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PAKISTAN ECONOMIC FREEDOM AUDIT

SOUND MONEY

AS A CASE STUDY

Dr. Wasim Shahid Malik

This study presents a detailed economic freedom audit of Pakistan, focusing on Sound Money as a case study, based on the Fraser Institute's Economic Freedom of the World Index.

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IMPRINT

Pakistan Economic Freedom Audit: Sound Money as a Case Study

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Policy Research Institute of Market Economy (PRIME)
First Floor, 15-E, Rehmat Center, Jinnah Ave,
Block D G 6/1 Blue Area, Islamabad 44000
primeinstitute.org

/primeinstitute.org

/Prime.thinktank

/primeinstitute

Author

Dr. Wasim Shahid Malik
Economist, Ph.D. in Economics (PIDE), PRIME Fellow

Partner

Atlas Network
Website: https://atlasnetwork.org/

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For Inquiries:

Phone: +92 (51) 8 31 43 38
Email: info@primeinstitute.org

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EXECUTIVE SUMMARY

This study presents an economic freedom audit of Pakistan, focusing on sound money as a case study. The success of free market capitalism is contingent upon protecting individual property rights. The Fraser Institute's Annual Report on Economic Freedom of the World assesses countries based on their economic freedom index, which comprises five areas, including sound money. This economic freedom audit report aims to evaluate Pakistan's monetary stability and analyze the macroeconomic policies that have shaped its current state. Furthermore, the report critically evaluates the methodology of the sound money sub-index to determine its efficacy in measuring economic freedom.

Pakistan's rating for monetary stability has been consistently low for the past two decades and has further declined in 2023. Historically, Pakistan has had a sound money rating of less than seven due to restrictions on residents having foreign currency accounts and monetary expansion exceeding real GDP growth. Fluctuations in the sound money rating were driven by recent inflation, its volatility, and monetary growth in the near past, as the score on foreign currency accounts remained stable. Pakistan's historical data reveals that sound money rating has typically risen during economic recessions caused by demand contraction but has fallen during periods of cost-push inflation. Recent assessments reveal that Pakistan's sound money rating for 2023 is 4.60, which is the lowest in history, primarily due to exceptionally high inflation during the year.

Throughout history, the fragility of money has been a persistent concern in Pakistan. The value of money has consistently depreciated over time, with a decline in its purchasing power for goods and services included in the CPI basket by one-tenth from 1974 to 2001 and one-sixty-eighths from 1974 to 2023. The Pakistani rupee (PKR) has also experienced a similar decline in value against foreign currencies. For instance, the value of one US dollar in Pakistani rupees increased from less than 10 in 1974 to 248 in 2023, resulting in a 25-fold cumulative loss.

Monetary fragility can be attributed to excessive monetary growth. The growth rate of broad money (M2) has consistently exceeded that of real GDP by a significant margin and has even surpassed nominal GDP growth. Real GDP has increased ten-fold over the past five decades, while nominal GDP has increased 644-fold. However, monetary growth during this period exceeded 1000 times, indicating inefficiencies in both monetary and fiscal policies that have contributed to this expansion and, ultimately, the devaluation of money. Since its inception, the Pakistani government has heavily relied on borrowing from the State Bank of Pakistan (SBP) to finance its budget, leading to an unsustainable monetary expansion. Although the amended SBP Act has limited the government's ability to issue its debt to the SBP, monetary expansion has continued. The SBP has provided the necessary liquidity to banks, which have, in turn, lent it to the government.

Over the last five decades, the monetary value has been fragile and unstable, resulting from the misguided and ineffective implementation of monetary, fiscal, and exchange rate policies. Particularly, the short-term real interest rate has remained marginally negative and has shown poor responsiveness to rising inflation, exacerbating the problem. The State Bank of Pakistan has recently adopted a reactionary stance in response to inflation and currency depreciation. However, this approach proved to be ineffective as well. The interest rate, which serves as the SBP's monetary policy instrument, has yielded little success in controlling inflation and exchange rates. Furthermore, interest rate changes hurt economic activity, particularly in large-scale manufacturing. On the other hand, fiscal slippages emanating from increased spending without matching revenue have led to domestic debt accumulation. At the same time, the overvaluation of the exchange rate has caused a trade deficit, contributing to external debt accumulation. Both of these debts are responsible for the monetary fragility that Pakistan is currently facing.

