THE DYNAMICS OF CAPITAL MARKETS, MONEY MARKET AND ECONOMIC GROWTH: THE CASE OF PAKISTAN

by

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Author's Declaration

I, **Asad Ullah,** hereby state that my MPhil thesis titled **"The Dynamics of Capital Markets, Money Market and Economic Growth: The Case of Pakistan"** is my work and has not been submitted previously by me for taking any degree from the Pakistan Institute of Development Economics or anywhere else in the country/world.

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Dedication

To my beloved parents and family

Whose relentless support and sacrifice have been integral to my academic journey. Their love and encouragement have been a constant source of strength, motivating me towards this achievement.

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I would like to begin by expressing my deepest gratitude to Almighty Allah for granting me the strength, wisdom, and endurance to complete this journey. His infinite blessings and guidance have been the pillars of my success in this academic journey. I also pay my deepest respects and love to the Holy Prophet Muhammad (peace be upon him), whose teachings have remained a motivation and guidance throughout my life.

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LIST OF ABBREVIATIONS

BM	Bond Market
BMC	Bond Market Capitalization
BMD	Bond Market Development
CMR	Call Money Rate
CM	Capital Market
CMD	Capital Market Development
DFH	Demand-Following Hypothesis
EG	Economic Growth
FBH	Feedback Hypothesis
FMD	Financial Market Development
GFCF	Gross Fixed Capital Formation
LR	Long Run
MM	Money Market
MMD	Money Market Development
NH	Neutrality Hypothesis
RGDP	Real Gross Domestic Product
SM	Stock Market
SMD	Stock Market Development
SMC	Stock Market Capitalization
SLH	Supply Leading Hypothesis
SR	Short Run
SR	Short Run

ABSTRACT

This study empirically examines the dynamic relationship between the capital market, money market and economic growth of Pakistan based on annual time-series data covering the period from 1980 to 2023. Applying the Autoregressive Distributed Lag (ARDL) model, the study analyzes both short-run and long-run effects of these markets on real Gross Domestic Product (GDP), while controlling important macroeconomic variables including investment, trade openness, inflation, and interest rates.

The results show a significant long-run positive relationship between stock market development and economic growth, indicating that equity market plays a crucial role in mobilizing savings, enhancing capital allocation, and promoting sustainable development. The money market also shows a strong positive impact by providing liquidity and helping with effective monetary policy transmission. On the contrary, the long-run relationship between the bond market and economic growth is insignificant, indicating its underdevelopment and narrow depth within Pakistan's financial system. Moreover, investment has a negative long-run relationship with GDP, which suggests capital allocation inefficiencies. Trade openness and inflation had mixed impacts, with interest rates having a negative effect on economic growth.

The study further identifies institutional and regulatory barriers limiting the functioning of the capital and money market through rigorous thematic content analysis of expert interviews on how robust financial markets can serve as driver of economic growth.

Key words: Bond Market, Stock Market, Money Market, Economic Growth, Investment

CHAPTER 1

INTRODUCTION

1.1 Background

It is widely recognized that capital and money markets are instrumental to a country's economic growth and development which provides an important platform for raising long-term capital needed for corporate growth, innovation, and making substantial contributions toward the economic environment through debt and equity instruments, that is, bonds and stocks. However, the money market (MM) deals with short-term borrowing and lending, contributing to the provision of liquidity within the financial system and aiding additional financial stability. According to King and Levine (1993), through efficient resource allocation, facilitating technological innovation, and capital accumulation financial markets are able to foster economic growth. Different studies have conducted and emphasized the role of well-functioning capital market (CM) and money markets (MM)[1] for economic growth. For example, Demiurgic-Kunt and Maksimovic (1998) showed empirically that sound legal and financial institutions promoting market development have large effects on firms' growth and hence on overall economic performance. In this regard, Levine (2005) has underscored the fact that it is financial intermediaries and markets that lead to economic growth (EG) by providing mechanisms through which savings can be pooled and utilized for investment and the management of risk.

In developed economies, the global financial markets are known to play a significant role in economic activities since they become the principal tools and channels for risk management, resource allocation, and entrepreneurship encouragements. Having historically been well correlated with sustained economic growth, this relates to countries that have implemented the most comprehensive regulatory frameworks along with setting up attractive conditions for investors.

Asia's financial markets have seen enormous growth, for example the Stock markets of China, India, and Japan emerging as significant players globally, and bond market, particularly China,

[1] Capital markets cover the stock market (SM) and bond market (BM) and provide corporations with access to long-term capital in the form of equity and debt, whereas MM supply short-term liquidity for daily economic activities

have risen substantially. Despite this, the region remains vulnerable to inhibitive factors like regulatory structures besides restricted cross-border market integration. MMs remain indispensable for critical liquidity, which improves stability, but above all, development of regulatory and financial infrastructure is required for an efficient market. Addressing these challenges is very important in ensuring continued growth and solidity for Asia's financial markets.

Capital markets are recognized globally for their role in economic growth, it becomes essential to explore the specific dynamics of these markets in Pakistan, especially under the current context of economic challenges. Pakistan's CM have seen many periods of expansion and complications. The Pakistan Stock Exchange (PSX), with PKR 6956.508 billion in 2022, is the representative of the stock market, facilitating the channelizing of funds and offering a platform for the expansion of corporations. Nevertheless, problems such as unpredictable market fluctuations, a restricted pool of investors, and regulatory limitations have presented substantial obstacles (Maqbool-ur-Rehman, 2015). In comparison to other emerging countries, bond market (BM), encompassing government securities and corporate bonds, is underdeveloped. The expansion of the country has been impeded by factors such as elevated budget deficits, inadequate institutional frameworks, and political instability (A. M. Khalid, 2007).

Deep-rooted structural and governance issues give chronically large fiscal deficit with weak institutional and political instability in Pakistan. The deficits are mainly caused by excessive dependency on borrowing for government expenditures, inadequate tax collections, and ineffectiveness in public spending. Chronic deficit creates inflationary pressure, crowding out private investment, and limits capital availability to the productive sectors, which constrain economic growth (EG). Weak institutional, characterized by a lack of consistency and ineffective enforcement of financial laws, besides showing a lack of transparency, erodes investor confidence and impedes the expansion of robust financial markets. Political instability aggravates these problems because uncertainty leads to volatile market behavior and discourages both local and international investment (Arif, 2007)

Being a stable source of long-term financing both in public and private sectors, the bond market is also a critical component of capital market and has a substantial effect on EG. In 2023 only government bonds contributed Rs. 2403.3 bn without corporate bonds which is essential for the

funding of government expenditures, the management of public debt, and the support of corporate investment without compromising ownership. This market includes government securities such as Pakistan Investment Bonds (PIBs) (A. M. Khalid, 2007). By diversifying funding sources, reducing dependence on foreign capital, and providing a dependable mechanism for managing financial risks, BM strengthens financial stability and reduces the external dependency of external factors.

The bond market in Pakistan is confronted with several obstacles, such as political instability, inadequate regulatory frameworks, and high fiscal deficits, which restrict its capacity to stimulate economic growth (Arif, 2007). Through comprehensive reforms, the bond market's depth and liquidity can be significantly improved, thereby enhancing its role in economic development, fostering a more resilient financial sector that is capable of enduring economic shocks and promoting sustainable growth.

The money market is important to provide financial stability in terms of raising short-term liquidity for borrowing and lending and facilitate smooth economic activities. The money market in Pakistan is relatively underdeveloped and, therefore, offers only a few instruments to address the need for short-term liquidity. Financial institutions are incapable of managing liquidity efficiently due to inadequate MM and, therefore, impacting overall economic stability.

The Pakistan money market, which accounts for 46.15 percent of GDP as of the year 2022, is under additional strain to ensure immediate liquidity and financial stability. Shallow instrument depth and liquidity in the MM have frequently resulted in inefficiencies within the financial system that sometimes spread over to affect the overall stability of an economy. The MM growth is central to the implementation of monetary policy and the stability of the financial sector (Malik, 2007).

1.2 Challenges and Opportunities

Pakistan's capital markets face many impediments to growth including permanent fiscal deficits, inadequate regulatory frameworks, lack of market depth, and political instability. The problems create an environment characterized by uncertainty and reduced investor confidence, hence restricting participation at both local and foreign levels. Underdevelopment of critical sectors, such as the corporate bond market, limits long-term funding options; lack of diversified financial instruments does not facilitate liquidation of markets. On the other hand, even greater potential exists to overcome these weaknesses. Strengthening regulatory supervision with more effective

implementation of financial regulation would help increase transparency and improve market efficiency. This will further increase the variety of financial instruments, especially corporate bonds, which will enhance market depth and liquidity. Promoting political stability and consistency in economic policies will also establish a more predictable and attractive environment for investors allowing capital and financial markets to further enhance long-term Pakistan's economic growth and its stability (Arif, 2007; A. M. Khalid, 2007; Malik, 2007)

1.3 Problem Statement

The underdevelopment of Pakistan's capital and money markets poses an enormous challenge to the country's economic growth. Financial markets (FM) are crucial in directing savings to productive investments, helping in capital accumulation, and providing liquidity to the economy. However, their potential in Pakistan largely remains untapped. Earlier studies has focused on stock market in which it is discovered that stock market development (SMD) has a positive correlation with EG (Shahbaz et al., 2008). However, the bond and money markets that are equally as vital to economic stability and growth besides the stock market of Pakistan, but significantly less researched and the dynamics are not investigated.

Financial market reforms in the 1990s were aimed at strengthening Pakistan's financial markets. However, the BM remains underdeveloped, with low corporate bond issuance and very little liquidity. Because the government relies heavily on borrowing through securities, this tends to create a crowding effect, limiting participation by private sector and slowing the expansion of a more dynamic corporate BM. This points to the fact that while such reforms were indispensable, they have proved inadequate in unlocking the potential of Pakistan's financial markets.

We have clearly mentioned that despite of the fact that well-functioning capital and money markets are critical in mobilizing savings, allocating capital efficiently, and supporting macroeconomic stability, Pakistan's financial markets are till fragmented, and underdeveloped. This underdevelopment is widely observed as a structural constraint on sustainable economic growth of the country.

Several studies Awais et al., (Awais et al., 2021) and Majeed & Iftikhar (2020) have focused on either the banking sector or the SM and ignore the role of BM and MM in economic growth. In This study we included two imported financial market variables and examine the long run impact of Pakistan's bond, stock, and money markets on EG. We examine the short run (SR) and long

run (LR) relationships are different or not. This study employed Cointegration, ARDL bound test approach to identify if financial market development (FMD) drives long run stable economic growth (as per the supply-leading hypothesis) [2] (King & Levine, 1993). Besides empirical analysis, this research covers institutional and regulatory dimensions affecting the development of Pakistan's financial market. This research highlights systemic limitations, i.e., the lack of enforcement, monitoring, and policy incoherencies, and demonstrates how such limits affect the functioning of money and bond markets. These issues are explored through expert interview theme analysis, which reveals contextual facts beyond econometric facts.

This study applies a mixed-methods approach to Examine Pakistan's underdevelopment of money and bond markets, as well as their ineffective role in fostering economic growth. The Autoregressive Distributed Lag (ARDL) Model is utilized to analyze both the SR And LR relationships between financial markets and EG. It can handle variables with different orders of integration and is suitable for small samples typical of developing economies. This assists to examine the long-run stability and trend of these interactions. To complement the quantitative analysis, thematic analysis is conducted with policymakers and financial expert interviews. This qualitative component determines institutional and regulatory barriers to market evolution. Together, the methodologies establish a complete understanding of the structural constraints affecting the performance of Pakistan's financial market.

1.4 Research Objective

The aim of the study is to empirically investigate the short-run and long run impact of bond markets, stock markets, and money markets on EG. The impact of other fundamental macroeconomic variables including Gross fixed capital formation, (GFCF) trade openness (TO), inflation and interest rate on economic growth was assessed. The present research, therefore, tries to contribute to the literature by incorporating a comprehensive analysis of how BM, MM, and SMD affect economic growth in a more detailed and nuanced manner than typically observed. The primary objectives of this study are as follows.

- To investigate the long-run equilibrium relationship between Pakistan’s bond market, stock market, money market and economic growth.

[2] supply leading hypothesis argues that the development of financial markets comes before and drives economic growth.

- To examine the different impact of Pakistan's bond market, stock market, money market on economic growth in the short run and long run.
- To identify institutional and regularity factors that are important in determining the short run and long run dynamics of these markets.

1.5 Research Question

- Is there a stable relationship between the bond market, stock market, money market, and economic growth?
- Does the impact of the bond market, stock market, and money market on GDP growth differ in the short run versus the long run?
- How do institutional and regulatory factors influence the short-term and long-term dynamics of the bond, stock, and money markets?

1.6 Policy Context

The understanding of the financial market and its inter-linkages with the process of economic growth is indispensable for formulating sound strategies that aimed at accelerating economic growth in Pakistan, at policy formulation level, a more prominent role may have been played by the money markets, stock markets, and particularly bond markets in impacting economic growth. Policymakers must consider the influence on economic growth emanated by these markets. In this context, an analysis of the role of bond markets, stock markets, and money markets can give policymakers the background to present exact interventions to really encourage savings and investments in the interest of LR economic growth.

