been disproved, at least in the context of Nepal region, as a preliminary approximation even for the early stages of stock market activity. According to this rejection of the hypothesis, investors on the floor of the exchange for securities can make higher expected profits in the future based solely on those historical price series under certain systematic trading schemes (i.e., Market Average Return) of the general securities market. This indicates that knowledge of the past now becomes useful in predicting the future movements in stock market prices. As a result, the anomaly of weak from testing of the efficient market hypothesis has significant implications for the past and future behavior of asset price variations. In general, there are two types of consequences for the conclusions drawn from the study: statistical and economic.

Timalsina (1997) has carried out an empirical investigation titled "Dividend and Stock Prices: An Empirical Study," using pooled data from sample companies to run multiple regression models and find evidence of a positive correlation between dividends and stock prices. The price of stocks is mostly influenced by dividends. The purpose of this study is to compare stock prices and dividends per share. to ascertain how the dividend policy affects the price of stocks. to determine whether altering the dividend policy or payment ratio can raise the market value of the stock. For the sample companies, there is a positive correlation between stock prices and dividends per share. The impact of dividends per share on share prices varies across different industries. For the sample companies, there is a positive correlation between stock prices and dividends per share. Share prices in various sectors are impacted differently by dividends per share. Increasing the market price per share may be possible by altering the dividend policy or dividend per share. Retained earnings per share and stock prices do not differ significantly. The stock price and the lag in earnings ratio are not equal. Even if the aforementioned research were conducted in Nepal, it is now vital to determine whether their conclusions are still applicable. Timalsina used 45 observations as the basis for her research. There were just sixteen companies in the sample, which is a relatively small quantity. Research on dividends carried out in the Nepali contest are solely dependent on secondary data. As of yet, no research on dividends utilizing primary data has been done. More qualitative information on dividends that cannot be ascertained by using secondary data must be obtained through a survey of financial executives.

Bhatta (1997) has additionally undertaken research on the subject of "Dynamics of the Stock Market in Nepal," with the aim of examining market trends in the country. to evaluate and calculate the stock market in Nepal's sartorial financial status. to evaluate the Nepalese stock market's market share price. to ascertain how the main market is affected by the secondary market and vice versa. to make suggestions for enhancing Nepal's stock market. Economic activity and the stock market go in the same direction. They have an effect on one another. The latter reflects the evolution of the former. Long-term, significant economic projects are financed by investments that are generated and mobilized via the stock market. As such, the stock market can be thought of as the center of the economy. The stock market in the Nepalese economy attracts investors who want to put their money into corporate sector shares. It is essential to foster entrepreneurship and motivate business owners to launch profitable ventures as soon as feasible. An entrepreneur's capacity for management is essential to the success of their businesses. The government should start initiatives to help

entrepreneurs become better managers, as this could help to increase the yield on investment. The foundation of any economy is the growth of the manufacturing sector, which in turn helps to support the banking, finance, and insurance industries.

Shrestha (1999) has carried out research on "stock price behavior in Nepal" with the goal of analyzing the effectiveness of the Nepali stock market. The purpose of this study is to investigate the serial correlation between the daily price changes of the various stocks over time. to ascertain whether the price changes' sequence is in line with the variations in the random number series that the independent Bernoulli's process predicts. to ascertain the stock market's efficiency in Nepal using the efficient market hypothesis theoretical model. to offer policy recommendations for the institutional creation of an effective market. For the thirty sample stocks listed on the Nepal Stock Exchange Ltd. (NEPSE), the serial correlation coefficients of the daily price changes for the first and second lag days, as well as runs of the series of daily price changes, led to the conclusion that the subsequent price changes are not independent random variables. Consequently, the behavior of the stock market prices in Nepal cannot be adequately explained by the random walk theory. The reliance in the observed price changes suggests that the price changes in the market in the future won't be independent of the price changes in the days prior. It suggests that historical price data can be used to forecast future price movements, allowing technical analysts to speculate with greater assurance of profit compared to a simple buy-and-hold strategy (i.e. average market return). As a result, knowledgeable investors—both individual and institutional have chances to increase their returns on investments in the market. The results of this investigation do not reveal the existence or involvement of sophisticated investors. It is acknowledged that the majority of unsophisticated investors have dominated the market, which can lead to prices deviating greatly from intrinsic values. This is because the sophisticated traders' very presence eliminates the possibility of price persistence, which establishes the independence of subsequent price changes.

Adhikari (1999) has studied "Corporate Practice in Nepal" The purpose of this study is to determine whether or not companies who pay bigger dividends are in a strong financial position and whether or not these companies have improved. Whether or not the companies with greater yields have better financial ratios. The question is whether or not dividend payout and stock price differences have an impact on the share prices of the finance and non-finance industries. the reasons behind paying stock and cash dividends, regardless of

whether doing so is a residual choice. If a business announces any kind of earnings based on share market price. Whether the existing legal restrictions on share repurchases should be maintained. The primary determinants of business dividend policy. Businesses in Nepal should adhere to some sort of dividend policy. More liquidity is found in stocks with higher dividends per share compared to book value per share. In contrast to stocks paying smaller dividends, the liquidity situation of stocks paying bigger dividends is likewise more erratic. Lower leverage ratios are found in stocks with higher dividends per share relative to book value per share. It demonstrates that businesses with larger dividend payout ratios are hesitant to use more leverage in their capital structure. In comparison to equities producing larger dividends, the leverage ratios of stocks with smaller payouts are considerably more volatile. Stocks with a greater dividend-to-book value ratio have higher profitability, according to research on the relationship between dividends and profitability. In contrast to equities paying smaller dividends, the profitability ratios of stocks paying greater dividends are also more erratic. The ratio of book value per share to dividend per share and turnover ratios show a positive difference. But, compared to companies that pay dividends, the turnover ratios of stocks that pay higher dividends are also more erratic.

Ojha (2000) has conducted a research on "Financial Performances and Common Stock Pricing" has been the subject of research. the investigation and analysis of the relationship between stock prices and financial results. to investigate the connection between stock price and dividends. to investigate the impact of signaling on stock price. The Nepalese stock market is still quite young. It is quite fresh and has only recently begun to take shape. The market is dominated by the banking sector because the outlook for other sectors, such as manufacturing, insurance, and finance corporations, is unfavorable. Long-standing corporate enterprises have historically maintained very consistent profitability metrics during the 1990 economic deregulation. Bonus shares have been issued by older companies more frequently than by new ones. Compared to the dividend payout ratio, the dividend per share is somewhat steadier. Payout ratios and dividend yields have been erratic because of this. The majority of investors have shifted their savings into the secondary stock market as a result of a lack of suitable investment opportunities. Calculated by a similar organization. People mistakenly believe that the issuance of right and bonus shares, which lower net worth per share and, as a result, should also lower the market price of stock, does not lower the price. As a result, they invest even at excessively high prices in the hopes of gaining more wealth overall. The dividends paid and the stock prices of the manufacturing and banking sectors have a strong positive link. There isn't a perfect relationship between stock prices and dividend payments in any other industry.

Dahal (2001) carried out a study titled "Stock Market Behavior of Listed Joint Stock Companies in Nepal." The rate at which new companies list on NEPSE and the rate at which listed companies are maintained are both studied and analyzed. to investigate and assess the signaling component on stock price using the index of the Nepal Stock Exchange. According to the study's findings, the NEPSE index's fluctuations are mostly caused by the signaling factor. Seven significant events were used to verify the study: the September 11 attack, the state of emergency, the Prime Minister's travel to the United States, the dissolution of parliament, the Royal Palace Massacre, and the King's visit to India.

Baral (2003) has studied the "Nepalese Securities Market Stock Price Movement." Examine and evaluate the volume and price of the stock. to research and evaluate the NEPSE's pace of newly listed businesses and the upkeep of those that are currently listed. to research and evaluate the opinions of investors on the choice of stock investing. to recommend the study's conclusions to those with an interest in investing in stocks. e. to investigate and assess, using the NEPSE index, the impact of signaling elements on stock price. Examining the Nepalese

stock market's annual trend analysis, it was discovered that while the stock price trend has been declining steadily for many years, it has been declining quickly in the last year. By using monthly trend analysis to examine the price trend of the NEPSE index over a three-year period (36 months), it was possible to determine that, in 2000, the price trend varied by month, with an increasing trend in 2001 and a decreasing trend in 2002. Thus, based on this trend analysis, we can conclude that there is no correlation between the price trend over the course of three years. After a year of studying the monthly trend analysis by sector, it was discovered that unsystematic activities of the market for stock prices in Nepal. Undoubtedly, no export can predict the price of the stock. Over the study period, the volume of stocks traded on the stock exchange showed an increasing tendency; however, last year, there was a falling trend.