The methodology used to rate sound money requires revision, particularly for developing countries. The rating scheme awards countries with the highest score for inflation and money growth components if they adhere to a zero inflation or deflationary policy. However, these policies are not preferred by any central bank globally; rather, they aim to maintain positive inflation. Additionally, inflation persistence may exhibit positive or negative trends over brief periods, making the standard deviation of five years' inflation an inadequate indicator of the solidity of money.

This is because the standard deviation is a measure of variation that applies equally to both rising and declining inflation. Finally, there are limited options available for scores related to restrictions on foreign currency accounts within the country and overseas. For example, the State Bank of Pakistan permits foreign currency bank accounts in Pakistan but restricts the flow of some types of funds into these accounts. Moreover, certain restrictions may sometimes hurt economic freedom, but their imposition can lead to more stable and sound money.While different countries may have varying degrees of restrictions, the current rating scheme fails to assign scores based on the severity of such restrictions.

A comprehensive reform agenda is needed to improve the solidity of money in Pakistan. The rationalization of government size, effective coordination between fiscal and monetary policies, efficient debt management, and establishment of an enabling environment for continuous economic growth, which provides equal opportunities to all, are pivotal requisites. It is crucial to re-evaluate the existing monetary-fiscal policy mix and ascertain the appropriate operating instrument for the State Bank of Pakistan to restrict monetary expansion and exercise its autonomy. Setting the policy rate to contain inflation while expanding the money supply as a response to government borrowing from scheduled banks is unproductive. A suitable monetary-fiscal coordination mechanism can be designed to overcome the high inflation and excessive debt predicament. Fiscal policy must adhere to the Fiscal Responsibility and Debt Limitation Act, and there is a need to put in place an accountability mechanism for the government's non-compliance, which can help limit the budget deficit and financing obligations. The government's economic intrusion must be reduced through reforms while simultaneously rendering tax policy more efficient. An Act of Parliament can restrict the deliberate overvaluation of the exchange rate, for which a suitable indicator needs to be developed.

1. INTRODUCTION

The success of free market capitalism depends on protecting individuals' property rights. Competitive markets function best when people are free to make choices. Decentralized equilibrium with complete and competitive markets is the Pareto optimum, and a social planner cannot further improve overall social welfare. A stable currency is essential for protecting property rights and promoting economic freedom. Unsound money is a result of the government expropriating private resources. This can have negative consequences because unsound money, caused by unexpected monetary growth, reduces the real value of assets that individuals hold. This can lead to arbitrary redistribution of wealth between lenders and borrowers, which changes the terms of agreed-upon contracts. Individuals' property and assets that are rightfully earned may not be protected if the government surprises the public with unanticipated high inflation or unsound money. High and volatile inflation limits the economic freedom of individuals as it makes the intertemporal allocation of resources inefficient and suboptimal.

Fraser Institute's Annual Report on Economic Freedom of the World[1] ranks countries based on their economic freedom index, which comprises five areas, including sound money. The sound money sub-index consists of four components that determine the soundness of money. These components are adjusted money growth relative to real GDP growth, the standard deviation of inflation, which measures the volatility of money value, the most recent inflation that directly measures the value of money, and permission granted to residents to hold foreign currency accounts within the country and abroad. The first three components indirectly measure economic freedom through their impact on the value of money, while the fourth component directly measures the freedom to hold the currency of choice.