This study will assist policymakers by offering empirical evidence regarding the SR and LR effects of the bond, stock, and money markets of Pakistan on economic growth. It will assist the development of evidence-based financial policies towards developing underdeveloped areas like the bond and money markets. This study identifies the institutional and regulatory gaps that increase market transparency, liquidity, and investor confidence. It will provide useful insights to enhance liquidity management by having a better money market, which would facilitate the implementation of monetary policy by the State Bank of Pakistan (SBP). In addition, the study highlights the need for mobilizing savings and investing them into productive areas, which is essential to ensure sustainable economic growth. Policymakers will also be guided by the suggestions to lower the dependence on foreign borrowing by building domestic capital markets,

increasing financial instruments, and establishing a more stable and integrated financial system suited to long-term economic growth goals.

1.7 Significance of the Study

Pakistan has, over recent years, faced serious economic challenges in form of political instability, huge fiscal deficits, and inadequate institutional frameworks, which caused serious obstacles in the growth of financial markets in the country. The study empirically investigates the necessity for reforms in these markets to mitigate their impact on economic growth. This study would benefit policymakers and other stakeholders who can understand, to some extent, how such markets function in stabilizing and improving the country's financial environment.

Studies conducted in Pakistan so far have shown that growth in economics does relate to financial markets; however, this has for the most part revolved around the banking sector or SM and ignore of the role of the BM and MM during economic growth. For example, it has been established that the Pakistan Stock Exchange (PSX) serves as an important tool for the mobilization of savings and the facilitation of investment, which in turn stimulates economic development (Shahbaz et al., 2008). This study included two more variables: (Bond Market and Money Market) the most ignored and important variables that channelize the funds and create liquidity and correlated in the financial market.

Correlation of capital markets and money market with economic growth in Pakistan is complicated and diverse. Arestis et al. (2001) investigated that the regulatory framework, market organization, and institutional excellence have a substantial impact on the ability of financial markets to stimulate economic growth. Moreover, Hondroyiannis et al. (2005) discovered that the effects of financial markets i.e. bond, stock and money markets on economic growth is contingent upon the overall economic and regulatory environment.

To understand fully how dynamics in the capital and money market influence economic growth in Pakistan, one must carefully examine the exact mechanisms involved. The purpose of this study is to improve upon the existing literature in this area by making an in-depth examination of these dynamics. The present study tries to contribute valuable input for the policymakers and stakeholders considering functions served by the equity, debt and money markets towards the economic growth of Pakistan. In-depth research on the relationship of these markets with

economic growth is the prime area of importance for the formulation of efficient policies and strategies for the promotion of sustainable development in Pakistan.

The study addresses a critical gap in the existing literature and provides evidence-based recommendations to policymakers and stakeholders (Ministry of Finance and Pakistan Stock Exchange) that would strengthen the area of liquidity, encourage investment, and bolster economic resilience in terms of strengthening the bond and money markets. More specifically, it asserts that, by complementing public institutions, the market is a vital source of long-term financing for both the public and private sectors in the management of debt and the financing of investment without excessive reliance on capital from abroad (A. M. Khalid, 2007) . The improvement in the depth and effectiveness of money markets will allow Pakistan to ensure enhanced liquidity management as the need for financial stability, during this period of economic uncertainty.

This importance of the research also reflects in their contributions to academic literature about economic growth and financial markets in Pakistan, where the financial market development (FMD) has remained relatively slow in comparison to other emerging economies. The implications of the study results will thus be guidance to policymakers in implementing reforms that will ensure financial stability, lower dependence on foreign capital, and sustain long-term economic growth through the development of home-based financial markets.

1.8 Organization of the Study

This study is organized into five chapters. Chapter one provides a detailed background of the study, outlining the key objectives, research questions, and significance of the research. Chapter two reviews existing literature, highlight previous findings and identifying the gap that this study aims to address. The third chapter discusses the study methodology and data sources utilized for empirical and thematic analysis. Chapter four presents and interprets the results of the study, offering insights into the relationships between CM, MM markets and economic growth. Finally, chapter five concludes the study with a summary of the key findings and provides policy recommendations based on the analysis.

CHAPTER 2

Historical overview of Pakistani Capital Markets

The capital market, comprised of both stock and bond markets, played a crucial role in the expansion of the Pakistan's economy. Both markets have witnessed dramatic transformations since their inception following Pakistan's independence in 1947, shaping the nation's financial landscape and supporting its overall economic growth. When the Karachi Stock Exchange (KSE) was established in 1947, the stock market, which had initially been small and underdeveloped, began to expand and eventually became a key source of capital for economic activities and industrial growth. Conversely, the Pakistani bond market was long underdeveloped with minimal private sector involvement, despite being crucial for financing. The role of both markets in mobilizing capital, financing government projects, and facilitating long-term economic development has grown due to significant reforms and liberalization efforts throughout history.

2.1.1 Inception Era: 1947 - 1971(1947–1971)

The foundation of Pakistan's stock market was laid shortly after the country's creation in 1947. On September 18, 1947, the Karachi Stock Exchange (KSE) was established as the nation's first formal exchange. There were not many companies listed when it opened, and the market was in its early stages. Initially, the market was focused narrowly and served primarily domestic investors with minimal penetration by foreigners. Expansion was slow during the initial years, and volumes of trading remained small.

The level of trading volume in the market was minimal for the first few years since its establishment. For instance, in 1949, the KSE listed just 5 companies, with minimal activity. Despite these limitations, the market started gaining traction as one of the major economic institutions. As the industrial sector grew, more enterprises turned to the stock market for finance.

The market was beginning to attract the interest of a wider base of investors by the 1960s, when there were 81 listed companies with market capitalization RS 1.8 bn as per PSX. Though still small, the market capitalization was now starting to indicate the significance the stock market was taking on in the economic infrastructure of Pakistan. Economic optimism prevailed during this period as the government started embarking on industrialization plans.

2.1.2 Reforms and Expansion Era: 1972 - 1990

The period from 1972 to 1990 was remarkable for the development of the stock market of Pakistan. The government of Pakistan introduced several reforms to enhance market efficiency and broaden operations. One of the most important events was the opening of the Lahore Stock Exchange (LSE) in October 1970, followed by the Islamabad Stock Exchange (ISE) in 1989, but the KSE continued to be the main exchange in Pakistan.

During the 1970s and 1980s, the economy of Pakistan was seriously hit by political unrest and oil price shocks. Yet the government responded positively to the process of modernizing the financial industry. By way of illustration, in 1981, futures trading was liberalized with the government releasing more sophisticated financial products as per the era. Access to these instruments played a key role in fueling the growth of the stock market.

The total number of publicly listed companies has also risen consistently. As of 1988, there were 650 companies listed on the Karachi Stock Exchange. The market capitalization also grew at a rapid rate, from US$3 billion in 1971 to US$15 billion by 1990.

In 1990, Pakistan experienced notable developments that improved investor confidence. The Securities and Exchange Commission of Pakistan (SECP) was formed in 1997, a major improvement in financial market regulation. All these developments, along with greater industrialization, led to a growth period, though the market was still quite small compared to global markets.

Despite the increase in the number of listings, the market faced significant problems such as inconsistent regulatory processes, limited foreign investment, and economic instability, which frequently caused stock price fluctuations.

2.1.3 Liberalization and Global Integration Era: 1991–2007

The early 1990s was a turning point in the history of Pakistan's stock market, when the government moved to liberalize it. The government adopted several important steps with a view to integrating the stock market of Pakistan with international financial markets. Foreign investors were opened to the stock market in 1991, which was a major turning point.

The Karachi Stock Exchange (KSE-100 Index), which tracks the top 100 companies in terms of market capitalization, was the basis for measuring market performance in 1991. Liberalization led

to a major rise in foreign investment, and the market experienced a 10% rise in foreign capital inflows over the period 1991-1995. Foreign institutional investment had risen to around 20% of total market capitalization as of 1993.

During that era, the KSE-100 Index increased enormously. The index hit the level of 2,000 points for the first time in 1994, indicating that Pakistan's market was believed by domestic and international investors. The Pakistan stock market had become the world's best-performing market by 2002 because of its spectacular growth. The market capitalization increased to $25 billion in 2007 from $15 billion in 1990, which indicates the fruitfulness of the liberalization policy.

2.1.4 Crisis, Consolidation, and the Rise of PSX Era: 2008–2015

The global economic crisis of 2008 significantly influenced the Pakistan stock market. The KSE, which was performing impressively in the pre-crisis years, witnessed a spectacular decline in stock prices. Political instability within, security concerns, and terrorism also enhanced the poor performance of the market.

The KSE-100 Index dropped sharply in 2008, from more than 15,000 points during 2007 to a record low of 6,500 points, reflecting the effect of both the world financial crisis and local challenges. The market also witnessed a decline in the number of listed firms, with several opting to delist due to low profitability and high costs.

Despite with those setbacks, the Pakistan Stock Exchange (PSX) gradually returned in the following years owing to government intervention and reform measures. The other significant development in this context was the 2016 merger of Pakistan's three exchanges (KSE, LSE, and ISE) into the one Pakistan Stock Exchange (PSX). This merger was viewed as a most important step towards enhancing market efficiency, liquidity, and adherence to the best international practices.

By 2015, the PSX recovered to near pre-crisis highs, and the KSE-100 Index had risen to around 34,000 points. The recovery was facilitated by a more stable macroeconomic framework, higher foreign investment, and improved corporate governance. The advent of exchange-traded funds (ETFs) and other advanced financial products deepened market breadth and provided investors with more diversified investment choices.

2.1.5 Digital Transition Era: 2016–2025

The contemporary era of Pakistan's capital market, specifically since the formation of the Pakistan Stock Exchange (PSX) in 2016, has been characterized by technological advancements and digital revolution. PSX has implemented new trading technologies, such as online platforms that enable retail investors to more easily participate in the market. This digital revolution has made the market more accessible to a wider audience, such as younger and more technologically capable investors.

As of 2020, retail participation in the PSX had grown exponentially with more than 1.5 million retail investors actively trading on the exchange. The advent of mobile trading applications and online broking facilities has facilitated access to stock market involvement.

The PSX has also concentrated on strengthening its infrastructure and positioning itself at international standards. Corporate governance has been strengthened to improve market liquidity, and increased transparency in market functioning guaranteed. These moves have contributed to improved investor confidence, both at Domestic and abroad. In June 2025, the stock market has 527 listed companies with a market value of Rs 15.2 trillion, of which 7 are on the GEM Board. From 38 various industries increasingly more companies are listed, including technology, energy, and consumer goods.

In response to growing investor interest in sustainable finance, PSX has added new instruments, including green bonds and Shariah-compliant financial products, to address increased demand for environmentally and socially responsible investments. Foreign institutions have become more active in PSX’s global integration.

Pakistan's stock market remains on the right trajectory. PSX’s digital transformation, coupled with efforts to draw in foreign investment, holds a vast scope for development. Retail investor participation is set to increase, as it is sustainable investing interest. PSX’s prospects are bright due to the introduction of innovative financial products and ongoing growth of green and socially responsible investing.

2.2.1 Bond Market of Pakistan

The bond market of Pakistan’s is a significant contributor to Pakistan's financial market, has historically been underdeveloped compared to its equities market. While the stock market has

steadily grown since Pakistan gained independence in 1947, the bond market has suffered from a series of issues that have hampered its expansion and development.

Initially, Pakistan's bond market was raw and utilized basically as a channel for the launch of government debt, such as Treasury Bills (T-bills) and Pakistan Investment Bonds (PIBs). One of the key impediments that detained its growth were the lack of institutional frameworks, investor consciousness, and regulatory oversight.

Major reforms to modernize and expand the bond market started in the 1990s during the liberalization of Pakistan's financial system and the internationalization of financial markets. Pakistan's bond market gradually grew in prominence over the years, particularly in corporate finance, infrastructure financing, and government borrowing. Despite such positive developments, concerns such as political uncertainty, regulatory failures, and institutional investor participation have continued to affect its performance.

2.2.1 Early Government Bond Issuances Era: 1947–1980s

The market for bonds was virtually non-existent in the initial years following Pakistan's independence in 1947. The establishment of basic financial institutions and infrastructure was the prime concern since the country's financial system was in its formative stage. The government gave little importance to market-based instruments such as bonds at this stage and instead utilized bank financing primarily to realize its budgetary goals.

The first significant government bond issue came with the introduction of government savings bonds for homegrown investors during the 1960s. To raise funds for public expenditures, public works, and other government initiatives, these bonds were mostly short-term endeavors. They were still limited in scope, however, since most of the funding continued to flow through traditional banking channels.

Since its establishment in 1947, the Karachi Stock Exchange (KSE) has specialized in stock trading. Conversely, the bond market remained in an infancy stage with only short-term government debt obligations available. The financial industry in Pakistan began to slowly modernize in the 1980s. Weak regulatory environment, lack of adequate private sector issuance, and investor education were some of the issues left in the bond market.

2.2.2 Reforms and Liberalization Eera: 1990s

The government's economic reforms aimed at liberalizing the financial sector were the primary reason for the dramatic shift in the growth of Pakistan's bond market during the 1990s. Global integration accelerated due to the 1991 liberalization of the stock market, and the bond market also began to permit private sector participation.

The 1991 reforms permitted foreign institutions to purchase government securities, eliminated restrictions on foreign currency holdings, and authorized foreign portfolio investments. But due to investor suspicion and regulatory constraints, the corporate bond market was underdeveloped. As a substitute for more traditional securities such as government treasury bills, the government launched the Pakistan Investment Bonds (PIBs) during the early 1990s.