Dhamala (2004) has undertaken research on the topic of "Determinants of Share Price in Nepalese Financial Market." The goal of this study is to assess the relationship between MPS and a number of financial indicators, including ROE, EPS, DPS, and NWPS. to evaluate MPS's market trends using a range of financial metrics, including ROE, EPS, NWPS, DPS, and so on. to determine if the selected companies' stocks are equilibrium priced or not. to offer some suggestions based on the study's findings. The MPS of NMBBL has a negative correlation with the main financial metrics. However, there is a favorable correlation with DPR and DPS, respectively. While NBL's MPS has a negative association with other financial variables, it has a favorable link with EPS and ROE. At the 1% and 5% levels of significance, there is a statistically significant positive correlation between NABL's MPS and EPS, NWPS, and DPS. Moreover, MPS and ROE have a favorable correlation. The MPS of NIBL has a reverse correlation with the main financial indicators. At the 1% significance level, MPS and DPS, however, are statistically significant. The MPS of SCNBL exhibits a negative correlation with key financial metrics. However, its positive correlation with ROE is stronger. With the exception of ROE, which it has a negative association with, AFCL's MPS has positive correlation with the other major financial metrics. However, there's no statistically significant association of such kind.

Giri (2005) has conducted a study titled "A study on Share Price Behaviour of Listed Commercial Banks," which offers an overview of the current state of the Nepalese stock market. to examine the performance of the commercial banks listed on the Nepal Stock Exchange in terms of share price. to investigate the level of risk associated with the commercial banks' sample investments in ordinary stock. d. To make a workable

recommendation based on the findings. For the sample period, there is a considerable deviation from zero in the large number of serial correlations of the daily log price movements of 10 commercial banks' stocks. This illustrates how price fluctuations in the past and present might weed out some important information when predicting price changes in the future. For the astute investors, there are therefore many opportunities. Because stock price swings are persistent, professional traders—individual or institutional can outperform the market. Hence, in order to generate greater profits than the simple buy and hold approach, keen fundamental and other studies are needed that can precisely forecast when fresh information will enter the market and affect prices. The NBBL common stock has the highest realized rate of return, at 76.06%, while the NIC and NBL stocks have negative returns. When it comes to overall risk, NBBL is the most dangerous stock out of all of them with 142% of the entire risk, while NIC is the least dangerous with only 5.03% of the total risk. In a similar vein, the standard deviation of the stocks of BOK and EBL places them second and third, respectively. It is discovered using the coefficient of variation study that the SBI stocks have the highest percent of risk per unit. NBBL stocks exhibit a higher degree of market aversion, as indicated by their highest beta coefficient of 3.93.

Shrestha (2006) has undertaken research on the "Share Price Behavior of Commercial Banks listed in NEPSE." The goal of this study is to examine how the NEPSE market's stock price moves. to evaluate the weak efficient market or random walk hypothesis. to determine whether the price of the previous change affects the subsequent price changes independently or not. For the majority of equities shares, the sum of the actual and expected runs is statistically significant, indicating that the price fluctuations of these shares deviate significantly from random series. The run test result corroborates the autocorrelation result. Therefore, the information from yesterday's pricing determines how much the price changed today. When the number of lag days grows, the mean absolute values of the autocorrelation coefficients decrease. This indicates that historical pricing data is not very useful in predicting future price changes over longer time horizons. The actual and expected number of runs differs significantly, as shown by the half of the sample companies whose share has a discrepancy of more than the average value of K (18.87%). Because the autocorrelation and run test results validate the persistence hypothesis, professional investors individual or institutional can outperform the market. A low order serial dependence is there, and it somewhat raises the predicted profit for investors.

Regmi (2006) presented a dissertation titled "Financial Indicators' Role in Nepal's Financial Market Share Price Determination." The purpose of this study is to investigate and assess the relationship between MPS and other financial metrics, such as ROE, EPS, DPS, and NWPS. a. To examine MPS market trends using a range of financial metrics, such as EPS, ROE, DPS, and NWPS. All financial indicators show a positive correlation with NABIL's MPS, yet at the 5% or 10% significance level, these correlations are not statistically significant. All financial indicators show a negative link with NABIL's MPS. The MPS correlation coefficients with other financial indicators are both positive and negative for all other banks. At the 5% or 10% level of significance, these values are statistically significant. The link is statistically significant at the 5% level of confidence with EPS and the 10% level of confidence with NWPS and DPS. The relationship is favorably correlated with all financial indicators of MPS for NFCL. The correlation coefficient of MPS with other financial indicators for other finance companies is both positively and negatively associated; the association is statistically significant for KFL and UFCML, but not significant for the other companies. According to the study's findings, all financial indicator studies have a favorable correlation with the MPS of NABIL, NFCL, and ACE. Similarly, the majority of the financial indicators under study have a favorable correlation with the MPS of BOK, KFL, UFCML, and HISEF. MPS has a negative correlation with every financial indicator examined for other companies, such as NIBL, and a negative correlation with most of the financial indicators for SBI. For certain financial measures of some of the organizations, the association is statistically significant. The share market price in Nepal is not a reliable indicator of a company's stock market financial performance. The stock market is prone to manipulation, inefficient, and flawed.

Bhattarai (2006) submitted a dissertation titled "Commercial Banks and Financial Institutions' Stock Price Behavior." The current state of the financial institution and joint venture banks is examined in this study. to investigate and assess the connection between MPS and other financial metrics, such as EPS, NWPS, DPS, and DPR. to evaluate the level of risk associated with the sampled companies' investments in common stocks. Provide some suggestions based on the study's conclusions in order to determine whether the stocks of the sampled companies are equilibrium priced or not. Compared to NBL, NIBL, and EBL, SCBL has a greater DPS. The DPS of NFCL is greater in finance businesses than that of AFCL and NMBCL. It can be observed that the NFCL's DPS is at a decent level. Compared to NBL, NIBL, and EBL, SCBL has a higher MPS. Among the chosen banks, SCBL is the most

notable. Compared to SCBL, NIBL, and EBL, the risk of NBL is higher. It suggests that NBL has a considerable risk. EBL has a greater CV, meaning that it fluctuates more. With the exception of EBL and AFCL, where the correlation coefficient is listed as negative, the correlation coefficient between EPS and DPS appears to be substantial. There is a negligible negative correlation coefficient between EPS and NWPS in the case of NIBL and NFCL, indicating a larger degree of managerial issues with issuing and managing NIBL and NFCL shares. e. Strong coefficients of determination (r2) for SCBL, NIBL, NFCL, and NMBFCL are 0.64, 0.254, 0.7174, and 0.393, respectively. This means that the influence of EPS accounts for 64%, 25.4%, 71.74%, and 39.3% of the total variation in market price, with the remaining 36%, 74.6%, 28.26%, and 60.7% coming from other factors.

Paudel (2005) on "Stock price Behavior of Commercial Banks in NEPSE" used correlation coefficients, regression analyses, run tests, and autocorrelation to look at the closing prices of six listed commercial banks every month for three years in a row, from 2002 to 2004. In his research, he discovered a correlation between subsequent price movements and earlier price series. Additionally, he discovered that the majority of stocks deviated from the random walk theory. The prior prices influenced the current stock price. The most significant element influencing the stock's price fluctuation was the EPS. Because the NEPSE index fluctuated as a result of transactions involving the shares of commercial banks, the majority of investors desired to invest in commercial bank shares. The study had significant limitations. The monthly closing price of stocks, which was the data employed in this study, was insufficient to forecast share price behavior. As the research on share price behavior in Nepal given above only provides a limited amount of information. Therefore, in order to draw more firm conclusions about the effectiveness of the Nepalese stock market, more thorough testing procedures, closer time periods (the majority of study data were collected on a weekly or monthly basis, which is not a true representation of the market), and adjustments to necessary variables are required. Since Arial's study was conducted over an eight-month period beginning on the first day of the structured stock market, it is already outdated. Additionally, the companies in the sample were chosen at random and did not meet any requirements. Shrestha's research, meanwhile, relied on thirty sample equities that were chosen at random. The research was limited to the structured market's early stages and did not modify any necessary variables.

2.4 Research Gap

The subject of stock market prices has been the subject of numerous prior studies. Each of

those studies has limitations of its own, yet they all contain numerous valuable discoveries. The aforementioned studies were conducted by several researchers, and their shortcomings are also noted. This will examine the state of the Nepalese stock market's stock price fluctuations. Common stock typically trades at par value on the primary market, but prices might vary on the secondary market. Common stock prices are heavily impacted by several market-related factors. As a result, research has been done on a number of important linked elements that influence fluctuations in secondary market stock prices. I discovered that there is still a great deal of work to be done in the area of investor interest. I discovered a few studies that were somewhat similar to the research I had conducted, but the sample size was extremely small—just five years' worth of data were collected, there were few closely related market factors, and traditional analytical techniques were employed. As a result, I considered consulting studies on a related subject that had more in-depth coverage.