Pakistan's overall economic freedom and sound money sub-index have been consistently low, with a rank above 100 since the year 2000. Over time, Pakistan's rank has deteriorated, falling from 88 in 1990 to 130 in 2019. The sound money rating has also declined, from 8.04 in 1990 to 5.98 in 2010 and to 6.27 in 2020. Numerous factors have contributed to the subpar performance at hand. The underlying issue pertains to the three essential requirements of sound money: the prioritization of price stability, the autonomy of the central bank, and the maintenance of a healthy public finance system[2]. There are additional issues that require discussion. These issues consist of the inefficacy of monetary policy in upholding price stability, inadequate communication by the government, especially the central bank, policymakers' fixation on the overvalued exchange rate, and money growth that is incompatible with the growth in nominal GDP.

1. *Gwartney and Murphy (2023)*

2. For details of these three mainstays, see Thomas J. Jordan's speech on 8 October 2020

This study conducts an Economic Freedom Audit of Pakistan, focusing on the case of sound money. The study serves two key objectives: firstly, to identify the causes of unsound and fragile money in Pakistan, and secondly, to evaluate the methodology used by the Fraser Institute to measure the solidity of money. More specifically, this paper seeks to measure the stability of money in Pakistan over the past five decades. It identifies the reasons why money can be unsound and fragile. At the outset, it is essential to note that this paper exclusively focuses on the policy failure to uphold the value of money while disregarding other factors, such as individuals' saving behavior and preferences for various types of assets. The study' scope is limited to the government's inability to maintain the value of currency, and it does not account for other determinants of monetary value. The discussion surrounding policy primarily centers on monetary policy, which is responsible for maintaining price stability and the solidity of money. However, other macroeconomic policies, such as fiscal policy and trade and exchange rate policies, are also topics of discussion. The potential impact of public debt on monetary fragility has also been briefly examined. The data utilized in this study has been sourced from two primary publications, namely, the Pakistan Economic Survey released by the Finance Division and the Handbook of Statistics on Pakistan Economy published by the State Bank of Pakistan. It is important to note that this data differs somewhat from that used by the Fraser Institute, which is taken from the World Development Indicators (WDI), primarily due to data revisions.

For the past two decades, the measurement of the sound money index has been conducted using revised data, and a comparison has been made with the measurement by the Fraser Institute. Additionally, an evaluation of the methodology employed by the Fraser Institute to determine sound money has also been performed. The results of these evaluations offer insights into the effectiveness of the sound money index measurement techniques and provide an opportunity to identify potential areas for improvement. Such analyses are of great significance in business and academic settings, as they contribute to advancing knowledge and creating more informed policies.

2. CONCEPTUAL FRAMEWORK

2.1 Money defined

Money is an essential component of modern economies, performing three crucial functions: medium of exchange, store of value, and unit of account. To be an effective medium of exchange, money must be generally acceptable in transactions. Currency, bank checks, and electronic money are examples of generally accepted mediums of exchange. The absence of money results in an inefficient barter system, which is subject to various limitations. The use of money as a medium of exchange encourages the specialization of labor and enhances market efficiency. Any disruption in the functioning of money as a medium of exchange can compromise the smooth operation of a market economy.

The optimal utilization of lifetime resources to attain maximum satisfaction demands efficient financial markets that facilitate the intertemporal transfer of purchasing power. As an asset, money is held to store value and transfer purchasing power from the present to the future. Other assets serve the same purpose, and individuals often compromise their current consumption to obtain them. However, saving is primarily intended for future consumption, and money is held due to its liquidity despite having a zero rate of return. Without money serving as a store of value, individuals' ability to allocate their resources across time is significantly constrained.

Money serves as a unit of account, enabling the simplification of economic accounting and the measurement of aggregate economic activity. Without money, prices of each commodity would be quoted in relation to every other commodity, leading to a significant increase in the number of price quotations, even with a moderate number of commodities. For example, 1000 commodities would require 499,500 prices[3]. Additionally, measuring aggregate economic activity would be cumbersome without using money. Money simplifies accounting by reducing the number of prices to the number of commodities. Furthermore, using money enables easy measurement of aggregate economic activity in monetary terms and facilitates global comparisons through an exchange market for various countries' currencies.