Even as the government began to place T-bills in the market, short-term debt instruments remained center stage. Few private sector firms were issuing bonds at this time, and the corporate bond market was effectively undeveloped.

The establishment of the Securities and Exchange Commission of Pakistan (SECP) in 1997, which provided a regulatory environment for the bond market, was the key development during the 1990s. It was a significant development because it facilitated better oversight of the activities of the bond market, greater transparency, and protection of investors.

Though, the Asian financial crisis of 1997 lowered investor confidence for a while and exposed emerging nations' vulnerabilities, including Pakistan. It slowed the growth of the bond market and curbed the issue of private bonds. The 1990s laid the grounds for Pakistan's bond market to become more formalized and organized despite these challenges.

2.2.3 Expansion and Institutionalization Era: 2000–2010

The bond market in Pakistan went into a period of growth and consolidation during the early 2000s. A series of notable steps were taken by the government to make the bond market more accessible and efficient. An important landmark was the formation of the Pakistan Stock Exchange (PSX) in 2016 through the amalgamation of multiple exchanges. The PSX played an instrumental role in enabling bond trading and providing a single marketplace for debt and equity securities.

The launch of Islamic bonds (Sukuk) in 2004 was perhaps the most notable event in this period. Pakistan's bond market underwent a radical transformation due to the government's initiatives to

make space for investors looking for Sharia-compliant instruments. Sukuk's launch was part of a broader effort to bring the market in line with international trends in Islamic finance.

In Pakistan, corporate bonds began to look promising as an investment instrument by the mid-2000s. Yet due to factors such as a small number of institutional investors and an absence of a developed bond market infrastructure, their sales remained limited. Despite these restraints, the government continued to promote the bond market by issuing long-term securities and expanding the secondary market for the trade of government assets.

The debt-to-GDP ratio of Pakistan was high during this period, and hence the government became more dependent on bonds to finance its budget deficits. The total national debt of Pakistan was over PKR 10 trillion by 2010, and a considerable portion of this debt came from bond issuances.

2.2.4 Modernization and Market Integration Era: 2011–2025

Due to technology advancements, global market integration, and regulatory changes, Pakistan's bond market has seen a remarkable modernization in the last few years. Greater liquidity and transparency in bond trading were brought with the launch of the Pakistan Stock Exchange (PSX) in 2016, attracting foreign as well as domestic investors.

The post-2010 years witnessed steep growth in government bond issuance as emphasis moved towards long-term securities. The market size of Pakistani government bonds grew to PKR 5 trillion by 2015, whereas Sukuk bond issue also rose exponentially. With Sukuk constituting more than 30% of total government bond issue by 2020, the Islamic finance sector, in general, has played a key role in driving bond market growth.

Pakistan has become part of international bond indices such as JP Morgan Emerging Market Bond Index (EMBI) by 2020, thereby increasingly incorporating the PSX bond market into the global markets. Foreign investors now hold 10-15 percent of Pakistan's outstanding government bonds due to this inclusion, increasing foreign participation in the bond market.

The issuance of infrastructure bonds, designed to fund large-scale infrastructure initiatives, has been one of the key innovations of recent years. Institutional investors have taken well to the bonds, attracted by the relatively high returns compared with government holdings.

Despite these promising trends, issues remain. Political unrest, inflation rates, and issuance of low levels of private sector bonds are some of the persistent issues that confront the corporate bond market. Compared to other emerging economies such as India and China, the ratio of Pakistan's bond market to GDP remains relatively low. When compared with India's corporate bond market worth more than USD 500 billion, Pakistan's corporate bond issuance through 2025 is barely around PKR 300 billion.

CHAPTER 3

LITERATURE REVIEW

Correlation between financial markets and economic growth has been an important subject of research, especially since the influential work of Schumpeter, J. A. (1911), within the field of academic research. Scholars have put forward different hypotheses regarding the correlation between capital market (CM) and economic growth (EG). One such hypothesis is the supply leading hypothesis (SLH), which argues that the development of financial markets comes before and drives EG. On the other hand, the demand following hypotheses (DFH) proposes the opposite causality, suggesting that EG leads to the development of financial market (FMD). The feedback hypotheses (FBH) suggest that financial market and EG are interconnected, support and strengthen each other. According to the Neutrality hypotheses (NH), there is no correlation between financial markets and EG, implying that they do not affect each other directly. Several research has been conducted that supports the idea that robust financial markets such as bonds and stock markets play a pivotal role in driving economic activities. They do this by encouraging savings, facilitating investment, and enhancing the allocation of resources. For example, King and Levine, (1993) highlights the significance of FMD bolstering economic growth by promoting accumulation of capital into productive investment and increase productivity.

Barro, (1974) challenged the central assumption of most fiscal models: that the private sector treats government bonds as net wealth. The author argues that since it relies on such factors as transaction costs, monopoly control over liquidity services, and imperfect private capital markets, the net-wealth effect generated by government debt is insignificant. The author employs the overlapping-generations framework to conclude that government debt does not increase perceived wealth until the government is as capable as private markets at regulating loans or providing liquidity services. In his study, the author challenged the basis of most fiscal policies that rely on the positive wealth effect of government debt by claiming that government debt developments have limited impacts on aggregate demand, interest rates, and consumption.

Similarly Fink et al., (2003) delves into the relationship between the expansion of bond markets and the economic growth of thirteen advance economies[3] and empirically examine the influence of markets for bonds as a significant external source of finance by employing the Granger causality tests and a co-integration approach to provide strong evidence in favor of the (SLH) in several countries, including USA, UK, Switzerland. Germany, Austria the Netherland. Data span from 1950 to 2000. In contrast, the research findings indicate a reciprocal connection between BMD and economic growth of Japan, Finland and Italy, highlighting a more interconnected relationship. This in-depth analysis highlights the importance of bond markets in promoting economic growth, thus FMD has a broader impact on the economy.

The study of Van Nieuwerburgh et al., (2006)employs a new dataset of the Brussels Stock Exchange to examine the link between economic growth and Belgian stock market development. There is strong evidence that the development of the stock market, particularly between 1873 and 1935, contributed significantly to economic growth. The authors argue that economic growth and industrial production were facilitated by financial development, and that institutional changes such as liberalization in the 1867–1873 period significantly enhanced the stock market's impact on economic growth. This work highlights the centrality of financial markets to long-run economic growth.

The study conducted by Fink et al. (2006) emphasizes the complex relationship between the financial market and economic growth. They specifically focus on the importance of BMs, as well as credit and stock markets. This empirical study of seven major nations spanning five decades provides evidence that the development of financial markets has a key role in driving economic growth, hence validating the SLH theory. The presence of Granger causality in many of the nations analyzed indicates that investment strategies should acknowledge the significance of robust BM. These markets provide options for long-term financing and play a role in promoting financial stability and development.

Based on a Vector Error Correction Model (VECM), Vazakidis & Adamopoulos, (2009) examine the causal link between economic growth and the development of the French stock market from

[3] USA, UK, Switzerland, Germany, Austria, Netherlands, Japan, Finland, Italy, Norway, Finland, Portugal and Portugal

1965 to 2007. Based on their evidence, economic growth positively influences stock market development; in the short run, a rise in economic growth leads to a 0.24% increase in the stock market index. Interest rates also negatively affect stock market growth. The tests for Granger causality indicate that even though interest rates and the development of the stock market demonstrate bilateral relationships, economic growth leads to stock market development. The findings point out how important economic growth is in the development of stock market growth (Vazakidis & Adamopoulos, 2009)

Ake, (2010) investigated that the development of the stock market, particularly in more liquid markets, is critical for fostering economic growth. Granger causality tests were employed in their research, conducted in five Euronext countries (France, Belgium, Netherlands, Portugal, and the United Kingdom), to test whether the relationship between economic growth measures such as GDP and FDI and stock market activity. They found that stock market growth "Granger causes" economic growth in more liquid markets. This correlation was less apparent in less liquid nations, such as Belgium and Portugal, which shows that market liquidity is an important element in encouraging growth (Ake, 2010)

Kapingura and Makhetha-Kosi (2014) delve into establishing the complex relationship between BM and economic growth in South Africa. The analysis is based on quarterly data covering 1995 to 2012. The study reveals that there is a significant relationship that exists between economic growth and bond market capitalization through the two-step Engle-Granger co-integration method casualty test. As firmed through this study. A domestic BM that functions efficiently contribute much to resource mobilization and subsequent economic growth. Therefore, with this study, it is proposed that governments in Africa need to initiate policies aimed at promoting the development of the bond market. This shall be a means to attain long-term economic growth. These empirical findings give support to theoretical underpinning, which proposes a secure link between capitalization of the domestic BM and its impact on economic activities.

The relationship of BMD to economic growth with respect to G-20 countries has been comprehensively analyzed for the period ranging from 1990 to 2011. Pradhan et al. (2015) threw light upon the presence of bi-directional and uni-directional causal relationships. It is estimated that VAR models were employed to analyze causal relationships with a specific focus on the impact of BMD on economic growth. It does so through the usage of four primary dimensions of

BMD: size, access, efficiency, and stability. The results obtained from the study indicate that the development of bond markets may drive or be the result of economic growth. In developing these results, this research has found evidence for various hypotheses, including the: SLH, DFH, FBH and NH. The findings make it clear that the presence of deep bond markets acts as a very important reason for sustainable economic growth. These markets allow for the provision of long-term funding, contribute to financial stability and improve resource allocation.

Pan & Mishra, (2018) examined the relationship between economic growth and stock market development in the context of China, a developing economy that is growing rapidly. They found that, while China's Shanghai A share market experienced a negative long-run relationship with the real economy, the impact was insignificant and could be largely ignored based on the ARDL model and unit root tests with structural breakages. It's noteworthy to mention that they saw no instant relationship between the economy and the stock market. In the context of China's B share market, the research also uncovered evidence to support the demand-driven hypothesis, which suggests economic growth leads to the growth of the stock market. These findings show the complexities of the link between economic growth and stock market and imply that it can vary depending on the structure of the market and the economic environment of the country.

Fanta and Makina (2017) explain the effects that different financial markets and intermediaries hold on the economic growth of South Africa. They do this through the VAR model. A comprehensive study is done ranging from BM to SM and different financial intermediaries. The discussion is far-reaching, and it includes many areas that have not been captured in previous studies, mainly on banks and SMs. The research findings show that the development of BM has a particular relationship with economic growth, which does not apply to stock markets and other financial intermediaries. It can thus be concluded from the results that every component of the financial sectors has its unique significance towards economic growth, and among them, the BM plays a pivotal role in the economic development of South Africa.

In the extensive study, Popov (2018) explores the complicated connection between finance and economic growth, delivering a detailed analysis of empirical data in different contexts. He delves into the various ways in which financial markets can spur economic growth, highlighting the importance of efficient financial institutions and markets in mobilizing saving, facilitating investments, and enhancing resources allocation. According to Popov (2018) effective financial

systems play a key role in facilitating corporate growth through improved capital accessibility. Additionally, they contribute to overall economic productivity by fostering technological advancements and innovation. The author explores the interconnectedness between financial development and economic stability, shedding light on the advantages and drawbacks of expanding financial markets. Through a comprehensive analysis of various empirical studies, the author presents a detailed analysis of the factors that determine the impact of financial development. This includes highlighting the significance of the regularity environment, institutional quality and the stage of economic development in shaping the relationship between finance and growth.

Correlation between the development of BM, SM and economic growth has been thoroughly examined in the context of the G-20 nations. Pradhan et al. (2020) examined the dynamics by employing the Granger causal relationships among BM, SM, EG and real interest rate. Their study suggests that there is a significant relationship between economic growth and both BM and SM. Additionally, they found that inflation and interest rates together with these financial markets play a pivotal role in driving long-term EG. The study used a panel VAR model to examine data from 1991 to 2016, demonstrating that well function and well establish financial markets are pivotal for achieving long term EG. The study emphasizes the significance of policymakers prioritizing the stability and advancement of financial markets to promote economic growth. It underlines the correlation between financial markets and macroeconomic stability.

For the period 1980 to 2017, Anderu (2020) explores how capital markets influence economic growth in Nigeria. The study, therefore, uses an empirical approach through the ARDL model and bound cointegration testing in examining various relationships between economic growth, proxied by GDP, and several capital market variables, including market capitalization, all share index, turnover ratios, gross capital formation, exchange rate, value of all transactions, and interest rate. The results indicated that there is a significant relationship between these variables, thus capital market efficiency is crucial for the augmentation of long-term economic growth. It is also supported by some post estimation tests, such as the Jarque-Bera and Breusch-Godfrey tests, which prove that the residuals are normally distributed and there is no presence of autocorrelation. The study proposes a need to improve techno-infrastructural facilities within the Nigerian capital

market and regulatory oversight by the Security and Exchange Commission to forestall unethical practices and promote efficiency.