CHAPTER-III
RESEARCH METHODOLOGY

The main goals of this study are to assess the stock market price, the strengths and weaknesses of Global IME Bank Limited, NMB Bank Limited, and NABIL Bank Limited, and to provide a framework for their improvement. The research methodology is used to test the hypothesis, analyze the data, and interpret the results.

3.1 Research Design

A descriptive and informal comparative research design is used in this study. Descriptive and analytical research methods were employed in this study to identify the factors that influence liquidity in the commercial banks of Global IME Bank Limited, NMB Bank Limited, and NABIL Bank Limited. A research design is a set of guidelines for gathering and analyzing data that tries to balance procedural economy with relevance to the study's goal. It is a strategy for gathering and evaluating data. It offers a set of guiding posts to help the researcher travel in the appropriate directions and accomplish the objective. The research design used in this study combines historical, descriptive, and case study methods. Examining the actual stock market prices of the selected companies Global IME Bank Limited, NMB Bank Limited, and NABIL Bank Limited is the goal of the study.

3.2 Population and Sampling Procedure

In addition to persons, all objects or things that will be selected for the study are included in the term population, also known as the study population. The study's population consists of Nepal's 19 commercial banks. Global IME Bank Limited is one of the 19 commercial banks used as a sample for this research. In research, the phrase "population" or "universe" refers to the entirety of any well-defined class of individuals, events, or objects. The stock market prices of Global IME Bank Limited, NMB Bank Limited, and NABIL Bank Limited were the subject of this investigation. We refer to the location of the population selected for the study as the "sample." A sample is an attempt to reflect the entire population in as many different ways as feasible. The information gathered from a single organization is analyzed using descriptive and causal comparative methodologies.

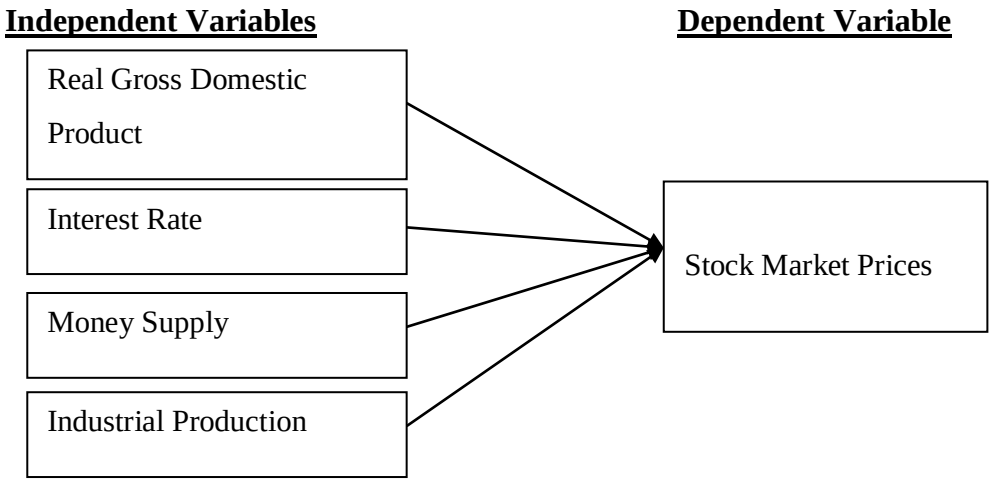
3.3 Nature and Sources of Data Collection

Secondary data served as the study's foundation. Secondary data is utilized to identify the

variables that impact the stock price and to illustrate the relationship between the various variables (SMP, RGDP, INT, MS, and IP). The study uses secondary sources for its data. Since the process used to acquire the data varies as well. We will gather pertinent secondary data from the NRB report. The three main factors being examined are interest rate (INT), real GDP (RGDP), and stock market price/Nepalese index (SP). The Nepal Stock Exchange provides the overall index data used to calculate stock market prices. The Nepalese Central Bureau of Statistics provides the RGDP as a gauge of economic activity. Broad money (MS), which is acquired from Nepal Rastra Bank (NRB), is a representation of the money supply. Treasury Bill due in 91 days The NRB also provides the interest rate and Nepalese currency rates in relation to the US dollar.

3.4 Research Framework and Definition of Variable

A conceptual framework is a flexible analytical tool that can be used in a variety of situations. It is employed to arrange concepts and draw conceptual distinctions. This study's analytical methodology is based on a condition-based evaluation of the available data. The conceptual framework that describes the dependent and independent variable used in the study are shown in figure:



Stock Market Prices

In regards to securities trading, the market price is the most recent price at which a security was traded. The market price is the result of the interaction of traders, investors, and dealers in the stock market. In order for a trade to occur, there must be a buyer and a seller that meet at the same price.

Real Gross Domestic Product

Real gross domestic product (GDP) is an inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year. Real GDP is expressed in base-year prices. It is often referred to as constant-price GDP, inflation-corrected GDP, or constant-dollar GDP. Put simply, real GDP measures the total economic output of a country and is adjusted for changes in price.

GDP is defined by the following formula:

$$\text{GDP} = \frac{GDP\ (time2) - GDP\ (time1)}{GDP\ (time1)}$$

Interest Rate

An interest rate is the percentage of principal a lender charges for using its funds. The principal is the amount of cash granted.

The interest rate charged on any loan or line of credit can vary depending on the type, length, size, and purpose of the loan, as well as other factors such as economic conditions, government policies, creditworthiness, and the risks associated with it.

Money Supply (MS)

Money supply contains coins, balances and cash carry in saving accounts and also in checking accounts. Economists developed policies to evaluate money supply for the purpose of controlling interest rate and money circulation in the economy. In case of increasing money supply mostly the interest is lower as a result it enhances the investments. The amount of money in an economy is referred to as the money supply or it is the total amount of monetary assets available in an economy at a specific time.

Industrial Production

Industrial production is a measure of output of the industrial sector of the economy. The industrial sector includes manufacturing, mining, and utilities. Although these sectors contribute only a small portion of gross domestic product (GDP), they are highly sensitive to interest rates and consumer demand. This makes industrial production an important tool for forecasting future GDP and economic performance. Industrial production figures are also used by central banks to measure inflation, as high levels of industrial production can lead to uncontrolled levels of consumption and rapid inflation.

3.5 Method of Analysis

Without being organized and presented in a methodical manner, the data so acquired are meaningless. They also require simplification in order to be analyzed. Tables with context are filled in with pertinent material. Unnecessary data is removed from the tabular form and only the information that is pertinent to the study is provided in an understandable manner. With the aid of numerous financial and statistical tools, an attempt is made to derive the conclusion from the data that is now accessible. Excel and SPSS are computer programs used to calculate statistical values such as mean, standard deviation, coefficient of variance, correlation, etc.

Descriptive Analysis

In descriptive statistics, the arithmetic mean is used to calculate central tendency. Consistency is measured using the standard deviation and coefficient of variation. Statistical graphics are also utilized to investigate the occurrences, depending on the type of data.

Likewise, several regressions are performed in order to derive the statistical conclusions. This is so that inferences about how credit risk impacts the profitability of foreign joint ventures engaged in commercial manufacturing in Nepal can be drawn from the study. In addition, the correlation matrix makes it easier to look for correlation coefficients between the variables. A computer, a data analysis toolbox, and Microsoft Excel are expected to be used in the computation of each statistical parameter in this study.

a. Arithmetic means

The arithmetic mean is the value that is found by adding the various quantities of each item in a series and dividing the total by the total number of items. The arithmetic mean is a useful tool in statistical analysis. The arithmetic mean is the most fundamental and often used method of calculating a mean or average. All that has to be done is divide the total number of numbers in the series by the sum of all the numbers in the group.

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

Where,

$\bar{X}$ = Arithmetic Mean

$\sum X$ = Sum of Elements

N = Number of Observations

b. Standard Deviation

T The standard deviation, a statistic that indicates how dispersed a dataset is in respect to its mean, is calculated using the square root of the variance. The square root of variance is an expression that can be obtained by computing the variance between each data point and the mean. Data points that depart from the mean cause a bigger deviation within the data collection; so, the more dispersed the data, the larger the standard deviation.

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

Correlation Analysis

The correlation coefficient is one statistical measure that's used to assess how strongly two variables are related to one another. When the values of the variables are exactly proportionate to one another, there is a positive correlation. On the other hand, if the values of the variables are inversely proportionate, the correlation is said to be negative. The correlation coefficient is always observed in the range of +1 to -1.

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$$

Where,

r is the correlation coefficient of X and Y between two variables.