3. *The number of prices can be found using the formula n*(n-1)/2, where n is the number of commodities.*

2.2 Sound Money

The stability and durability of money are essential for achieving its three functions. Money serves as a store of value, unit of account, and medium of exchange. However, if money frequently loses its value, it becomes an unsuitable store of value, leading people to prefer other assets. Frequent depreciation of money renders it an unreliable unit of account because the scale used for measuring accounts becomes too flexible. Additionally, unsound money fails to serve as an effective medium of exchange. If the value of money changes frequently, then people tend to opt for other assets, leading to extra costs and efforts to convert other assets into money before going shopping. Therefore, it is crucial to maintain the stability and reliability of money to ensure its efficient functioning in the economy.

2.3 Sound Money as a Pillar of Economic Freedom

Economic freedom refers to a state in which individuals possess the autonomy to make their economic decisions concerning production, distribution, and consumption. Any government intervention that distorts individuals' choices leads to sub-optimal outcomes at the aggregate level. In a market economy, where individuals are free to make their economic decisions, the government may only intervene to provide public services for which property rights are not defined. Intervention in producing and distributing privately owned goods and services may have distortionary effects. As the central objective of public policy is to enhance society's welfare, the government can take action to deliver public services, including protecting property rights.

Money serves as a medium of exchange and a store of value. In today's world, money is legal tender and holds only extrinsic value.[4] Governments possess the exclusive power to issue money and regulate the banking industry. It is the responsibility of the government or a public entity like the central bank to maintain the value of money. Nonetheless, the general public encounters principal-agent predicaments as the government itself is a significant borrower from banks. Like any other borrower, governments owe their debts in the form of money. Consequently, any price increase and the subsequent decrease in the value of money reduce governments' debt.

Hence, it may not be in the government's best interest to uphold the value of money. However, the functionality of money is compromised when its value becomes fragile and loses its stability regularly. Inflation, which is responsible for the deterioration of money's solidity, leads to the transfer of resources from the private sector to the government and the arbitrary redistribution of wealth between lenders and borrowers, sellers and purchasers, or even employees and employers when nominal wages are fixed. A country's social and economic fabric may be distorted due to inflation, leading to insecurity among people about their property, assets, and economic freedom. In summary, if money is not sound, property rights are not protected, and the overall economic stability of a country is at risk.

4. *Bank checks are also money. But government-issued money as legal tender provides the basis for a banking system.*

It is noteworthy that the gold standard system was fully compliant with the principles of economic freedom. The system was adopted as a complement to the ideology of free-market individualism. The system aimed to curtail the government's ability to raise funds for its expansionary spending activities. The issuance of money was independent of the government's financing requirements, and the money supply depended on the availability of gold. As a result, due to the limited supply of gold, prices remained stable or decreased in response to growth in economic activity. It is essential to mention that this paper does not discuss the advantages and disadvantages of the gold standard as a monetary order. In this paper, the concept of sound money does not relate to the solidity of money within the gold standard system. Instead, it refers to price stability guaranteed by a low but positive inflation rate. This concept of sound money aligns with paper money, bank checks, and electronic money and is consistent with modern central bank practices in most countries.

2.4 Sound Money Index

The Sound Money Index, created by the Fraser Institute, comprises four sub-indices that measure the solidity of money, resulting from the effectiveness and consistency of monetary policy and other macroeconomic policies. These sub-indices include Money Growth, Standard Deviation of Inflation, Inflation of the Most Recent Year, and Freedom to have Foreign Currency Bank Accounts. The first three sub-indices are calculated based on available data, while the fourth sub-index is derived from the central bank's foreign exchange regulatory measures.

It is important to note that the first three sub-indices measure economic freedom indirectly, while the fourth sub-index measures economic freedom directly. To obtain a high rating on the Sound Money Index, countries must follow policies and adopt institutions that lead to low and stable inflation rates. Additionally, regulations that limit the ability to use alternative currencies must be avoided. The Sound Money Index is a valuable tool for assessing a country's monetary and macroeconomic policies. Its objective and easily calculable sub-indices make it a reliable measure of a country's adherence to sound money principles.