Nneka et al. (2022) investigates the correlation between BMD and economic growth in a range of developing countries between 1990 and 2020. The study utilizes ARDL and co-integration methodologies to analyze the data. Gross domestic product (GDP) Per Capita is used as a proxy for economic growth, while government and corporate bond capitalization are employed as a measure of BMD. The results of the study indicate certain factors have a significant impact on economic growth. Specifically, government bond capitalization and domestic credit to private sector are found to have a negative impact on EG. According to the findings, the increase in government bonds appears to have a positive impact on EG, while the presence of corporate bonds and private sector credit may have a detrimental effect. According to the study, it is recommended that policy makers prioritize the streamlining of bonds issuance procedures and the advancement of BMD. These measures are pivotal to attracting increased investment and provide substantial backing for long-term economic growth initiatives.

Phung Thanh (2022) steps into the macroeconomics effects from the Green bond (GB) market on 37 Asian economies going from 2002 to 2018 using both co-integration and causality methodologies, and the research shows a one-way causal relationship between several variables like inflation rate, inward FDI, governance indicators, HDI, and the issuance of GBs in these Asian nations. Following an inquiry, it is seen that for the relation between higher and upper-middle-income countries, the causal effects are one-way. The upper middle is primarily affected by HDI and Governance as it is inferred that Governance and Inflation has a direct bearing on GBs. As the lower-income Asian states are said to lack the ability to ensure the same, these could quite well be seen as suggestions for them that they need to ensure policies that lay an emphasis on enhancing the efficiency of GBs as a step toward a positive impact on economic activities and human development. These include improvement of the financial system, rural electrification programs, and the dissemination of electric vehicles. Meanwhile, it is important for wealthier countries to support the inflow of international capital into GB markets to promote economic activities and foster human development. This well-understood insight is very important for policymakers striving to better finance green growth in a diversified economic context.

3.1 Literature on Pakistan Bond Market

The development of bond markets in emerging countries such as Pakistan provides a complex environment, full of vast opportunities and huge challenges. BM plays a pivotal role in a well-functioning financial system, enabling fiscal deficit financing, improving the effectiveness of the monetary policy, and offering means to manage inflation and capital inflows. A. M. Khalid, (A. M. Khalid, 2007) highlights the role of financial markets in directing saving towards productive investments, thereby promoting economic growth and stability. Nevertheless, emerging markets frequently encounter obstacles such as inadequate regulatory frameworks, restricted issuer and investor bases, and macroeconomic instability. In Pakistan, the slow growth of bond market can be attributed to factors such as significant fiscal deficits, a weak institutional framework, and ongoing political and economic uncertainties. In order to overcome these challenges, A. M. Khalid, (A. M. Khalid, 2007) proposes that Pakistan should focus on establishing comprehensive financial sector reforms. Pakistan has the potential to boost economic growth, enhancing financial intermediation, and achieve long-term economic sustainability by creating a favorable environment for bonk market development.

Corporate bond markets provide financial stability and expansion to developing economies. Hameed (2007) identifies several constraints for which Pakistan's corporate bond market is suffering at the moment and, if address, will trigger economic growth. Corporate bond markets allow for long-term funding during times of economic downturn and compete with bank finance and equities. Due to capital diversification, financial systems stabilized after the Asian financial crises and hence reduced the risk of the banking sector. Despite considerable potential in Pakistan's corporate bond market, administrative inefficiencies, a lack of liquidity, and government funding have resulted in corporate debt remaining at or slightly above 1% of GDP. Thus, the introduction of policy measures to remove these bottlenecks will boost financial stability and resource allocation and, therefore, allow the process of economic growth to sustain itself. The corporate BM in Pakistan has to be strategically grown to meet its targets of economic development.

The Pakistan bond market is important to financial market evolution and economic progress. According to Arif (2007) local bond market, particularly the corporate bond section, needs major changes to catch up to other emerging countries, emphasizing the importance of diverse investors, effective issuance methods, and strong debt management frameworks for market growth. In

addition, government assets with a constant long-term supply are needed to provide a meaning yield curve that can benchmark corporate bond issuance. This technique diversifies risk and mitigates financial crises by providing other funding sources. The fixed income market, notable through the issuing of PIBs and Term Finance certificates (TFCs), has made headway but needs better regulatory frameworks and market infrastructure to fully realize its potential. A thriving bond market requires better coordination between monetary and fiscal policy and strong legal and regulatory environments. This set of policies can meet the twin objectives of enhancing the stability of the economy and accelerating growth by providing sustainable finance and boosting investors' confidence in the financial system.

Since 1995 the development of a corporate bond market in Pakistan has undergone various issues yet to be successfully overcome. Even the best efforts at change have not been able to bring forth the great benefits of a corporate bond market in the country. A lot of major challenges that the corporate bond market in Pakistan is operating under have been marked by Rehman and Khilji (2017). These are the imposition of high interest rates of National savings schemes, strict disclosure rules and increased transaction costs. These challenges have collectively acted to hinder market expansion and deepening. The NSS instruments, which offer risk-free rates higher than those offered by private bonds, led to huge competition, which led the government to force the NSS yields to converge with the long-term sovereign bonds to avoid this. Additionally, the unwillingness by family-owned firms to provide information has reduced the number of publicly listed companies and, consequently, this has curtailed the market's depth. The abnormal costs associated with the issuing, listing, and taxing of Term Finance Certificates (TFCs) were another factor dissuading their issuance. In addition, the secondary market for TFCs is illiquid, mainly due to low volumes of bond issuance and a lack of experience among investors in trading bonds. Although an e-bond trading platform has been introduced by the SBP for the development of its primary, secondary markets of sovereign bonds, the development pace of the corporate bond market in Pakistan is far below the level of other emerging economies. The improved access to real-time information, diminished liquidity concerns, and facilitated more decisions involving informed financing are some of the objectives to be achieved through this platform. Still, there is a limitation to the growth of the market. All these show the need for comprehensive reforms with unequivocal efforts to avoid these hindrances and tap the potential of Pakistan's corporate bond market that catalyzes a country environment that shall be stronger and more financially literate.

A well-functioning bond market is necessary for providing firms, governments, and private sector with long-term funding for economic growth. It can be summed up that since the early 1990s financial reforms, the Pakistan bond market has fallen behind. Maqbool-ur-Rehman, (2015) identified that for both economic and financial system stability, a strong bond market was necessary. Different obstacles are found from an investigation to the long-term bond market of Pakistan. Lack in depth, resultant trade inefficiencies, and high-interest rate volatility are some examples. The author has termed comprehensive changes that include a stable benchmark for the long-term government securities, market transparency, and frequent and large bond issuances to increase liquidity. It has emphasized the removal of structural and administrative hurdles by regular authorities to remove impediments to bond market expansion. From the results obtained, it can be concluded that specific policy actions are needed, like lowering issuance costs, enhancing regulation, and boosting investor trust, to revive Pakistan's bond market. Concerns are best addressed to ensure higher levels of economic growth through better resource allocation, reduction of the risks of financial transactions, and ensuring that the financial market remains competitive.

3.2 Literature on Stock Market of Pakistan

The study by Shahbaz et al. (2008) examines the dynamic relationship between SMD and economic growth in Pakistan based on annual time series data ranging from 1971 to 2006. The study employed advanced econometric models such as the ARDL bounds testing approach and the Engle-Granger causality test to investigate both the LR and SR relationships. The results indicate that there is a significant long-run relationship, and that the direction of causality runs both ways between SMD and economic growth. In the short run, however, the causality is one-way and moves from SMD to economic growth. Their findings again highlight that the development of the financial sector acts as a significant factor in the economic growth of less-developed nations such as Pakistan and how the policies of financial liberalization increase the overall capital market efficiency, thereby contributing to economic growth in general. Their result implies that stock market growth may mobilize savings, enhance capital allocation, and stimulate more economic activities, which support long-term EG.

Similarly, Nazir et al. (2010) study the complex relationship between the development of SM and the economic growth of Pakistan within a time frame extending from 1986 to 2008. This study acknowledges stock market size, represented through market capitalization, and liquidity,

measured by the total value of traded shares, as significant in fostering economic growth. The authors, using the Augmented Dickey-Fuller (ADF) unit root testing methodology, prove that both the stock market size and its liquidity positively and significantly affect the EG of the country, with a stronger impact for market size. The authors also considered FDI and human development to be critical determinants of economic growth and found those variables to have a significant positive impact. The research emphasizes the need for an integrated approach to include the development of stock markets, enhanced human capital investment, and acquiring strategic foreign direct investment. These findings supplement the existing literature, and in the light of previous studies, the research concludes that the financial markets must be developed to sustain economic growth in economies like Pakistan. The emphasis made is concerned with the policy measures which shall promote transparency in financial markets together with efficiency to further boost the level of economic performance.

Z. Ahmad et al., (2012) based their understanding of comparative analysis in relation to the growth of the stock market and economic development in Pakistan and Bangladesh of the 90s on the post-liberalization period. The researchers further investigated the impact of stock market indicators, including market capitalization, stock market liquidity, and volume of listed companies, on GDP per capita. Their results show that the size of the SM impacts economic growth in Pakistan, while economic growth in Bangladesh appears to be influenced by the liquidity aspect of its stock market. Despite a few divergences in their economic structures, both show a reasonably strong positive correlation between the development of SMs with EG. The study emphasizes that the size and liquidity of a stock market may play divergent roles in determining the economic performance of developing countries, thereby suggesting that Pakistan benefits from a larger market size and Bangladesh's more liquid but smaller market is associated with EG.

A similar study conducted by Ahmad et al. (2012) investigates the impact of the development of a stock market would have on the economic growth of Pakistan, India, and China using panel data from 1993 to 2016. Using pooled, fixed, and random effects panel regression models, the authors found that SMC has a significant effect on the GDP growth of the subject countries. Random effects were the most appropriate model because of differences between countries. The findings, therefore, indicate that SMD, proxy through the market capitalization model, is a crucial variable for economic growth in these developing economies. The emphasis in this paper is on the role of

a stable political and economic environment in sustaining growth within the stock market. According to the study, policymakers should therefore direct their attention on financial market stability as a means of sustaining long-term growth in the economy. This is in corroboration with research that indicates regional financial development reveals a positive relationship with EG in a region that is quickly industrializing, such as South Asia.

3.3 Literature on Money Market of Pakistan

Tariq et al. (2017) empirically examined the influence of money supply on economic growth in Pakistan between 1980 and 2014 by using ordinary least squares method, Granger causality tests, and vector autoregression (VAR). The empirical results of the study have shown that money supply has a positive effect on the EG of Pakistan. Considering this, the Granger Causality test showed that the money supply Granger causes economic growth. The results of VAR further support the existence of a positive relation, which reveals the major role of monetary policy through the SBP in shaping economic performance. This study also plays special emphasis on the fact that an expansionary monetary policy can stimulate growth, but a very careful balancing between the two will be needed to avoid inflation, as it may hit at the very root of economic development. Hence, the study confirms with other studies of monetary policy on economic growth in developing countries and adds to the concept that the management of money supply is one such effective tool that is vital to achieve stable EG in developing countries.

The study by Kausar et al. (2020) analyzes the effect that money supply has on the economic growth of Pakistan, using time series data related to 1980-2018. The econometric method applied by the authors uses the ADF test, Johansen cointegration test, and Granger causality test for an examination of the relationship among the involved variables. The results indicate that there is a LR positive relationship between money supply and EG, and money supply is conducive to the economic growth of Pakistan. Furthermore, unidirectional causality running from money supply to economic growth has been ascertained, which shows that monetary policies are still effective in promoting economic development. Their findings are consistent with the literature to date that identifies a suitably regulated money supply as the key to maintaining economic growth, especially in less developed countries such as Pakistan.

Similarly, Ihsan and Anjum (2013) have studied the effect of money supply, M2, on the gross domestic product of Pakistan for the period 2000-2011. In that respect, the authors have used a

regression model and then established the connection of money supply with other leading economic variables namely rate of inflation, rate of interest, and Consumer Price Index. The coefficients reveal that while the interest rate and CPI significantly positively affect GDP, inflation is insignificant in its relationship with GDP. The study concludes that excessive money supply by the SBP contributes to building up inflationary pressures and thus influences economic growth. However, regulation of money supply mainly via interest rate management and management of CPI is increasingly essential for economic growth to continue in Pakistan. In fact, the contribution that this research makes towards a broader understanding of the role of monetary policy in economic development delineates a pre-requisite for effective monetary controls to further increase GDP growth.

S. M. Khan et al., (2020) examines the impacts of money supply and domestic credit on the economic well-being of the inhabitants of Pakistan, starting from 1981 to 2018. By using an estimation technique, the ARDL model with Bound Testing and Error Correction Model (ECM), they find that both money supply and domestic credit have a positive and statistically significant impact on GDP per capita, used as a proxy for economic well-being. On the other hand, inflation and real effective exchange rates have important negative effects on welfare. The deduction could hence be made herein that an expansionary monetary policy, which would stimulate domestic consumption and impart easy access to domestic credit, could be utilized as a method for enhancing EG and thereby the welfare of the citizens. The study accordingly highlights that monetary policies authorities must design policies in which money supply and credit expansion are matched by inflation control with a view to sustaining economic development in Pakistan.

The study of Stylianou et al., (2024) has been conducted to investigate the money supply-inflation nexus which considers the Pakistan economy from 1981 to 2021. The conducted study applied the ARDL bounds testing approach to study the LR and SR dynamics between money supply, interest rate, unemployment, and inflation. The results show that money supply and interest rates are positively related to inflation, while unemployment is inversely related to inflation. This paper, therefore, highlights the requirement for calibrated monetary policy in effective management of inflation. These findings also call for special policy measures. The government, along with the central bank, should thus work together to attain financial stability and keep excessive inflationary

pressures under control. The contributions of this work are to understand the dynamics of inflation in Pakistan, providing policy-relevant insight into the impact of monetary variables on inflation.