Features:

a) It is situated between -1 and +1
b) A perfect positive correlation exists if r = +1.
c) A perfect negative correlation exists if r = -1.
d) There is no association if r = 0.
e) A strong degree of positive or negative correlation is present if r = 0.7 to 0.99 (or -0.7 to -0.99).

Regression Analysis

Regression analysis is a set of statistical methods used to assess the relationships between one or more independent variables and a dependent variable. It can be applied to assess the degree

of correlation between the variables and predict the future relationship between them. The study's model approximates the idea that the stock price depends on several independent variables for the first time. The independent variables include return on assets, dividends per share, net profit margin earning per share, and return on equity. As a result, the model assumes the following shapes:

Model Summary

The study investigated the role of macroeconomic variables on stock market prices. In linear form and using natural log on both sides as follows:

$\ln SMP_t = \alpha + \beta_1 \ln RGDP_t + \beta_2 \ln INT_t + \beta_3 MS_t + \beta_4 IP_t + \mu_t$

Where,

SMP_t = Stock market prices

α = constant term

β_{1-4} = Coefficients ,

$RGDP_t$ = Real Gross Domestic Product,

Ms = Broad money supply,

INT = Interest rate,

MS = Money Supply

IP = Industrial Production

μ_t = error term and

t = time in year

CHAPTER-IV
RESULTS AND DISCUSSION

This chapter serves as the study's primary body section. This chapter serves as the study's focal point. The unprocessed secondary data is collected. As a result, in order to meet the objectives of this study, these raw data are organized in this chapter and assessed using a range of statistical and financial instruments and techniques. Secondary data comes from multiple sources, is presented separately, and is analyzed both qualitatively and quantitatively.

4.1 Analysis of SMP, RGDP, INT, MS and IP

Financial analysis is the process of evaluating businesses, projects, budgets, and other finance-related entities to determine their performance and suitability. Financial instruments are used to assess the bank's strengths and weaknesses concerning its financial performance or health. The financial metrics that were applied to the data analysis are listed below:

4.1.1 Analysis of Stock Market Prices

The most recent price at which a security was exchanged is known as the market price in the context of securities trading. The interaction of dealers, investors, and traders in the stock market determines the market price. A buyer and a seller must agree on a price in order for a trade to take place. Table 4.1 provides an analysis of the sample banks' stock market prices.

Table 4.1

Stock Market Prices of Sample Banks

Fiscal Year	GBIL	NABIL	NMBBL	Average
2015/016	515	2344	1500	1989.75
2016/017	388	1523	886	1273.00
2017/018	290	921	551	629.25
2018/019	295	800	552	582.25
2019/020	239	765	540	513.73
2020/021	441	1359	484	676.05
2021/022	251	825	450	480.50
Total				6144.53
Average				877.79
S.D.				77.58
C.V.				8.83%

Source: Annual Report of Selected Banks

The average MPS for the seven-year study period of four commercial banks is displayed in table 4.1. Between the fiscal years 2015–2016 and 2021–2022, the price of stocks has

declined. The banks' stock market price peaked at 1989.75 in the 2015–16 fiscal year and fell to 480.50 in the 2021–2022 fiscal year. The company's coefficient of variation is 8.83 percent, and the average standard deviation is 77.58, according to the banks' SMP of 877.79.

Figure 4.1

Stock Market Prices of Sample Banks

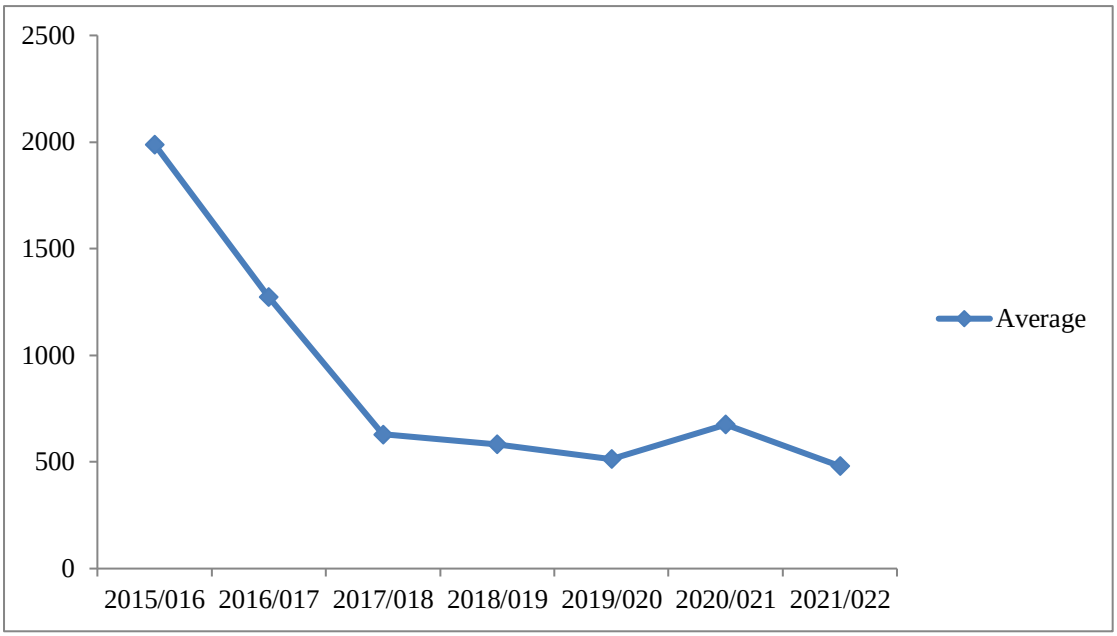


Figure 4.1 displays the trend line of bank stock market prices over the course of the seven-year study period. Throughout the fiscal years 2015–2016 and 2021–2022, the price of stocks has dropped.

4.1.2 Analysis of Real Gross Domestic Product

The value of all goods and services generated by an economy in a given year is reflected in the real gross domestic product (GDP), which is a statistic adjusted for inflation. Base-year prices are used to express real GDP. It is also known as constant-dollar GDP, constant-price GDP, or inflation-corrected GDP. To put it simply, real GDP accounts for price fluctuations and represents the entire economic production of a nation. Table 4.2 provides an analysis of the sample banks' real gross domestic product (GDP).

Table 4.2

Real Gross Domestic Product of Sample Banks

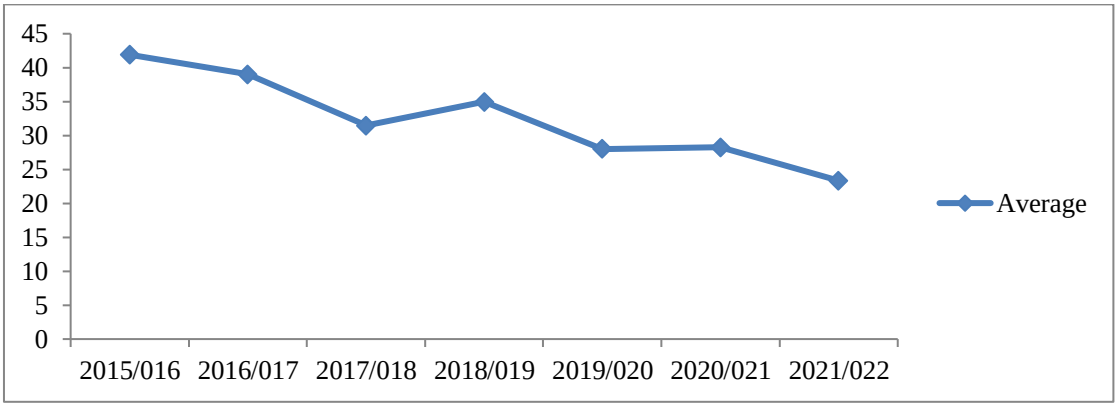
Fiscal Year	GBIL	NABIL	NMBBL	Average
2015/016	19.33	59.27	43.03	41.90
2016/017	25.51	59.86	35.15	39.00
2017/018	23.64	51.84	23.11	31.48
2018/019	26.46	50.57	32.44	34.97
2019/020	17.99	36.16	27.6	28.00
2020/021	19.25	33.57	28.07	28.26
2021/022	20.84	18.64	29.84	23.35
Total				226.96
Average				32.42
S.D.				8.76
C.V.				27.02%

Source: Annual Report of Selected Banks

The average real gross domestic product of four commercial banks during the course of the seven-year study period is displayed in table 4.2. There has been a decline in the real gross domestic product from the fiscal years 2015–2016 and 2021–2022. The banks' real gross domestic product reached its highest point in the fiscal year 2015/016, or 41.90, and its lowest point in the fiscal year 2021/022, or 23.35. The banks' average real gross domestic product is 32.42, while the company's coefficient of variation is 27.02 percent and its standard deviation is 8.76.