3. SOUND MONEY INDEX FOR PAKISTAN: HISTORICAL AND THE MOST RECENT

This section thoroughly examines all four components of sound money in the context of Pakistan for the fiscal year 2022-23. To provide a historical perspective, the sound money index for Pakistan has been measured for the past two decades (2001-2023). The data for this study has been obtained from two primary sources - the Pakistan Economic Survey, published by the Finance Division, and the Handbook of Statistics on Pakistan Economy, published by the State Bank of Pakistan. Our results differ from the Annual Reports on Economic Freedom of the World, published by the Fraser Institute, as we have utilized data sources that publish revised data whenever necessary. Furthermore, we have adjusted our data for changes in the base year for real GDP and GDP deflator. The methodology employed in this study is based on the Annual Report 2023 on Economic Freedom of the World, which is annexed at the end.

3.1 Sound Money Index in 2023

a. Money Growth

Pakistan's real GDP growth rate has been experiencing a consistent decline since the end of the 1980s. The average real GDP growth rate during the 1960s and 1980s was over 6 percent per annum. However, the average growth rate has decreased to 4.7 percent per year over the last five decades. The trend has continued, with the last ten years recording an average real GDP growth rate of 3.6 percent, which is lower than the historical average. Over the past five years, broad money (M2) experienced an average annual growth rate of 14.6 percent, slightly lower than the historical average of 15.3 percent. Consequently, the adjusted money growth rate, which is measured as the last five years' average annual money growth rate minus the last ten years' average annual real GDP growth rate, has been recorded at 10.9 percent. The rating for this specific component was 7.81 (Table 1), significantly lower than the maximum rating of 10 and slightly lower than the ratings of the last two years.

b. Standard Deviation of Inflation:

Pakistan’s inflation rate has demonstrated considerable variability over the past five decades, with an average annual rate of 9.6 percent and a standard deviation of 6.1 percent. Notably, the rate has been more volatile in the last five years, with a standard deviation of 8.96 percent[5]. The highest inflation rate of 33.3 percent was recorded in 1974, while the lowest was 2.7 percent in 2002. This component of Pakistan's economic performance has been assigned a rating of 6.41 (Table 1), which is significantly lower than the maximum rating of 10 and moderately less than the ratings from the past two years.

5. During the last five years, the standard deviation of inflation was recorded at 1.22 in India, 1.58 in Bangladesh, 1.10 in China, and 19.21 in Sri Lanka .

c. Inflation in the Most Recent Year:

Pakistan has experienced a significant rise in its annual inflation rate during the fiscal year 2022-23. The average annual inflation rate for the past ten years has been 9.6 percent, whereas the fiscal year 2022-23 witnessed a rate of 29.2 percent, which is the second-highest rate recorded in Pakistan's history. The poor performance regarding recent inflation has resulted in a rating of 4.16 (Table 1) for this component, which is less than half of the maximum score of 10 and approximately half of the scores achieved in the last two years.

d. Freedom to have Foreign Currency Bank Accounts

Both residents and non-residents in Pakistan can maintain foreign currency accounts with private banks located within the country[6,7]. However, the State Bank of Pakistan has imposed certain limitations on the types of funds that may be deposited into such accounts. For instance, export earnings cannot be deposited into these accounts. Hence, permission to open a foreign currency account in Pakistan is not unrestricted. Additionally, the State Bank of Pakistan stipulates that Pakistani nationals who reside in the country are not authorized to open or maintain any foreign currency accounts with banks outside of Pakistan[8]. As a result, this aspect of Sound Money has been given a rating of zero (Table 1), which is consistent with previous evaluations of the Economic Freedom of the World report by the Fraser Institute.

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6. https://www.sbp.org.pk/fe_manual/chapters/chapter6.htm#:~:text=In%20addition%2C%20Special%20Foreign%20Currency,permission%20of%20the%20State%20Bank.