3.4 Research Gap

Despite the extensive literature on the relationship between financial markets and economic growth of Pakistan. Most of the studies have remained largely confined to stock and banking sectors and ignore the bond market and money markets. Few studies have addressed theoretical propositions and not empirically investigated the effect of bond and money market on EG. More specifically, the empirical of the relationship between the BM and some macroeconomic factors including inflation rate and interest rate have not received attention within the context of Pakistan. Furthermore, the available literature lacks empirical investigation to capture the dynamics [4] of bond, stock, and money markets on economic growth. Therefore, this research fills the gap by detailing comprehensive empirical research about the relationship between EG and financial markets. This study provides valuable insights analyzing the development of Pakistan's financial sector and its ability to enhance economic growth through the analysis of the financial segments on the economy and the role of institutional and regulatory factors. Moreover, a few studies have considered the regularity and institutional drivers of market performance. This research aims to bridge this empirical and theoretical shortfall through a mixed-methods strategy ARDL estimates together with thematic analysis of expert interviews to create a holistic understanding of financial market dynamics in Pakistan.

[4] The term dynamics refers to the changing behavior, and interactions, effects of the capital and money markets over time, particularly to Pakistan’s economic growth

CHAPTER 4

METHODOLOGY AND DATA

4.1 Preamble

This chapter outlines the methodology used in this study to investigate the dynamics of capital market, money market on economic growth in Pakistan. The Auto Regressive Distributed Lag Model has been employed in the study to achieve the objectives.

4.2 Research Approach

This research follows a mixed-method approach, incorporating both quantitative and qualitative methods to provide a well-rounded analysis. To empirically explore the effect of the capital market and money market on EG, annual time series secondary data is utilized in the study for a period of 44 years spanning from 1980 to 2023. The data has been collected from various domestic and international sources. The variables used in the study are Real GDP, bond market, stock market, money market, GFCF, trade openness, inflation, and interest rate. The details of the variables used in the study are given in table 3.1 along with the sources. Description and formula of the variable. For thematic analysis this research relies on expert's interviews to gather primary data, which requires a particular procedure to understand the subject matter.

4.3 Sampling

The aim of the study is to gather diverse viewpoints related to the Capital market and money market in Pakistan by engaging in thoughtful conversations. This requires compact and specific information, which can be provided by people with adequate experience in the finance sector and policymakers. A total of eight interviews were conducted.

4.4 Units of Data Collection

The data was collected from primary and secondary sources. The primary data was collected through in-depth interviews. Participants for the in-depth interviews were chosen from the Ministry of Finance, PSX, NSS, and SECP for their valuable experiences and insights. The aim was to gather diverse viewpoints by engaging in thoughtful conversations. While secondary data is collected from WDI, SBP, and PSX.

Table 4. 1: Description of Variables

Variable	Description	Formula	Source
Dependent Variable			
Economic Growth	RGDP		WDI
Independent Variable			
Bond Market	BM	Size of Bond market % of GDP	SBP
Stock Market	SM	Total Market capitalization % of GDP	PSX
Money Market	M2	M2 (% of GDP)	SBP
Investment	GFCF	GFCF (% of GDP)	WDI
Trade openness	TO	Exports + Imports/ GDP	WDI
Inflation	CPI	CPI (annual %)	WDI
Interest rate	Money at call rate	CMR (annual %)	SBP

4.5 Discussion About Variable

4.5.1 Economic Growth

This study uses real GDP as a proxy for economic growth. GDP is the total amount of value added by all producers who live in a country. It includes all taxes and subsidies that are not included in the prices of goods and services. GDP is estimated without accounting for depreciation of manufactured assets or depletion and deterioration of natural resources (World Development Indicator). Data is available in local currency at constant prices. RGDP is use as a dependent variable in the literature by different studies, including (Hondroyiannis et al., 2005; Toby & Dibiah, 2021). Real GDP is widely used in financial markets and economic analysis because it reflects the real production of an economy over time, excluding the effect of inflation This enables researchers to analyze growth based on increase in real production, not price-level changes.

4.5.2 Bond Market

The bond market is a financial market where participants buy and sell debt securities, typically bonds. The channel connects government and business money seekers with long-term investors

who have spare funds to lend. It is also known as the debt, credit, or fixed-income market. The BM primarily includes corporate debt instruments and government-issued securities (Fabozzi et al., 1998; Fabozzi & Fabozzi, 2021).

Development of the BM is taken as an exogenous variable, defined by the volume of total debt raised through the issuance of debt securities by both public and private sectors. This measure highlights the capacity of the bond market to provide long-term financing (Chidi-Okeke et al., 2020; Fink et al., 2003).

4.5.3 Stock Market

The stock market is a financial market where publicly traded firms' issue, purchase, and sell shares, enabling companies to access funds and investors to purchase a portion of ownership in the company (Fabozzi et al., 1998; Fabozzi & Fabozzi, 2021).

Number of studies take stock market development as an exogenous variable and often measure it by the total capital raised by listed firms from equity , as done by (Z. Ahmad et al., 2012; Nazir et al., 2010). According to these studies, the stock exchange represents a way of mobilizing financial resources that might make a very pertinent contribution to EG. It is through the provision of a platform for companies to raise capital that stock markets promote better investment, allocation of capital, and economic growth. Indeed, the development of a stock market finds a place in models analyzing the outcome of economies, thus showing the importance of this factor in shaping the country's economic course.

4.5.4 Money Market

The money market is a financial market segment that facilitates the financial system's liquidity by facilitating the borrowing, lending, purchasing, and exchange of securities with durations of one year or less (Fabozzi & Fabozzi, 2021).

Money market is considered as an exogenous variable. Money market is proxied by M2. This measure indicates the overall level of liquidity available within the financial system. According to studies done by (Ihsan & Anjum, 2013; Kizito, 2013) high liquidity within the money market means that financial transactions take place smoothly; therefore, high economic activities are promoted in a stable manner, which then affects economic growth.

4.5.5 Investment

Gross Fixed Capital Formation (GFCF) is a key component of expenditure-based GDP. It indicates the amount of expenditure that has been spent on land, buildings, machinery, transport equipment, and infrastructure, along with the replacement value of capital that has depreciated over time. (R. Ahmad et al., 2017; M. A. Khan & Qayyum, 2007) GFCF is a good measure of capital accumulation and economic development since it indicates how much individuals are investing. GFCF can usually be used to examine trends in investment since it accounts for a broad array of physical capital spending that is necessary for long-term growth and productivity.

4.5.6 Trade Openness

Trade openness (TO) indicates a country's integration with the international market, such as imports, exports, and other cross-border trade flows. Greater trade openness brings more foreign investment inflows and offers opportunities for home-based firms to expand globally. In this research, trade openness is computed as the sum of real imports and real exports divided by real GDP, a common method in empirical studies(R. Ahmad et al., 2017; Bibi et al., 2014) . This index measures the effect of trade liberalization on investment patterns and EG.

4.5.7 Inflation

This study utilizes the inflation rate as a proxy of inflation, and the data is collected from WDI. The consumer price index measures changes in the average consumer's cost of acquiring a basket of goods and services, which can be set or changed at regular intervals, such as yearly. The Laspeyres formula is widely utilized (World Development Indicator).

Most of the studies treated inflation as an exogenous variable, as is prominently measured by the Consumer Price Index. This was noticed in the studies of (Madurapperuma, 2023; Pradhan et al., 2020a; Uddin & Rahman, 2023) CPI is the standard indicator, showing the average change in prices over some time.

4.5.8 Interest Rate

The lending rate is the bank rate that normally covers the short- and medium-term funding needs of the private sector. Normally, this rate is adjusted depending on the creditworthiness of the

consumers and the objectives of financing. However, the terms and conditions associated with lending rates vary for each nation, making them less comparable with other nations. Many studies, including (Malik, 2007; Moreno & Kim, 1993) have used the call money rate (CMR) interest rate as an independent variable for granger causality.

4.6 Econometric Methodology

The Autoregressive Distributed Lag (ARDL) model, developed by Pesaran et al. (2001), is employed in this study to examine both the LR and SR effects of the BM, SM, and MM on economic growth in Pakistan. This methodology is chosen for its advantages over other estimation techniques, particularly its effectiveness in modeling nonlinear relationships and handling variables with different orders of integration. The purpose of this study is to check the LR relationship between economic growth, bond market, stock market, money market along with other control variables. Autoregressive distributed lag model will be employed to check the long run relationship. One set of variables is assumed to be stationary at I (0) by this technique, while the other set is assumed to be stationary at first difference I (1). However, if any variable's integration order is greater than 1, the ARDL approach's basic presumptions are violated (Ouattara, 2004). Prior to estimating the ARDL model, we first test for the integration order of the variables that are included in this study.

4.7 Unit Root Test

There is a risk of getting spurious results when working with time series data. To avoid misleading results, it's important to handle the issue of non-stationary data. The ADF test is utilized to investigate the stationarity of variables. The augmented Dickey-Fuller tests are modified versions of the Dickey-Fuller (DF) test. The ADF test removes auto-correlation by incorporating the dependent variable's lagged difference as independent variables in the Dickey-Fuller equation. The ADF test can be used with or without an intercept and time trend to identify non-stationary variables. The ADF test is expressed using the following model.

$$\Delta X_t = \alpha + \beta_t + \gamma X_{t-1} + \sum_{i=1}^{p} \Delta X_{t-i} + \varepsilon_t \qquad 3.1$$

Where X_t shows time series, α represents the constant term, t is the time trend, Δ is the first difference operator, β and γ are the parameters to be estimated, p represents the optimal lag length and ε_t is the white noise error term.

The null hypothesis $H_o : \gamma=0$ (series is nonstationary) is tested against the alternative hypothesis Ho : $\gamma <$ (series is stationary) based on τ -statistic. Since test statistics does not base on the student 's t-distribution. Therefore, critical values provided by Dickey and Fuller (1979) and Mackinnon (1996) are used for analysis.

4.8 Model Specification

To investigate the long-term and short-term impacts of financial market development on economic growth in Pakistan, ARDL model is employed.

Following (Algaeed, 2021; Nyasha & Odhiambo, 2015; Shahbaz et al., 2008) following econometric model is used in the study.

$$\log GDP_t = \alpha_o + +\gamma \log BM_t + \delta \log SM_t + \eta \log MM_t + \psi \log TO_t + \varphi \log GFCF_t + \theta\ inf_t + \phi cmr_t + \varepsilon_t \quad 3.2$$

Where GDP represents the real GDP, which is used as a proxy for economic growth. SM represents stock market capitalization, MM represents money market, and money supply is used as a proxy for it. TO shows Trade openness, GFCF represents gross fixed capital formation, inf represents the inflation rate, and cmr represents the call money rate used as a proxy of short-term interest rate, $\beta,\ \gamma,\ \delta, \eta,\ \varphi, \psi,\ \theta\ and\ \phi$ are the coefficients. and ε_t represents the error term. All variables are taken in log form except the inflation rate and call money rate. The model aims to assess how these financial and macroeconomic factors influence real GDP over time.

4.9 Long-Run ARDL Model

The long-run relationship between economic growth and the financial markets, namely, the bond market, stock market, and money market as well as key macroeconomic control variables, is estimated using the log-run ARDL model. The general long-run ARDL specification used in this study is as follows:

$$\text{Log}GDP_t = \alpha_o + \beta log GDP_{t-1} + \gamma log BM_{t-1} + \delta \log SM_{t-1} + \eta \log MM_{t-1} + \psi \log TO_{t-1} + \varphi log GFCF_{t-1} + \theta \inf_{t-1} + \phi cmr_{t-1} + \varepsilon_t \quad 3.3$$

4.10 Short-Run Dynamics: Error Correction Model

To capture the short-run adjustments and dynamic behavior of the variables towards the long-run equilibrium, the Unrestricted Error Correction Model (UECM) form of the ARDL is applied. The short-run model includes the error correction term (ECT) derived from the long-run equation, which represents the speed of adjustment toward the long-run equilibrium after a short-term shock. The short-run model is specified as:

$$\Delta \log GDP_t = \alpha_o + \sum_{i=1}^{3} \beta_i \, \Delta logGDP_{t-i} + \sum_{j=0}^{1} \gamma_j \, \Delta logBM_{t-j} + \sum_{k=0}^{1} \delta_k \, \Delta \log SM_{t-k} + \sum_{l=1}^{2} \eta_l \, \Delta \log MM_{t-l} + \sum_{m=2}^{2} \psi_m \, \Delta \log TO_{t-m} + \sum_{n=1}^{1} \varphi_n \, \Delta \log GFCF_{t-n} + \sum_{0=o}^{0} \theta_o \, \Delta \inf_{t-o} + \sum_{p=1}^{1} \phi_p \, \Delta cmr_{t-p} + \lambda ECM_{t-1} + \varepsilon_t \qquad 3.4$$

4.11 Co-Integration Approach

To determine whether a model empirically demonstrates significant long-term linkages, co-integration testing is a prerequisite. It becomes essential to keep working with variables in differences if co-integration among the underlying variables cannot be established. The long-term data will be absent, though. In addition to the (Engle & Granger, 1987) process, there are a number of co-integration tests, including the ARDL co-integration technique, also known as the bound co-integration testing technique.