Figure 4.2

Real Gross Domestic Product of Sample Banks



The real gross domestic product trend line for banks during the course of the seven-year study period is displayed in figure 4.2. There has been a decline in the real gross domestic product from the fiscal years 2015–2016 and 2021–2022.

4.1.3 Analysis of Interest Rate

The proportion of principal that a lender charges for using its money is known as the interest rate. The amount of money issued is known as the principle. Any loan or line of credit may have an interest rate that varies based on its amount, length, purpose, and other elements like creditworthiness, risks involved, government regulations, and the state of the economy. Table 4.3 provides an analysis of the Interest Rate e for the sample banks.

Table 4.3

Interest Rate of Sample Banks

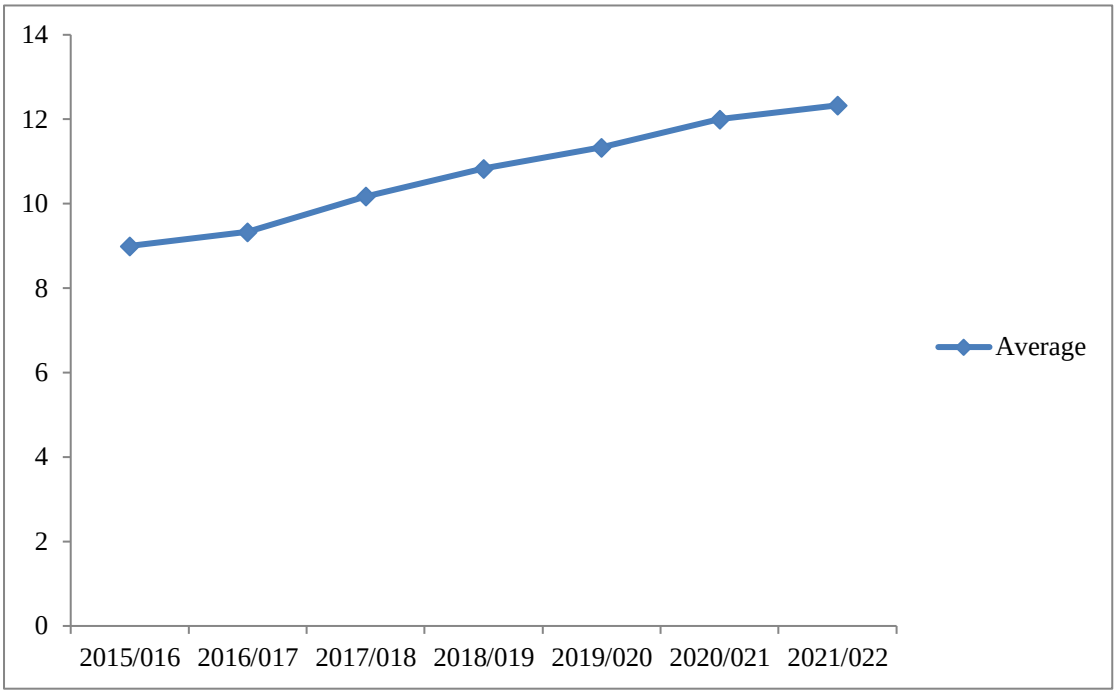
Fiscal Year	GBIL	NABIL	NMBBL	Average
2015/016	9.50	9.00	8.50	9.00
2016/017	9.00	10.00	9.00	9.33
2017/018	10.50	10.50	9.50	10.17
2018/019	11.00	11.50	10.00	10.83
2019/020	11.50	12.00	10.50	11.33
2020/021	12.00	12.50	11.50	12.00
2021/022	12.00	13.00	12.00	12.33
Total				75.00
Average				10.71
S.D.				7.65
C.V.				71.42%

Source: Annual Report of Selected Banks

The interest rates of four commercial banks during the course of the seven-year study period are displayed in table 4.3. From fiscal year 2015/016 to fiscal year 2021/022, interest rates have grown. The banks' interest rates range from a low of 9 in the fiscal year 2015/016 to a maximum of 12.33 in the fiscal year 2021/022. The standard deviation is 7.65 and the company's coefficient of variation is 71.42 percent, while the average interest rate offered by banks is 10.71.

Figure 4.3

Interest Rate of Sample Banks



The trend line of bank interest rates over the course of the seven-year study period is displayed in figure 4.3. During the period from fiscal year 2015/016 to fiscal year 2021/022, interest rates have grown.

4.1.4 Analysis of Money Supply (MS)

Cash held in checking and savings accounts, as well as coins and balances, make up the money supply. Interest rates and the flow of money throughout the economy are managed by policies that economists have devised to assess the money supply. When the money supply rises, investments tend to perform better since interest rates are typically lower. Money supply is the entire amount of monetary assets available in an economy at a given point in time, and it is the amount of money in an economy. Table number 4.4 analyzes the money supply (MS) of the sample banks.

Table 4.4

Money Supply of Sample Banks

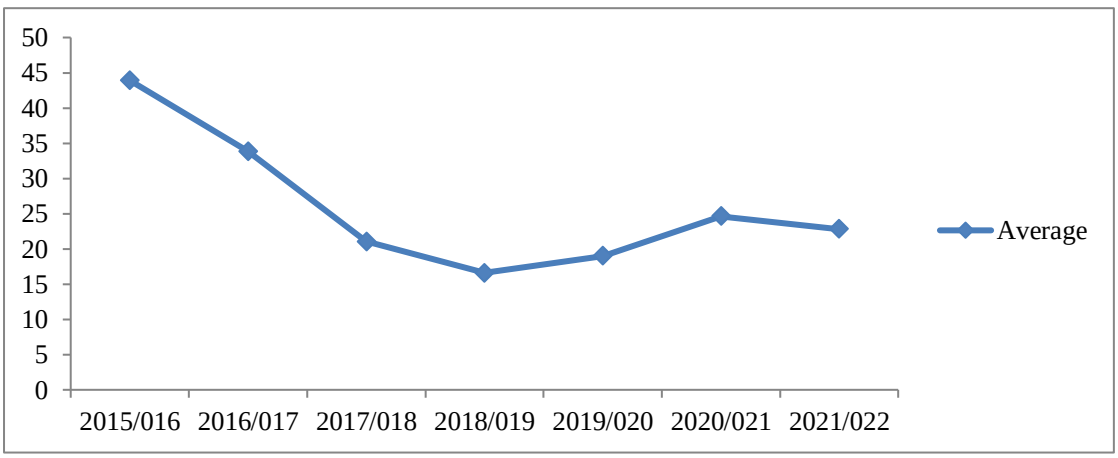
Fiscal Year	GBIL	NABIL	NMBBL	Average
2015/016	22.89	39.55	34.86	43.91
2016/017	20.25	25.44	25.11	33.87
2017/018	14.08	18.6	23.84	21.04
2018/019	11.15	15.82	17.02	16.61
2019/020	13.29	21.15	19.57	18.98
2020/021	22.9	40.48	17.25	24.61
2021/022	12.06	44.21	18.52	22.81
Total				181.82
Average				25.97
S.D.				9.24
C.V.				35.57%

Source: Annual Report of Selected Banks

The money supply ratios for four commercial banks throughout the course of a seven-year study period are displayed in table 4.4. There has been a reduction in the money supply from fiscal year 2015–2021–2022. Bank money supply is at its lowest point in the fiscal year 2018/019, at 16.61, and at its highest point in the fiscal year 2015/016, at 43.91. The standard deviation is 9.24, the company's coefficient of variation is 35.57 percent, and the average money supply ratio for banks is 25.97.

Figure 4.4

Money Supply of Sample Banks



The money supply ratio trend line for banks over the course of the seven-year study period is displayed in figure 4.4. Between fiscal years 2015–16 and 2021–022, there has been a decline in the money supply ratio.

4.1.5 Analysis of Industrial Production

A measure of the economy's industrial sector's output is called industrial production. Mining, utilities, and manufacturing are all part of the industrial sector. These industries only make up a small percentage of the GDP, but they are very dependent on consumer demand and interest rates. Because of this, industrial production is a crucial indicator of future GDP and economic growth. Since high levels of industrial production can result in uncontrollably high levels of consumption and quick inflation, central banks also use industrial production numbers to measure inflation. Table 4.5 provides an analysis of the sample banks' industrial production.