7. https://www.hbl.com/personal/accounts/saving/hbl-foreign-currency-savingsaccount

8. https://www.sbp.org.pk/fe_manual/chapters/chapter6.htm

Table 1: Sound Money Rating: Pakistan (2023)

Money Growth		**Standard Dev of Inflation**		**Most Recent Inflation**		**FC* Account Permitted**	
Average RGDP GR (10 years)	3.61						
Average M2 GR (5 years)	14.55	St Dev INF (5 years)	8.96	Inflation 2023	29.18	FC Account permitted in Pakistan	0.00
Adjusted M2 GR (Vi)	10.94	Vi	8.96	Vi	29.18	FC Account permitted Abroad	0.00
Vmax	50.00	Vmax	25.00	Vmax	50.00		
Vmin	0.00	Vmin	0.00	Vmin	0.00		
Rating**	7.81	Rating**	6.41	Rating**	4.16	Rating**	0.00
Aggregate Rating***	4.60						

* Foreign Currency
** Rating = (Vmax-Vi)/(Vmax-Vmin)*10;
where Vmax and Vmin are the maximum and minimum values of score (V), while Vi is the respective score of the component for a country
*** Aggregate Rating is
measured as average of ratings of all four components of sound money.

e. Sound Money Rating:

Pakistan's economy's sound money category was assessed using the Fraser Institute methodology, which resulted in a score of 4.60 in 2023. This score portrays a concerning state of affairs regarding the country's economic freedom. Specifically, Pakistan's performance has significantly declined compared to the last two ratings, with a decrease of one quarter. This score is the country's lowest in the past four decades.

3.2 Historical Sound Money Rating:

It is informative to gain insight into the historical performance of sound money in Pakistan, for which the sound money rating has been evaluated for the past two decades, spanning from 2001 to 2023. The findings of the analysis indicate that:

- The average rating of sound money has been 6.22 in the past two decades (Figure 1a).
- The highest rating (6.83) was found for 2002, while the lowest (4.60) for 2023. In both years, the economy faced recession; however, an economic slowdown resulted from demand contraction in 2002, while 2023 witnessed stagflation.
- Barring 2009 and 2023, there was little deviation of sound money rating from its average value.
- Lower than average ratings have been observed mainly in 2008-12 and 2021-23. In all these years, the inflation rate was high because of supply disruptions or any other unfavorable supply-side shock.
- Sound money rating has decreased, and the deficiency (from a maximum score of 10) has increased consecutively after 2018 (Figure 1b).