Initially, the F-test is conducted to assess the existence of a long-term relationship among the variables. The calculated F-statistics are then compared to the critical values established by (Pesaran et al., 2001). If the computed F-statistic falls outside the lower and upper bounds of these critical values, it indicates the co-integration between the variables. Additionally, the Akaike Information Criterion (AIC) is utilized to determine the optimal lag order, as a lower AIC suggests the most suitable lag length.

4.12 Advantages of ARDL

The Autoregressive Distributed Lag (ARDL) method offers distinct advantages in empirical time series modeling, especially in handling endogeneity issues. Through the specification of individual equations for each of the underlying variables, the method minimizes residual correlation since all the variables are considered endogenous. The technique also allows for an exhaustive analysis of the base model. When there is a single LR relationship, the ARDL model effectively distinguishes

dependent and explanatory variables. Pesaran et al., (Pesaran et al., 2001) point out, the ARDL method assumes the presence of one reduced-form equation that captures the long-run relationship between the dependent variable and a group of exogenous regressors

The primary benefit of this method is its ability to identify several co-integrating vectors. The corresponding Error Correction Model (ECM) can be obtained by a linear transformation of the ARDL equation, thus extracting both short-run dynamics and long-run equilibrium behavior without losing long-run information. The ECM model has a proper number of lags to represent the data-generating process in different contexts of modeling. In addition, the ARDL method is especially ideal for small sample size-based studies, since it supports variables with a mixed order of integration (I(0) and I(1)) and enables short- and long-run effects to be estimated simultaneously, rendering it a very powerful and dependable tool for time series analysis.

CHAPTER 4

RESULTS AND DISCUSSION

5.1 Preamble

This study examined relevant literature on the Stock market, bond market, and money market from Pakistan and around the world in chapter two of the literature. This allowed us to create an empirical estimation methodology that will help us achieve the study's initial goals. Additionally, this chapter offers an econometric approach, the ARDL model is used in this work to estimate the long run and short run dynamics. The empirical results of the study are presented in this chapter

5.2 Correlation Matrix

The statistical summary of table 5.1 displays correlation coefficients among different financial and macroeconomic variables in Pakistan, depicting their interdependence. The correlation between RGDP (Real GDP) and the capital market indicators, i.e., BM (Bond Market) and SM (Stock Market), is significantly high with values of 0.6916 and 0.7069, respectively, showing their positive relationship with economic growth. The Money market (MM) also has a moderate relationship with RGDP (0.5431), which indicates that financial system liquidity has a positive but weaker association with economic output. GFCF has a negative relationship with RGDP (-0.6976), which may indicate that increased investment in fixed assets may not always support immediate GDP growth under the current economic setup of Pakistan. The TO (Trade Openness) variable also indicates a negative relationship with RGDP (-0.4952), which means that trade openness cannot always directly support economic growth, perhaps because of other macroeconomic variables or external market situations. Inflation (INF) indicates a weak positive relationship with RGDP (0.3059), and CMR (Call Money Rate) shows a weaker positive relationship (0.2958), which means that interest rates and inflation do impact economic activity to some degree. Generally, the Table 5.1 correlations offer a preliminary look into the relationship between financial and macroeconomic variables and their combined effect on Pakistan's economic growth.

Table 5. 1: Correlation Matrix

	RGDP	BM	SM	MM	GFCF	TO	INF	CMR
RGDP	1.0000							
BM	0.6916	1.0000						
SM	0.7069	0.7055	1.0000					
MM	0.5431	0.5303	0.6359	1.0000				
GFCF	-0.6976	-0.5821	-0.6117	-0.1090	1.0000			
TO	-0.4952	-0.3891	-0.4595	0.1875	0.7314	1.0000		
INF	0.3059	0.3141	0.111	0.1565	-0.0456	0.35	1.0000	
CMR	0.2958	0.3104	0.1181	0.2942	-0.1683	0.2541	0.6389	1.0000

5.3 Unit Root Test

The results of the Augmented Dickey-Fuller (ADF) test with intercept and trend are given in Table 5.2. The test shows that RGDP, bond market, stock market, money market, GFCF, and TO are non-stationary at the level, having p-values 0.466, 0.754, 0.849, 0.1313, 0.198, 0.3594, respectively. All of them are stationary after taking their first difference. Inflation rate and call money rate are stationary at the level.

Table 5. 2: Results of ADF Test

Variables	Level			First Difference			Decision
	T Statistic	Critical Value	P value	T Statistic	Critical Value	P value	
log_RGDP	-2.241	-3.531	0.466	-4.391	-3.536	0.0023*	I (1)
log_BM	-1.691	-3.532	0.754	-4.99	-3.536	0.0002*	I (1)
log_SM	-1.437	-3.532	0.849	-4.536	-3.536	0.0013*	I (1)
log_MM	-3.003	-3.532	0.131	-4.846	-3.536	0.0004*	I (1)
log_GFCF	-2.797	-3.532	0.198	-4.641	-3.536	0.0009*	I (1)
log_TO	-2.438	-3.532	0.359	-4.366	-3.536	0.0026*	I (1)
INF	-1.233	-3.532	0.903	-3.773	-3.536	0.0180*	I (1)
CMR	-4.611	-3.548	0.0010*				I (0)

5.4 Lag Order Selection Criteria

The selection criteria of the lag length of the ARDL model were evaluated under the log-likelihood (LL), likelihood ratio (LR) test, final prediction error (FPE), Akaike information criterion (AIC), Hannan-Quinn information criterion (HQIC), and Schwarz-Bayesian information criterion (SBIC). The results of the lag selection criterion by using different methods are given in Table 4.3.

Table 5. 3: Lag Selection Criteria

Lag Order	LL	LR	AIC	HQIC	SBIC
0	-159.02		8.351	8.4732	8.6888
1	127.206	572.45	-2.7603	-1.6611	0.2796
2	215.846	177.28	-3.9923	-1.9161	**1.7498***
3	314.893	198.09*	**-5.7446***	**-2.6914***	2.6997

The result confirms that the LL significantly increases as the order of the lag increases from 0 to 3, and the LR test confirms strong statistical significance ($p = 0.000$) of every addition of lag. The FPE, AIC, HQIC, and SBIC all decrease steadily until lag 3, indicating a longer lag structure improves model fitness. The improvement is most significant at lag 3, where the LR test is highest (198.09), and the AIC is lowest (-5.7446), validating this as the best lag order for the ARDL model.

5.5 Long Run Co-Integration Test

The findings of the ARDL bounds test in Table 5.4 shows the presence of a long-run relationship among the under investigated variables. The F-statistics of 9.0546 are above the upper critical bounds at all the significance levels (3.667 at 10%, 4.347 at 5%, and 5.976 at 1% for I (1) regressors), rejecting the null hypothesis of no co-integration conclusively. This shows that the dependent variable has a strong equilibrium relationship with the financial market variables and macroeconomic controls variables in the model. The very low p-values (0.001 for the F-statistics) also confirm the robustness of these results.

Table 5. 4: Long Run Co-integration Test

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	9.0546	10%	1.92	2.89
k	7	5%	2.17	3.21
		2.50%	2.43	3.51
		1%	2.73	3.9

The existence of co-integration, as evidenced in Table 5.4, confirms the validity of the use of the ARDL approach in testing both the long-run equilibrium relationship and short-run dynamics (Akhtar et al., 2024). The results imply that the variables are co-integrated in the long run. The relevance of the bounds test statistics ensures that the model is adequately specified and that the respective estimated relationships are not spurious. This empirical evidence corroborates the theoretical prediction of a stable association between financial market development and economic growth, as per SLH (Fink et al., 2006) while also adjusting for the role of critical macroeconomic variables. The results contribute to the wider financial-growth Nexus literature by securing strong statistical evidence of co-integration in the specified model.

5.6 Long Run Results of ARDL

To investigate our first objective of our study, the Long-run equilibrium relationship between Pakistan's bond market, stock market, money market and Economic growth. We employed the ARDL model. The results of long run ARDL model are presented in Table 5.5, which depicts the LR relationship between real GDP and fundamental financial market variables, along with major macroeconomic variables. In this context, the dependent variable is the natural logarithm of real GDP. The key independent variables include BM, SM, and MM, measured as a percentage of GDP to express the depth of financial markets. The other macroeconomics variables are GFCF, which is used as a proxy for investment, trade openness, inflation, and the call money rate, used as a proxy for interest rates. These controls are added to account for broader financial and macroeconomic determinants of economic performance. The results of long run ARDL model are illustrated in table 5.5 given below.

Table 5. 5: Long Run Results of ARDL

Variable	coefficient	std.err	t stats	p
log_BM	-0.0123	0.0281	-0.44	0.664
log_SM	0.1232***	0.0273	4.50	0.0000
log_MM	0.9829***	0.2999	3.28	0.003
log_GFCF	-1.5413***	0.4304	-3.58	0.002
log_TO	-0.4213	0.3143	-1.34	0.193
INF	0.0077	0.0051	1.51	0.144
CMR	-0.0469***	0.0176	-2.76	0.011

In the long run, the stock market shows a statistically significant positive effect on real GDP growth with a coefficient of 0.1232 and a p-value is 0.000. This implies that an increase in SM by 1% of the GDP is linked to a respective increase in economic output of about 0.12%. This result is supported by the theoretical proposition of SLH that well-functioning equity markets play a key role in mobilizing domestic savings, enhancing the efficiency of capital allocation, and eventually fostering sustainable economic growth (Demirgüç-Kunt & Maksimovic, 1998; Levine, 2005). The result is in line with the results of (Akram & Akram, 2024; KAMRAN et al., 2018; Shahbaz et al., 2008), who underscore stock markets 'significance in the stimulation of economic growth. This result also supports by Yao, (2024) whose work captures long-term effects of financial depth on EG as significant. The relevance of this long-term relationship highlights the structural significance of capital markets structure of Pakistan. However, the realization of these benefits hinges on the depth and integration of the stock market with financing of the real sector, something that continues to be problematic in Pakistan's which relatively underdeveloped and segmented financial system.

Similarly, the money market shows a statistically significant long-term relationship with real GDP, with a coefficient 0.9829 and having p-value of 0.003. This positive coefficient indicates that the higher money market reflects better short-term liquidity conditions and effective credit allocation plays a significant role in long-run economic activities. In theoretical terms, the liquidity and credit

market channels of monetary transmission with a well-functioning money market ensuring smooth access to working capital, reducing transaction costs, and enabling better intertemporal resource allocation. These findings are consistent with (SHAH, 2021; Vo & Tran, 2023) with the role of money supply and liquidity in underpinning economic activity. They discovered that monetary aggregates, like broad money, play a role in growth in Pakistan's macroeconomic context. (AlHarbi et al., 2024; Mahmood et al., 2017) determined that monetary indicators positively affected GDP in Pakistan, highlighting the imperative of liquidity provisioning to maintain productive activity.

In the longer term, gross fixed capital formation has a negative and statistically significant relationship with real GDP coefficient of -1.5414 and a p-value of 0.002. This result shows that, while investment will initially promote growth, if capital is not properly allocated to the productive sector, it will diminish its marginal productivity and will hurt the long-run impact. In Pakistan, a major portion of investment is focused on public sector projects, such as infrastructure and roads, while private sector investment remains relatively low. Public spending, though important for the development of infrastructure, can have crowding-out effects, particularly when being disbursed towards non-productive investments. In addition, disbursements towards sectors such as education, which are critical to ensuring long-term growth, remain poorly funded. Therefore, the capital's long-term returns diminish, as investments do not completely maximize productive capacity or facilitate the development of human capital. This is consistent with the research of Ahmad et al., (Adelakun, 2011; R. Ahmad et al., 2017) where inefficiencies in investment allocation in Pakistan, particularly in sectors that do not produce high returns, are highlighted. (R. Ahmad et al., 2017; Z. Ahmad et al., 2012; Aslan & Altinoz, 2021) highlight that, in Pakistan, the investment priority of infrastructure accompanied by the lack of adequate attention to the development of human capital can dilute the effectiveness of capital formation in supporting sustain growth. The limited priority on real sector investments, combined with the lack of adequate expenditure on education, heightens the gap between short-term capital accumulation and long-term growth prospects. Therefore, while GFCF can provide immediate stimulation, its long-term impacts are constrained by inefficient allocation of GFCF and inherent structural problems.

The call money rate has a statistically significant negative impact on real GDP having coefficient -0.0470 and p value 0.011. This result conforms to conventional monetary theory, which posits

that high interest rates increase borrowing costs, suppress investment, and reduce aggregate demand, thereby leading to a slowdown in economic activities. (Chughtai et al., 2015; Mahmood et al., 2017; Moreno & Kim, 1993) have documented related negative long-run effects of interest rates on output, emphasizing monetary tightening via investment and credit channels.

The bond market has a statistically insignificant long-run relationship between on real GDP, with a coefficient of -0.0123 and a p-value of 0.664. This indicated structural problems since the market is dominated by government bonds that were largely employed to finance deficits and not stimulate private investment. Lack of data on corporate bonds limited analysis. Corroborating this outcome are similar findings by Oke et al., (2021) and Kartini & Milawati, (2020) in Nigeria and Indonesia. Pakistan's bond market is underdeveloped and has shallow depth, poor institutional arrangements, secondary markets of poor liquidity, and poor financial instruments, according to. Despite initiatives such as PIBs and TFCs (Rehman & Khilji, 2017), the progress has been slow, limiting the bond market's contribution to fostering long-term economic growth.