Table 4.5

Industrial Production of Sample Banks

Fiscal Year	GBIL	NABIL	NMBBL	Average
2015/016	125.17	244	196.12	208.32
2016/017	139.15	270	189.91	223.77
2017/018	131.72	256	174.24	183.99
2018/019	158.4	257	187.73	197.28
2019/020	151.95	256	187.67	195.68
2020/021	154.58	251	188.43	197.05
2021/022	158.6	232	188.9	192.88
Total				1398.96
Average				199.85
S.D.				37.01
C.V.				18.52%

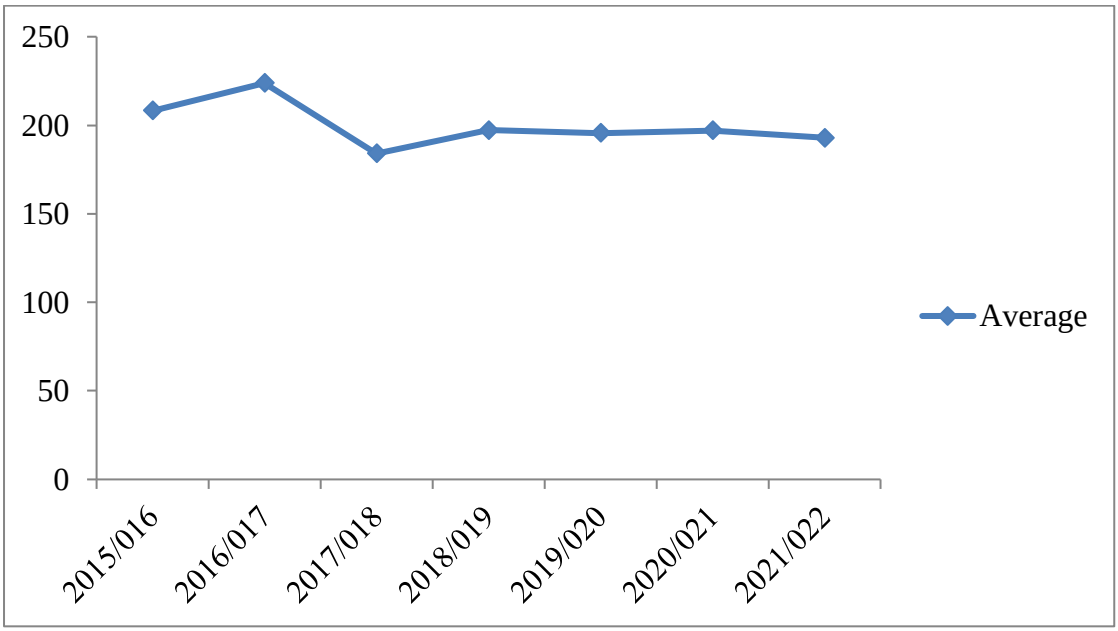
Source: Annual Report of Selected Banks

The industrial production of four commercial banks during the course of the seven-year study period is displayed in table 4.5. From fiscal year 2015/016 to fiscal year 2021/022, there has been a decline in industrial production. The banks' industrial production reached its peak in the 2016–17 fiscal year, or 223.77, and its lowest point in the 2017–18 fiscal year, or 183.99. The banks' average industrial production is 199.85, with a standard deviation of 937.01 and a

coefficient of variation of 18.52 percent for the company.

Figure 4.5

Industrial Production of Sample Banks



The trend line of banks' industrial production during the course of the seven-year study period is depicted in figure 4.5. From fiscal year 2015/016 to fiscal year 2021/022, there has been a decline in industrial production.

4.2 Descriptive Statistics

Table 4.6

Descriptive Statistics of Study Variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
SMP	7	877.79	558.69	480.50	1989.75
RGDP	7	32.42	6.58	23.35	41.90
IR	7	10.71	1.28	9.00	12.33
MS	7	26.12	9.52	16.61	43.91
IP	7	199.85	12.75	183.99	223.77
Valid N (listwise)	7				

Source: Appendix-II

The results for the sample banks during the seven years are displayed in table 4.6 include SMP, RGDP, IR, MS, and IP. For the study period of 2015/016 to 2021/022, the table displays descriptive statistics, including the mean, standard deviation, minimum and maximum values of variables connected with seven commercial banks. The Sample Company's SMP increased until it reached its highest value of 1989.75. The SMP mean value is -877.79, the S.D. value is 558.69, the minimum value is 480.50, and the maximum value is 1989.75. Comparably, the RGDdP has a mean value of 32.42, a standard deviation of 6.58, a minimum value of 23.35, and a maximum value of 41.90. With a minimum value of 9 and a high value of 12.33, the IR mean value is 10.71 and the S.D. is 1.28. The MS mean is 26.12, the S.D. is 9.52, the minimum is 16.61, and the maximum is 43.91. The IP mean is 199.85, the standard deviation is 12.75, the minimum is 183.99, and the maximum is 223.77. The standard deviation shows that the dependent variable, stock market price, has the biggest variance, while the independent variable, interest rate ratio, has the lowest variation.

4.3 Relationship between SMP, RGDP, IR, MS and IP

This section establishes the relationship between market value per share and the following factors: money supply, interest rates, real gross domestic product, money market prices, and industrial production. For analytical purposes, real gross domestic product, interest rate, money supply, and industrial production volatility are assumed to have an impact on the stock market price (SMP). Therefore, RGDP, IR, MS, and IP are considered independent variables, while SMP is considered the dependent variable. The correlation analysis is used to ascertain how RGDP, IR, MS, and IP relate to SMP. Calculating simple correlation and each variable's coefficient of determination enables one to ascertain the impact of RGDP, IR, MS, and IP on SMP. Multiple regression analysis is used to ascertain the extent to which the independent variable influences the dependent variable.

4.3.1 Correlation Analysis

To determine how various independent factors relate to MPS, a correlation analysis of the total data is conducted.

Table 4.7

Relationship of SMP with RGDP, IR, MS and IP

Variables	SMP	RGDP	IR	MS	IP
SMP	1				
RGDP	.847**	1			
IR	-.811	-937	1		
MS	-.964	.702**	-.693	1	
IP	.665**	.674**	-580	.678**	1

Source: Appendix-II

Table 4.7 demonstrates that there is a considerable positive correlation between SMP and RGDP (i.e.,.847**), IR (i.e., -.811), MS (i.e., -.964), and IP (i.e.,.665**). At the 1% significance level, the link between SMP and RGDP and IP is significant; at the 5% significance level, it is significant with respect to IR and MS. According to the correlation result, the dependent variable the stock market price increases as the independent variables do, and vice versa.

RGDP has a positive and significant link with MS, IP, and MS, according to an analysis of the universal relationship between independent variables. Likewise, there is a strong positive correlation between RGDP and IP.

4.3.2 Regression Analysis

Table 4.8

Model Summary

R	R- Square	Adjusted R Square	Std. Error of the Estimate
1.00	1.00	.99	60.87

Source: Appendix-III

a. Predictors: (Constant), RGDP, IR, MS, IP

b. Dependent Variable: SMP

The coefficient of determination, or R-square, which is sometimes referred to as the model summary, can be used to explain variation. Table 4.8 clearly shows that the R-square value is.99, meaning that RGDP, IR, MS, and IP account for 99% of the volatility in the market

price of Nepalese commercial banks. Nevertheless, other factors not covered in this study account for the remaining 0.2% (100% - 99%).

Similarly, after correcting for degree of freedom (df), RGDP, IR, MS, and IP account for 99% of the volatility in the market price of Nepalese commercial banks, or modified R-square of.99. This demonstrates that all independent variables and dependent variables have significant relationships. This implies that the movement of the stock price in commercial banks is significantly influenced by RGDP, IR, MS, and IP.

The model summary also shows that the standard error of estimate is 60.87, indicating that the observed value of the factors influencing the movement of stock prices in Nepal's commercial banks is 466356.9 units variable from the regression line.

Regression Analysis

Table 4.9

Regression Model

Variables	Unstandardized Coefficient		Unstandardized Coefficient Beta	t	Sig.
	B	Std. Error			
(Constant)	-1226.34	961.26	.00	-1.28	.292
RGDP	44.18	12.16	.52	3.63	.068
IR	63.99	58.55	.15	1.09	.388
MS	46.75	4.11	.80	11.39	.008
IP	-6.18	2.99	-.14	-2.07	.174

Source: Appendix-III

a. Dependent Variable: SMP

The regression equation for Nepal's commercial banks' stock price movement may be expressed as follows based on the coefficients:

SMP = -1226.34 + 44.18X1+63.99X2 +46.75X3 -6.18X4 + ei

Based on RGDP, IR, MS, and IP, the regression coefficients are, in order, -1226.34, 44.18, 63.99, 46.75, and -6.18. Additionally, Table 4.9 demonstrates that the independent P/E ratio has a significant outcome because each of its p-values is below the significant level (p <

0.05). Nevertheless, RGDP and MS are independent factors. This shows that a rise of one unit in RGDP, IR, MS, and IP corresponds to increments in SMP of -1226.34, 44.18, 63.99, 46.75, and -6.18.