Figure 1a: Sound Money Rating

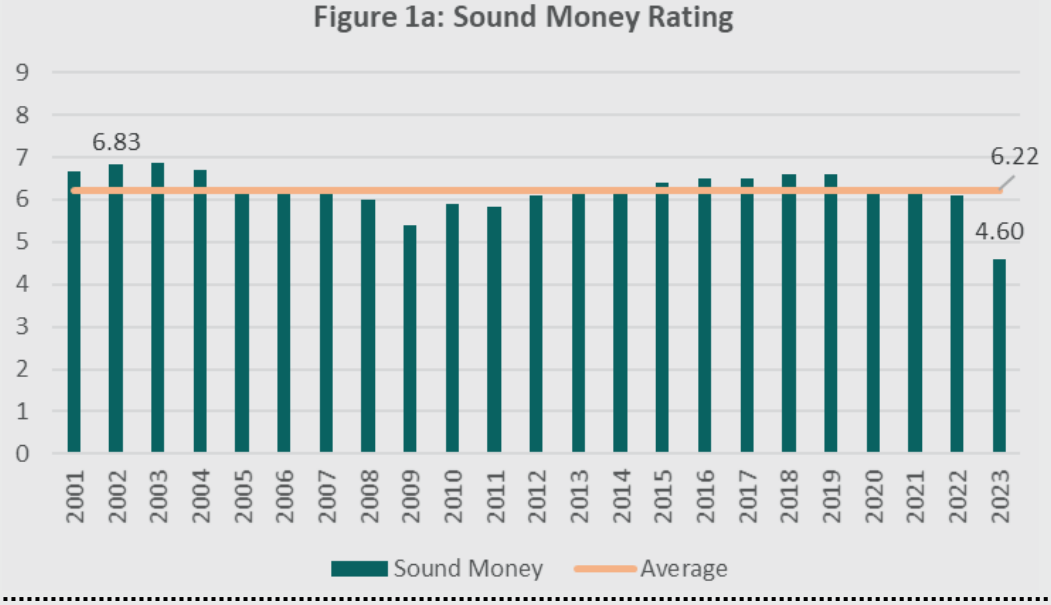
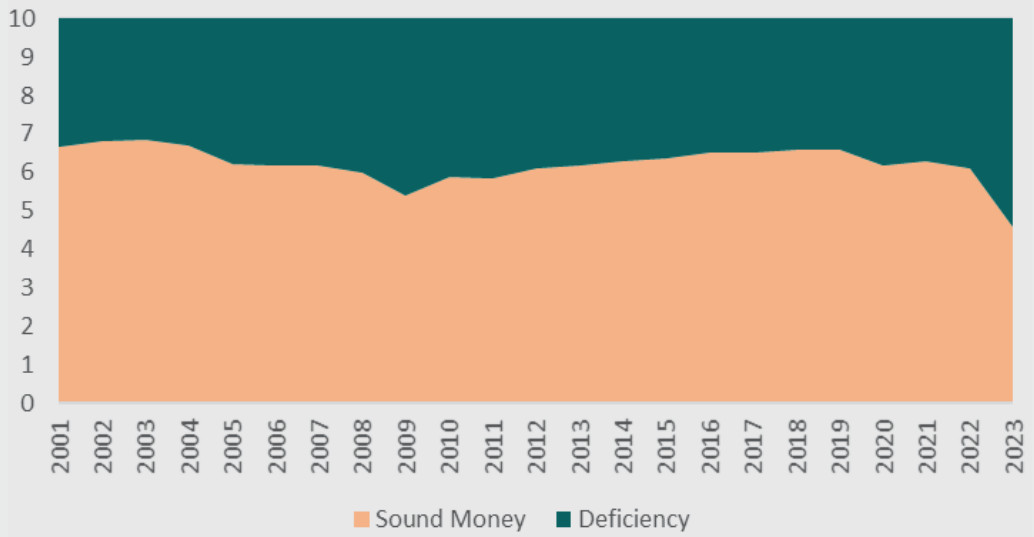