Trade openness shows a negative but statistically insignificant coefficient of -0.4213, p-value of 0.193, suggesting that increased trade openness does not lead to economic growth when controlling for financial market variables. This finding aligns with studies such (Ali & Rafiq, 2019) and (M. A. Khalid, 2016), both of them shows insignificant long-term relationship between trade openness and GDP in Pakistan. Pakistan’s economy relies on imports of raw materials and intermediate goods to sustain production. In the long run, rising imports, especially of oil, machinery, and industrial inputs, increase the cost of production, which may erode any potential gains from trade openness. Furthermore, Pakistan's infant industries, when exposed prematurely to international competition without adequate protection or capacity building, often struggle to survive, which undermines industrial growth and long-term competitiveness. These structural weaknesses likely dilute the benefits of trade openness and highlight the need for a more strategic trade and industrial policy that fosters domestic capability before embracing full liberalization.

Inflation has a weak positive coefficient 0.0077 and the p-value = 0.144 indicates that inflation has an insignificant effect on real GDP in this model. This result supports recent empirical study, such as (Abbas et al., 2024; SHAH, 2021; Shahid, 2014), which also show that inflation has no significant relationship with output, particularly under the condition of stable and moderate inflation rates. The evidence suggests that keeping inflation rate in a stable and manageable range

reduces its adverse effects on investment, consumption, and productivity, and hence its effect on long-run growth becomes statistically insignificant.

5.7 Short-Run Relationship

To achieve our second objective of the study, whether the impact of bond market, stock market, and money market on GDP growth is different in the short run and long run, we utilized the ARDL and ECM model. In the short run, Money market fluctuations have a negative and significant effect on real GDP, with a coefficient =-0.1050 p-value = 0.003 for the first lag of D(log_MM). This negative sign suggests that sudden changes in short-run liquidity conditions can have a destabilizing impact on economic activity. These findings indicate the fluctuations, unexpected liquidity shifts, short-term credit market disruptions, and constraining businesses' ability to access low-cost working capital, thereby hindering investment and production decisions. Mahmood et al., (2017) reveal that Pakistan's money market is prone to external shocks, poor institutional mechanisms, and speculation, reflecting the monetary transmission asymmetry of developing economies. These results are in line with Mukhtar et al., (2024) proposition that, although liquidity is essential for economic growth, the presence of high short-term volatility in financial markets low investor confidence and prevents monetary policy transmission to the real economy.

Trade openness (D(log_TO) L1) is found with a positive and statistically significant effect on GDP coefficient o=0.0816 and p-value = 0.024, that higher openness increases economic output in the short run. This result is supported by the studies of (M. A. Khan & Qayyum, 2007; Sarkar, 2008) who both reported similar positive short-run effects of trade openness on economic growth. In the Pakistan context, this short-run benefit could be attributed to the direct gains realized from the importation of industrial raw materials and capital goods, which significantly contribute to increased production and economic growth. The importation of inputs critical to the industrial sector of Pakistan, in combination with greater openness in trade, increases production levels and thereby increases GDP in the short run.

GFCF reveals a significant positive relationship with real GDP, with high coefficients at both the first lag 0.2409 and p-value of 0.000 and second lag, having 0.1996 p-value of 0.000. The Findings underscores the importance of capital accumulation in promoting short-run economic growth, as Hashmi et al., (2012) explains that investment in infrastructure has a positive short-run effect on economic activity in Pakistan. Bashir et al., (2025) also supports these findings that, in the short

run, GFCF used as a driver for economic growth, particularly through its direct effects on employment and productivity. In Pakistan's case, the direct gains from GFCF are often realized in infrastructural projects, which have the potential to create jobs promptly and stimulate economic activity. However, while these investments provide benefits in the short run, their long-term benefits depend on the effectiveness of their integration in the overall economic system, specifically on the engagement of the private sector and the human capital investment.

CMR exhibits a positive and statistically significant impact on real GDP at both the first coefficient 0.0056, and p-value 0.001, and the second lag coefficient, 0.0026, and p-value of 0.058. This observation may indicate a pro-cyclical monetary policy, characterized by an increase in interest rates as a reaction to robust economic activity rather than as a catalyst for it. In these contexts, high interest rates in the short run signal economic confidence, attract capital inflow, bolster short-term stability, and generate economic activities in the short term. The findings presented are corroborated by the work of (Shaikh & Rehman, 2024), who emphasize the beneficial short-term impact of financial development and observe that adjustments in interest rates can stabilize output while not immediately hindering growth.

Stock market capitalization has a statistically insignificant negative short-run impact on real GDP coefficient of -0.0138 and a p-value of 0.138. These results corroborate with Shahbaz et al., (2008), who emphasized that short-run stock market fluctuations and real sector performance in Pakistan have a weak and insignificant relationship in the short run.

Table 5. 6: Results of Error Correction Model

Variable	coefficient	std.err	t stats	p
D(log_RGDP) L1	-0.6182***	0.1525	-4.05	0.000
D(log_RGDP) L2	-0.3555***	0.1394	-2.55	0.018
D (log_SM) L1	-0.0138	0.0089	-1.54	0.138
D (log_MM) L1	-0.1050***	0.0317	-3.31	0.003
D (log_TO) L1	0.0816**	0.0338	2.41	0.024
D (log_GFCF) L1	0.2409***	0.0467	5.16	0.000
D (log_GFCF) L2	0.1996***	0.0458	4.37	0.000
D (CMR) L1	0.0056***	0.0014	3.91	0.001
D (CMR) L2	0.0026*	0.0012	1.99	0.058
C	1.5199***	0.3959	3.84	0.001
ECT (-1)	-0.1198***	0.03282	-3.65	0.001
R square	0.8496		Log likelihood	140.4959
Adj R-Square	0.7384		Root MSE	0.0105
Durbin-Watson test	2.3100			

This indicates that Short-term fluctuations in the stock market tend to be speculative and volatile, where business tends to be driven by investor sentiment, market inefficiencies, and country external shocks and not fundamentals. Research such as Bekaert and Harvey, (2003) and Pradhan et al., (2020b) has identified that in less developed financial systems, short-run dynamics are controlled by uncertainty and speculative trading behavior. This implies that the financial sectors are not connected with the real sector in the short run and the relationship between short-term shifts in the stock market and economic activity is weaker since the market is volatile, few large investors exist, and the market is not deep. That short-term and long-term effects differ indicate that stock markets in such cases possess two dimensions: they serve to facilitate long-term growth, but they are also influenced by short-run speculations, trading, volatility and market inefficiencies.

The error correction term (ECT (-1)) is negative and statistically significant coefficient of -0.1198 having p-value of 0.001, which implies the existence of a long-run stable equilibrium relationship between the variables. About 12% of short-run disequilibrium is corrected every period, implying

a moderate rate of adjustment. The significance of the ECT supports the validity of the ARDL-ECM model and strengthens the co-integration hypothesis (Pesaran et al., 2001). Early results show that investment and money market operations contribute significantly to driving economic growth, whereas the short-run contribution of the stock market is relatively limited. Diagnostic tests uncover model performance as reflected in an R-squared value of 0.8496, an adjusted R-squared value of 0.7384, and a Durbin-Watson statistic of 2.36, which supports the non-existence of significant autocorrelation.

5.8 Diagnostic Tests

For the validity and reliability of the ARDL-ECM model, diagnostic tests were employed to test important econometric assumptions, especially focusing on serial correlation and heteroscedasticity. The Breusch–Godfrey LM test was applied to determine the presence of autocorrelation in the residuals of the model. The test provided a chi-square statistic of 3.957 with a p-value of 0.0497 at one lag. Even though this p-value is below 5%, albeit marginally, it does not indicate the severe autocorrelation issue, particularly in the case of time series models with various lagged variables. Additionally, the Durbin-Watson value of 2.31 being close to 2, i.e., within the acceptable boundary, also confirms that the model is free from autocorrelation. So, although the Breusch–Godfrey result might at first glance lead to caution, overall evidence verifies that serial correlation is not a problem in the model.

In addition, the results of White's test for heteroscedasticity confirm that the model's residuals exhibit constant variance. The test yielded a chi-square statistic of 41.00 with 40 degrees of freedom and a p-value of 0.4265, indicating no evidence of heteroscedasticity. The Cameron and Trivedi's decomposition of the information matrix (IM) test also supports the model's specification. None of the element's heteroscedasticity p-value of 0.4265, skewness p-value of 0.3344, and kurtosis p-value 0.4525 were statistically significant, and the p-value of 0.3870 for the overall shows that the residuals are nearly normally distributed and well-behaved. Combined, these findings show that the model satisfies the classical regression assumptions, and thus estimations can be deemed robust, credible, and suitable for policy decision-making and academic analysis.

Table 5. 7: Diagnostic Results of ARDL Model

Test	Test Statistic (Chi^2)	df	p value	Decision at 5% Level
Breush Godfrey LM test lag(1)	3.957	1	0.0497	No serious autocorrelation
white's test Heteroskedasticity	41	40	0.4265	Homoskedasticity confirmed
IM Test Heteroskedasticity	41	40	0.4265	No evidence of Heteroskedasticity
IM Test Skewness	18.9	17	0.3344	No evidence of Skewness
Kurtosis	0.56	1	0.4525	No evidence of Excess Kurtosis
IM Test: Total	60.46	58	0.3870	Model Is well-specified

The ARDL bound test approach shows a long-run co-integration relationship between the variables since the calculated F-statistic value (9.054627) is higher than the upper critical bound at the 5% level of significance. Long-term results indicate that money market development and stock market development have a positive and statistically significant effect on real GDP, validating the finance-led growth hypothesis, while gross fixed capital formation and credit to the private sector (CMR) have a negative and significant relationship with economic growth. In the short run, GFCF, trade openness, and CMR are positively contributing to economic growth, and MMD has a statistically significant negative contribution. The error correction term (ECT_{t-1}) is statistically significant and negative coefficient of −0.1198 and a p-value of 0.001, which shows the stable long-run equilibrium, and about 12% of short-run disequilibrium is corrected in each period—implying a moderate rate of adjustment. The model also shows high explanatory power R^2 is 0.8496, Adjusted R^2 is 0.7384, and the Durbin-Watson value of 2.36 implies the lack of autocorrelation.

5.9 Model Diagnostic Tests

The below CUSUM charts illustrate a process over time, plotting the stability of the data points against the established 5% significance level. In the first chart, the CUSUM of squares shows a general steady increasing trend, well within the upper and lower levels, and this is indicative of consistent and stable performance of the data throughout the period of analysis. The second graph, that of the standard CUSUM, illustrates minor fluctuation about the baseline with no considerable

deviation beyond the specified boundaries. These findings confirm that the process under examination is stable with no noticeable deviation beyond the range of variation as expected, align with the required control standards.