4.4 Major Findings of the Study

i. Owing to the disparate types and sources of data, the main and secondary data analyses yielded distinct major conclusions for this study, which are as follows:

ii. i. The trend line of bank stock prices during the course of the seven-year study period. Throughout the fiscal years 2015–2016 and 2021–2022, the price of stocks has dropped.

iii. ii. The real gross domestic product trend line for the seven-year study period for banks. Between fiscal years 2015/016 and 2021/022, there was a decline in the real gross domestic product.

iv. iii. The bank interest rate trend line throughout a seven-year period of research. From fiscal year 2015/016 to fiscal year 2021/022, there has been an increase in interest rates.

v. v. The banks' money supply ratio trend line during the course of the seven-year study period. Between fiscal years 2015–16 and 2021–022, there has been a decline in the money supply ratio.

vi. vi. The banks' industrial production trend line over the course of the seven-year study period. From fiscal year 2015/016 to fiscal year 2021/022, there has been a decline in industrial production.

vii. VII.The findings show the sample banks' SMP, RGDP, IR, MS, and IP during a seven-year period. For the study period of 2015/016 to 2021/022, the table displays descriptive statistics, including the mean, standard deviation, minimum and maximum values of variables connected with three commercial banks. The Sample Company's SMP increased until it reached its highest value of 1989.75. The SMP mean value is -877.79, the S.D. value is 558.69, the minimum value is 480.50, and the maximum value is 1989.75. viii.The RGDdP has a mean value of 32.42, a standard deviation of 6.58, a minimum value of 23.35, and a maximum value of 41.90. With a minimum value of 9 and a high value of 12.33, the IR mean value is 10.71 and the S.D. is 1.28. The MS mean is 26.12, the S.D. is 9.52, the minimum is 16.61, and the maximum is 43.91. The IP mean is 199.85, the standard deviation is 12.75, the minimum is 183.99, and the maximum is 223.77. The standard deviation shows that the dependent

variable, stock market price, has the biggest variance, whereas the independent variable has the lowest variation.

viii. viii. The coefficient of determination, or R-square, is a tool for explaining variation. Table 4.8 clearly shows that the R-square value is.99, meaning that RGDP, IR, MS, and IP account for 99% of the volatility in the market price of Nepalese commercial banks. Nevertheless, other factors not covered in this study account for the remaining 0.2% (100% - 99%). Similarly, after correcting for degree of freedom (df), RGDP, IR, MS, and IP account for 99% of the volatility in the market price of Nepalese commercial banks, or modified R-square of.99. This demonstrates that all independent variables and dependent variables have significant relationships.

ix. ix. The regression coefficients based on IP, RGDP, IR, and MS are -6.18, 63.99, 46.75, -1226.34, and 44.18, respectively. Additionally, Table 4.9 demonstrates that the independent P/E ratio has a significant outcome because each of its p-values is below the significant level ($p < 0.05$). Nevertheless, RGDP and MS are independent factors. This shows that a rise of one unit in RGDP, IR, MS, and IP corresponds to increments in SMP of -1226.34, 44.18, 63.99, 46.75, and -6.18.

4.5 Discussion

The arbitrage pricing theory (APT), which examines stock market returns and economic variables, reveals the connection between stock prices and economic variables (Ross, 1976). The relationship between systematic risk and expected return for assets, especially equities, is characterized by the Capital Asset Pricing Model (CAPM). It is extensively used in finance to determine costs of capital, generate predicted returns for assets based on their risk, and price hazardous securities. A simplified representation of how financial markets value securities and, in turn, calculate projected returns on capital investments is provided by the Capital Asset Pricing Model (CAPM) (Sharpe, 1970; Bachelier, 1900; Paudel, 2008; Pradhan and KC, 2010), Hossein et al. (2011), Eita (2012), Phuyal (2016), Azeez and Obalade (2018), Shrestha and Subedi (2014), Devkota and Dhungana (2019) The study came to the conclusion that the Nepali stock market is unstable due to a lack of derivative products and that investors have no other options.

An additional empirical discovery derived from the regression analysis indicates a positive correlation between the trend lines of bank stock market prices throughout the course of the seven-year study period. Between fiscal year 2015/016 and fiscal year 2021/022, the price of stocks has dropped. the real gross domestic product trend line for banks during the course of

the seven-year study period. There has been a decline in the real gross domestic product from the fiscal years 2015–2016 and 2021–2022. the bank interest rate trend line during the course of the seven-year study period. During the period from fiscal year 2015/016 to fiscal year 2021/022, interest rates have grown. The money supply ratio trend line for banks throughout a seven-year study period. Between fiscal years 2015–16 and 2021–022, there has been a decline in the money supply ratio. the seven-year study period's trend line for banks' industrial production. From fiscal year 2015/016 to fiscal year 2021/022, there has been a decline in industrial production.

CHAPTER-V
SUMMARY, CONCLUSION AND IMPLICATIONS

This study chapter is divided into three pieces. The first section provides a brief summary of the study. The second section presents the study's conclusions, while the third and final section discusses ramifications for the analysis's setting.

5.1 Summary

Nepal's stock market is still relatively new. Most ordinary people, or the general public, are still unaware of it. Nepal's share market is still fumbling in the right direction, despite the fact that share markets are crucial to the movement of money in an economy. Investors invest their savings in publicly traded companies' common stock through the Primary and Secondary Markets. Generally speaking, investors sought to maximize their returns. However, due to a lack of knowledge and poor performance of the Nepalese capital market, investors were unable to realize the anticipated returns. Except for the most educated urbanites, nobody understands the idea of share markets or the laws that govern them. Moreover, the government has not prioritized the expansion of the capital market sufficiently.

Finding the major variables influencing the share prices of Nepalese commercial banks is the main objective of this study. This is the reason that consideration is given to all 19 commercial banks that are currently listed on NEPSE. An analytical investigation was carried out to compare the market prices of these banks with other financial measures such as DPS, EPS, and BPS. Secondary data was gathered from multiple sources and examined using a range of statistical methods in order to do this analysis.

The study supports the idea that the bank's profitability situation influences the decision to issue a dividend. Further research has shown that the declaration of a dividend affects the bank's value before shares are bought on the open market. It is therefore advised that before buying shares, investors take into account the banks' profitability since their earnings situation will indicate their potential for dividend announcements, which will increase the share price. It is recommended that they monitor issues related to stock determinants because the market price of the selected commercial banks' stock varies throughout the study period.

The analysis shows that there are limited investment sector possibilities for investors. The Nepalese stock market is dominated by banks and other financial organizations. Larger corporations also conduct business in Nepal. NEPSE and SEBON should create a policy to incentivize additional sectors of the economy, like real estate, manufacturing, and processing,

to list on the NEPSE. Investors would have additional possibilities for investing in sectors-specific financial products as the market grew in size. Considering how little the general public knows about stocks and the stock market, public education must be actively pursued. It is recommended that NEPSE create a separate division or independent organization that use a variety of techniques to research, instruct, and increase prospective investors' knowledge of equities and the stock market.

A few independent variables specific to banks were included in the study; macroeconomic variables such as interest rates, political considerations, economic policy, bank credit, money supply, exchange rate, etc. can be included for a more reliable outcome. Future studies should take into account additional factors such the consumer price index, profitability, scale, and return on equity in addition to net asset value per share. Future studies on this topic might be conducted over a longer period of time. Primary surveys will be useful in the future for researchers conducting studies and gaining additional insights into the banking sector. Analogous research can also be done in other areas, including the manufacturing, hydroelectric, hotel, and service sectors.

5.2 Conclusions

The following findings have been drawn for the fiscal years 2015–2016 and 2021–2022 based on the objectives and analysis of the study:

The bank stock market price trend line throughout a seven-year period of analysis. Throughout the fiscal years 2015–2016 and 2021–2022, the price of stocks has dropped. The seven-year study period's real gross domestic product trend line for banks. Between fiscal years 2015/016 and 2021/022, there was a decline in the real gross domestic product. The interest rate trend line for banks over a seven-year period of research. From fiscal year 2015/016 to fiscal year 2021/022, there has been an increase in interest rates. The money supply ratio trend line for banks throughout a seven-year study period. Between fiscal years 2015–16 and 2021–022, there has been a decline in the money supply ratio. the seven-year study period's trend line for banks' industrial production. From fiscal year 2015/016 to fiscal year 2021/022, there has been a decline in industrial production.

The results demonstrate the SMP, RGDP, IR, MS, and IP of the sample banks during a seven-year period. The table presents descriptive statistics for the study period of 2015/016 to 2021/022, including the mean, standard deviation, minimum and maximum values of variables associated with seven commercial banks. The SMP of The Sample Company rose

till it hit 1989.75, the greatest value. 1989.75 is the greatest value, 480.50 is the minimum, and the SMP mean value is -877.79. The S.D. value is 558.69. The RGDdP ranges from a minimum of 23.35 to a maximum of 41.90, with a mean value of 32.42 and a standard deviation of 6.58. The IR mean value is 10.71 with a S.D. of 1.28, with a low value of 9 and a high value of 12.33. The MS mean is 26.12, the S.D. value is 9.52, the minimum value is 16.61, and the maximum number is 43.91. With a minimum of 183.99 and a maximum of 223.77, the IP mean is 199.85 and the standard deviation is 12.75. According to the standard deviation, the interest rate ratio is the independent variable with the least variation, and the stock market price, the dependent variable, has the largest variation.

One tool for explaining variation is the R-square, commonly referred to as the The R-square, also known as the coefficient of determination, is a useful tool for interpreting variation. According to Table 4.8's R-square value of.99, RGDP, IR, MS, and IP are responsible for 99% of the variation in the market price of Nepalese commercial banks. Yet, the remaining 0.2% (100% - 99%) is due to additional factors not addressed in this study. After adjusting for degree of freedom (df), the updated R-square of.99 shows that RGDP, IR, MS, and IP account for 99% of the volatility in the market price of Nepalese commercial banks. This indicates that all independent and dependent variables have a strong association with one another. RGDP, IR, MS, and IP as a basis, The sequence of the regression coefficients is -6.18, 63.99, 44.18, 626.34, and -1226.34. shows that each of the independent P/E ratio's p-values is below the significant level ($p < 0.05$), further supporting the outcome's significance. Even yet, MS and RGDP are unrelated variables. It can be observed that an increase of one unit in RGDP, IR, MS, and IP results in increases of -1226.34, 44.18, 63.99, 46.75, and -6.18 in SMP.

5.3 Implications

The following suggestions on the share price of Nepalese commercial banks can be made in light of the data examined in the sections above:

i. Since most people are unaware of shares and the share market, a concentrated effort is needed to educate the public about them. NEPSE is suggested to create a separate department or independent institution to carry out analysis, distribute information, and increase awareness of shares and the share market among aspiring investors using print, broadcast, and seminar media.

ii. In order to prevent share speculation, an effective control system is needed. A transparent process must be employed to evaluate and penalize such speculations in order to guarantee that there is no longer any artificial influence on share price. To curb these kinds of speculative activities, the government ought to provide an honest and rational atmosphere for brokers and share dealers.

iii. To encourage the expansion of the share market, the government should create and implement strict laws and regulations. A system that enables the defective organization to take immediate action must be put in place.

iv. Before investing in the company, investors are recommended to have a thorough understanding of their financial status. They need to be on the lookout for any misconduct by brokers, NEPSE, the government, or associated businesses, and they need to be informed about it. In order for them to get the expected returns on their investment, they need to learn more about shares and the share market.

v. In light of the current level of globalization, Nepal's share market might be enhanced by an open policy that supports and encourages foreign investors in share prices.

vi. In order to offer a conclusive and clear response about the factors impacting share price, a population analysis of the entire share market over a longer study period is required. Regarding the actual share determinants, this is the only available factual information. Public companies should consistently provide investors w ɔst recent information so that they may make informed investment decisions.

Reference

Adefemi, A. (2017). Panel Data Regression Model in Eviews.

Alshatti, A. S. (2015). The Effect of the Liquidity Management on Profitability in the Jordanian Commercial Banks. *International Journal of Business and Management,*

10(1) 62-70.

Gautam, R., The Determinants of Banks Liquidity: Empirical Evidence on Nepalese Commercial Banks. The Batuk: Journal of Interdisciplinary Studies, 2(2) (2016) 69- 78.

Kamande, E. G. (2017). The Effect Of Bank Specific Factors On Financial Performance Of Commercial Banks In Kenya. Kenya.

Mohammad, A. (2016). Determinants of Banks Liquidity: Empirical Evidence on Turkish Banks. Institute of Graduate Studies and Research, Institute of Graduate Studies and Research. *North Cyprus: Eastern Mediterranean University*.

Ojha, P. R. (2018). Macroeconomics And Bank-Specific Factors Affecting Liquidity: A Study Of Nepali Commercial Banks. *Journal of Business and Social Sciences, 2(1)* 79-87.

Shamas, G., Zainol, Z., & Zainol, Z., (2018) The Impact of Bank's Determinants on Liquidity Risk: Evidence from Islamic Banks in Bahrain. *Journal of Business & Management, 6(1)*1-22.

Sharma, N., (2014). A History of Banking System in Nepal. Retrieved June 20, 2019, from Linkedin: a-history-of-banking-system-in-Nepal.

Sheefeni, J. P., & Nyambe, J. M.(2016). Macroeconomic Determinants Of Commercial Banks' Liquidity. *European Journal of Business, Economics, and Accountancy, 4(2056- 6018),* 19-30.

Umar, M., & Sun, G, Non-performing Loans (NPLs), (2016). Liquidity Creation, and Moral Hazard: Case of Chinese Banks. *Umar and Sun China Finance and Economic Review,* 1-23.

Vodova, P. K..(2011). Determinants of commercial banks' liquidity in the Czech Republic. Recent researches on applied and computational mathematics, 92-97.

Zulfikar, R. (2017). Estimation Model and Selection Method of Panel Data Regression: An Overview of Common Effect, Fixed Effect, and Random Effect.

Appendix-I

GBIL

Fiscal Year	SMP	RGDP	IR	MS	IP
2015/016	515	19.33	9.50	22.89	125.17
2016/017	388	25.51	9.00	20.25	139.15
2017/018	290	23.64	10.50	14.08	131.72
2018/019	295	26.46	11.00	11.15	158.4
2019/020	239	17.99	11.50	13.29	151.95

2020/021	441	19.25	12.00	22.9	154.58
2021/022	251	20.84	12.00	12.06	158.6

NABIL

Fiscal Year	SMP	RGDP	IR	MS	IP
2015/016	2344	59.27	9.00	39.55	244
2016/017	1523	59.86	10.00	25.44	270
2017/018	921	51.84	10.50	18.6	256
2018/019	800	50.57	11.50	15.82	257
2019/020	765	36.16	12.00	21.15	256
2020/021	1359	33.57	12.50	40.48	251
2021/022	825	18.64	13.00	44.21	232

NMBBL

Fiscal Year	SMP	RGDP	IR	MS	IP
2015/016	1500	43.03	8.50	34.86	196.12
2016/017	886	35.15	9.00	25.11	189.91
2017/018	551	23.11	9.50	23.84	174.24
2018/019	552	32.44	10.00	17.02	187.73
2019/020	540	27.6	10.50	19.57	187.67
2020/021	484	28.07	11.50	17.25	188.43
2021/022	450	29.84	12.00	18.52	188.9

Appendix-II

Descriptive Statistics

	N	Mean	Std Dev	Minimum	Maximum
SMP	7	877.79	558.69	480.50	1989.75
RGDP	7	32.42	6.58	23.35	41.90
IR	7	10.71	1.28	9.00	12.33
MS	7	26.12	9.52	16.61	43.91
IP	7	199.85	12.75	183.99	223.77
Valid N (listwise)	8				
Missing N (listwise)	1				

Correlations

		SMP	RGDP	IR	MS	IP
SMP	Pearson Correlation	1.000	.847	-.811	.964	.665
	Sig. (2-tailed)		.016	.027	.000	.103
	N	7	7	7	7	7
RGDP	Pearson Correlation	.847	1.000	-.937	.702	.674
	Sig. (2-tailed)	.016		.002	.079	.097
	N	7	7	7	7	7
IR	Pearson Correlation	-.811	-.937	1.000	-.693	-.580
	Sig. (2-tailed)	.027	.002		.084	.172
	N	7	7	7	7	7
MS	Pearson Correlation	.964	.702	-.693	1.000	.678
	Sig. (2-tailed)	.000	.079	.084		.094
	N	7	7	7	7	7
IP	Pearson Correlation	.665	.674	-.580	.678	1.000
	Sig. (2-tailed)	.103	.097	.172	.094	
	N	7	7	7	7	7

Appendix-III

Model Summary (SMP)

R	R Square	Adjusted R Square	Std. Error of the Estimate
1.00	1.00	.99	60.87

ANOVA (SMP)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1865428	4	466356.9	125.87	.008
Residual	7410.17	2	3705.08		
Total	1872838	6			

Coefficients (SMP)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	-1226.34	961.26	.00	-1.28	.292
RGDP	44.18	12.16	.52	3.63	.068
IR	63.99	58.55	.15	1.09	.388
MS	46.75	4.11	.80	11.39	.008
IP	-6.18	2.99	-.14	-2.07	.174