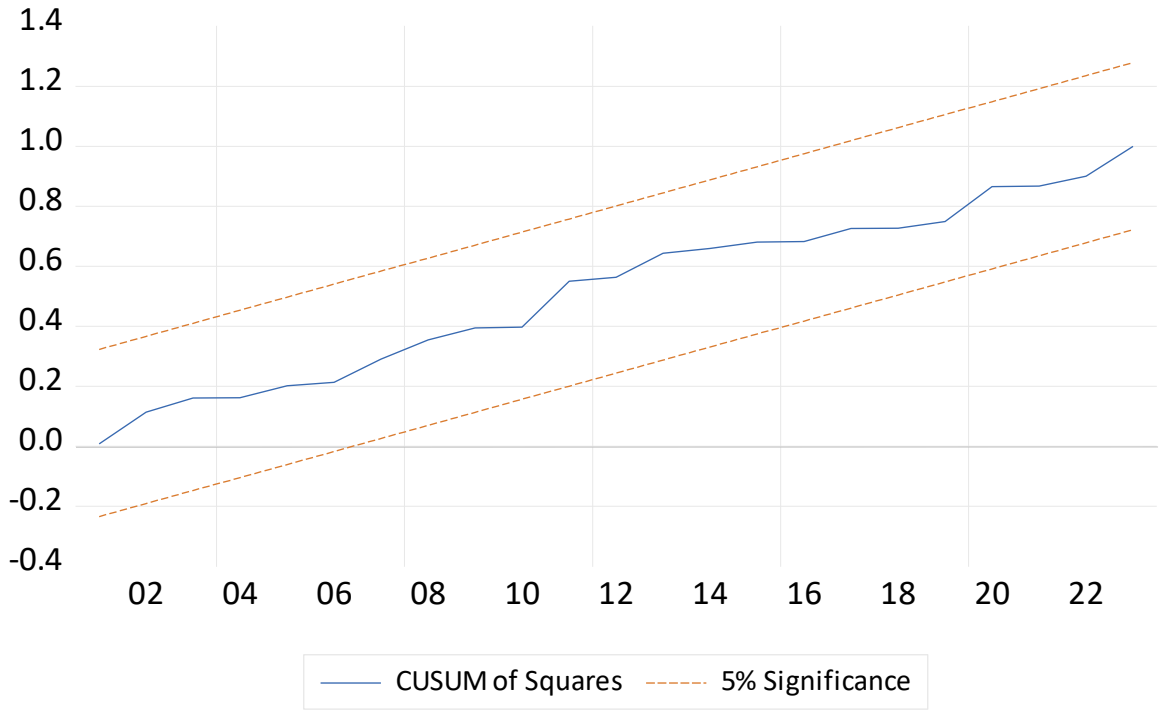

Fig 5. 1: CUSUM OF SQUARES

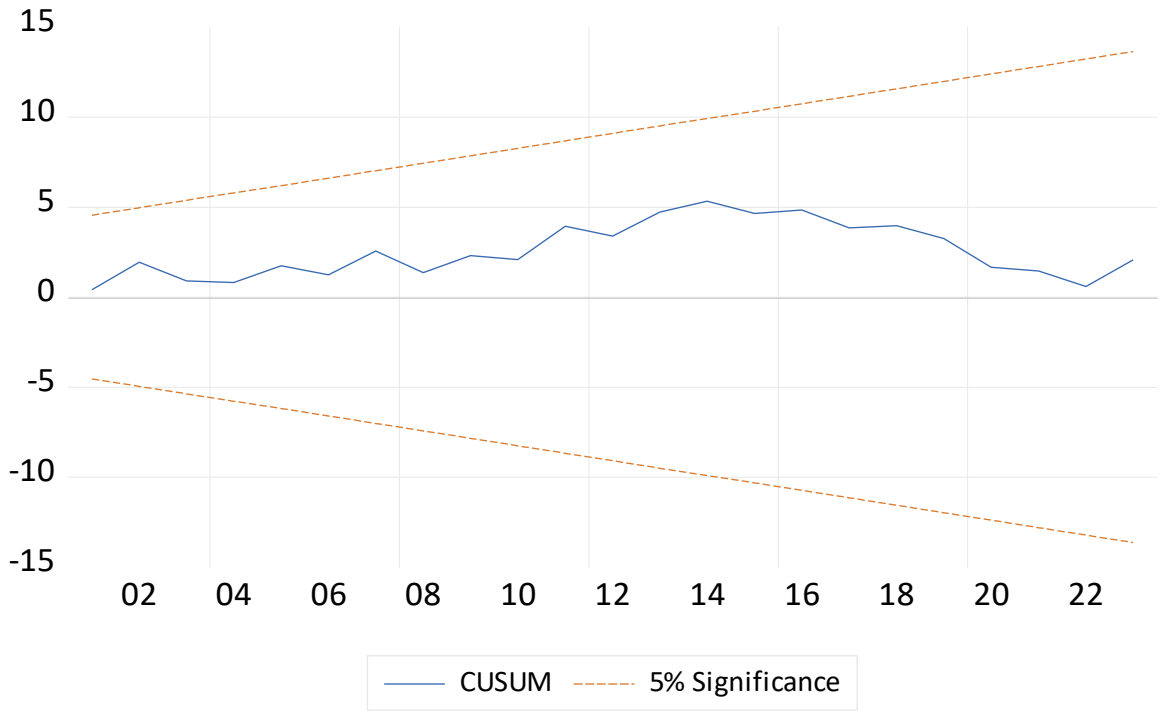

Fig 5. 2: CUSUM

5.10 Thematic Analysis

To identify institutional and regularity factors that are important in determining the short run and long run dynamics of BM, SM, MM and economic growth which is our 3rd objective. This study employs thematic analysis as a qualitative method to obtain and analyze themes from interviews with experts in the field of Finance in Pakistan. Using thematic analysis, the study identifies noteworthy patterns, trends, and repeated issues elaborated by Experts. This semi-structured interview allows for a comprehensive exploration of the complexities within the capital market and money market, providing valuable insights into the factors influencing policymaking in the Ministry of Finance, PSX, and SECP. The research categorizes three key themes, each consisting of three sub-themes: Thus, the research presents the complicated picture of the characteristics that affect the capital market, money market on economic growth in Pakistan.

In order to investigate how institutional and regulatory factors influences both the short-run and long-run behavior of financial markets in Pakistan, eight in-depth semi-structured interviews were conducted with experts and senior professionals from primary financial institutions such as the PSX, the Securities and Exchange Commission of Pakistan (SECP), the National Savings Scheme

(NSS), and the Ministry of Finance. The thematic analysis of these interviews reveals three key themes are:

1. Regulatory Capacity and Enforcement Gaps
2. Coordination Deficits and Institutional Fragmentation,
3. Market Maturity and Investor Confidence.

5.10 Regulatory Capacity and Enforcement Gaps

5.10.1 Ineffective Enforcement of Existing Regulatory Frameworks

Although regulatory bodies such as the SECP have a sound legal base, their enforcement power remains limited. All acknowledge that although rules for corporate governance, transparency, and disclosure are in place on paper, there is poor compliance because there is limited monitoring and enforcement. The weakness of regulation has resulted in inconsistencies in enforcing corporate listing rules and financial reporting standards contributes to weakening investor confidence. The failure to strictly enforce has also promoted speculative activity, which results in market volatility and distorts long-term capital formation

5.10.2 Regulatory Gaps in the Corporate Bond Market

In comparison to the relatively better-regulated equity market, the corporate bond market lacks up-to-date and proper regulation. There is a clear absence of contemporary credit risk management frameworks, bond ratings, and investor protection. Consequently, private sector involvement in the bond market is negligible, and low issuance. This has confined the fixed-income domain largely to government securities, reducing its potential to mobilize capital for corporate development. Experts cite this regulatory inertia as one of the main impediments to diversifying and deepening the capital market.

5.10.3 Institutional Inertia and Fragmented Oversight

A more fundamental problem behind both enforcement and regularity design is institutional inertia—regulatory institutions have been hesitant to evolve with changing market requirements. This includes delays in updating outmoded regulations and an inability to coordinate supervision across market segments. For example, the PSX observes that the failure of proactive regulatory

interventions has enabled irregularity and short-term speculation to continue unchecked. This fragmented and reactive regulatory leads to inefficiencies in both equity and debt markets and ultimately discourages private sector development and sustainable investment.

5.11 Institutional Fragmentation and Coordination Deficits

5.11.1 Lack of Integrated Policymaking and Institutional Synergy

The financial institutions of Pakistan usually work in silos, with weak horizontal coordination among the main stakeholders such as the SBP, SECP, Ministry of Finance, and PSX. The lack of systemic integration of these institutions creates uncoordinated strategies and undermines strong market-based financial market development. The lack of coordinated planning or synchronized policy efforts translates into duplicated efforts, conflicting actions that interfere with market efficiency and confidence.

5.11.2 Policy Conflicts and Market-Distorting Incentives

The lack of coordination produces conflicting incentives across institutions. For instance, the government's utilization of the National Savings Scheme (NSS) to cover fiscal deficits distorts the corporate bond and equity markets. NSS products offer high, risk-free returns that are tax-privileged, diverting both retail and institutional funds from more productive and risk-based market instruments. The crowding-out effect dampens the capital formation in the private sector and discourages the growth of a diversified financial ecosystem.

5.11.3 Weak Transmission of Monetary Policy and Suboptimal Market Functioning.

Fragmentation also weakens the effectiveness of monetary policy implementation. Even as the SBP changes policy rates, the money market underdevelopment and lack of synchronization with the fiscal authorities diminish the effects of these actions. Delay in Bond issuance and a narrow channel of financial intermediation weaken interest rate signals, distorting liquidity conditions and hampering short-term market response. This decreases the effectiveness of macroeconomic management.

5.12 Investor Confidence and Market Maturity

5.12.1 Low Financial Literacy and Risk-Averse Retail Behavior

Investor behavior in Pakistan is shaped by pervasive financial illiteracy, particularly at the retail level. As observed by the NSS expert, many retailer investors favor government savings products because they are perceived to be safe and easily understandable. Such a choice from risk-averse investors hampers the availability of capital to more dynamic and market-based investment options like equities or corporate bonds, thereby limiting the depth and growth of financial markets.

5.12.2 Weak Investor Protection and underdeveloped complaint Regulation Mechanisms

One of the major obstacles to the development of investor confidence is the absence of strong legal protection and effective systems for resolving disputes. In the absence of effective protection or grievance facilities, retail and institutional investors perceive market engagement as risky and unpredictable. This reduces long-term investment and fosters short-term speculative trading behavior.

5.12.3 Limited Market Instruments and Institutional Participation

The underdevelopment of financial instruments like Exchange-Traded Funds (ETFs), derivatives, and a dynamic corporate bond market inhibits diversification of the portfolio as well as liquidity. Moreover, mutual funds and institutional investors have a very limited role in Pakistan's capital markets. The lack of a diversified investor base and advanced investment creates shallow markets dominated by few players, boosting volatility and diminishing efficiency in price discovery.

This thematic analysis indicated that Pakistan’s financial markets are hampered by regulatory deficiencies, institutional fragmentation, and low investor confidence. The results demonstrated that enforcement of current regulations is weak, especially in the corporate bond market, where gaps in regulation prevented private sector involvement. Institutional inertia and fragmented supervision further deteriorated regulatory effectiveness. Furthermore, financial institutions worked in silos with minimum coordination, leading to conflicting policy measures and weakened monetary policy transmission. Investor engagement was also restricted by poor financial literacy, weak protection mechanisms, and shortages of diversified financial instruments. In combination,

these issues constrained market depth, efficiency, and the ability of financial markets to facilitate sustainable economic growth.

CHAPTER 6

CONCLUSION AND POLICY RECOMMENDATIONS

6.1 Conclusion

This study examines the complex nexus between Pakistan's Capital market, money market development and economic growth using annual data from 1980 to 2023. By employing the ARDL method, the research analyzes the short run dynamics and long-run impacts of the bond market, stock market, and money market on real GDP while holding key macroeconomic variables constant.

The findings confirm that the stock and money markets play a crucial role in Pakistan's long-run economic growth. The stock market plays a positive role by allowing for the accumulation of capital, increasing opportunities for investment, and supporting resource allocation. The money market, as measured by M2 as a percentage of GDP, also has a positive and significant long-run impact, highlighting its function in providing liquidity and supporting effective operations of monetary policy. These results confirm the supply-leading hypothesis in the Pakistan financial market context in which economic growth is preceded and driven by financial market development.

On the other hand, the bond market reflects no significant effect on economic growth in the long run. The finding indicates structural flaws such as low corporates bond issues, heavy dependence on government securities, illiquid secondary markets, and limited diversity of investors. Without reforms improving transparency, governance, and financial innovation, the bond market will not significantly affect the financial system.

Investment has negative long-run effects on GDP. It implies inefficiencies in public investment, inefficient project selection, and lack of private sector participation. Furthermore, interest rates have adverse effects on growth that reveal the high burden of borrowing in Pakistan's economy. Inflation and trade openness have mixed results, suggesting that external sector and price dynamics call for prudent macroeconomic regulation.

overall, this study reveals that the underutilized potential of Pakistan's financial markets, particularly the bond market, needs to be address through well design policies. The results present an evidence-based foundation for the design of targeted financial and macroeconomic policy measures with the objective of securing long-term growth. A strong, inclusive, and sound financial system is imperative not only for mobilizing domestic resources but also for reducing dependence on the external sector and increasing economic resilience. The findings emphasize the need to bring financial development plans in line with national growth objectives.

6.2 Policy Recommendations

To enhance the contribution of financial markets to Pakistan's economic growth, this study recommends the following focused policy measures:

6.2.1 Revitalize the Bond Market

To revitalize the bond market, Pakistan needs to enhance regulatory frameworks for promoting the issuance of corporate bonds and minimizing dependence on government bonds. There is a need to improve liquidity and transparency by introducing electronic trading platforms and releasing benchmark yield curves. Introducing diverse instruments such as green and infrastructure bonds can help diversify investor base and aid in the achievement of development goals.

6.2.2 Strengthen the Money Market

To develop a robust money market, diversifying the types of short-term financial instruments is critical and needs to be encouraged actively through promoting the issuance of treasury bills, certificates of deposit, and commercial papers to enhance market depth and flexibility. Increasing institutional presence, especially by encouraging non-banking financial institutions to invest and operate in the interbank market, can contribute towards market efficiency and liquidity. In addition, enhancing coordination among the SBP and financial institutions is critical to maximizing monetary policy implementation. Such coordination will provide a proper mechanism for effective liquidity management, allowing a timely response to market conditions and overall financial stability.

6.2.3 Boost Stock Market Development

To encourage the growth of Pakistan's stock market, facilitating SMEs access to the Pakistan Stock Exchange (PSX) through streamlined listing procedure and favorable terms of finance is critical. Enhancing investor protection by strictly adhering to corporate governance requirements

and providing timely, transparent financial disclosure will develop market confidence. Furthermore, widening market outreach by using digital platforms and organizing public awareness campaigns can foster retail investor participation and increase the investor base.

6.2.4 Ensure Macroeconomic and Regulatory Stability

Maintaining disciplined interest rate and inflation policies is key to minimizing economic uncertainty and facilitating long-term investment planning. Stronger coordination between the SECP, SBP, and fiscal authorities needs to be exercised to provide coherent, forward-looking financial regulations. In addition, promoting private sector investment by offering targeted tax incentives, enhancing the ease of doing business, and reducing the crowding-out implications of public debt will push economic growth and market development.

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