Figure 1b: Sound Money Rating and Deficiency

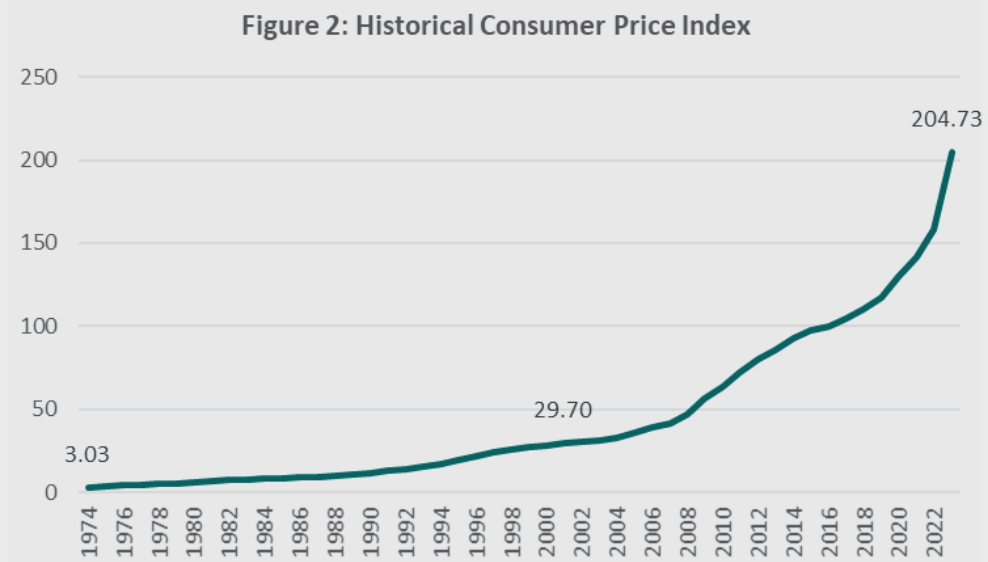


4.MEASURING THE SOLIDITY OF MONEY IN PAKISTAN

As previously stated, money serves as a medium of exchange in both domestic and international transactions, both in the current and future. While domestic money is directly utilized in domestic transactions, its use in foreign transactions is indirect, as it must first be converted into a foreign medium of exchange. Consequently, the value of money is determined by its purchasing power in both domestic and foreign economies.

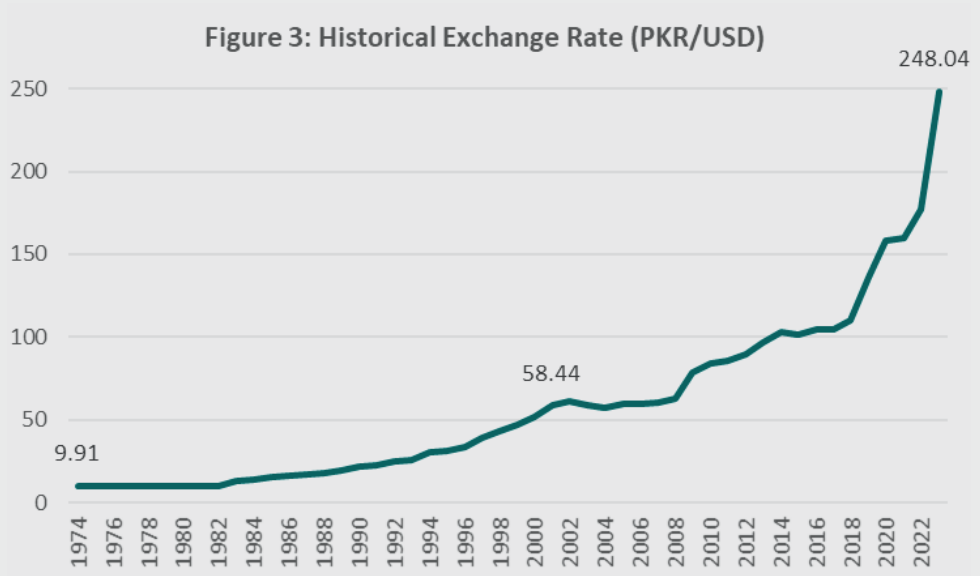
Throughout the analysis period, money in Pakistan experienced a decline in value in both domestic and foreign markets. Depreciation rates against a typical consumer's representative basket and foreign currency were high enough to render money unstable and unsound. Furthermore, money lost its value to such a significant degree that it cannot be used reliably as a unit of account.

Fifty years back, the cost of a typical consumer’s basket, CPI, in Pakistan was quite low. Just for comparison, one can assume that the basket’s cost was just PKR 3. A consumer with three rupees in their pocket could have purchased the basket of commodities included in CPI. Then, for several reasons, explained in the next section, money continuously sheds its value. In the year 2001, the year almost in the middle of the sample and after which the structural fabric of the economy changed, money had already lost one-tenth of its value. The consumer basket, which cost Rs.3 in 1974, was worth PKR 29.7 in 2001 (Figure 2). Put differently, a person holding three rupees in the pocket could have purchased a CPI basket of commodities in 1974 but only one-tenth of the same basket in 2001. This shows that money lost its value by one-tenth over three decades. The next two decades witnessed even more loss of value, as the same basket of commodities cost PKR 204.7 in 2023 – a loss of value by one-seventieth (one-sixty-eighth to be precise). It means a person holding three rupees in the pocket could have purchased a CPI basket of commodities in 1974 but only one-seventieth of the same basket in 2023. This indicates that the money lost its value by one-seventieth over the past five decades.

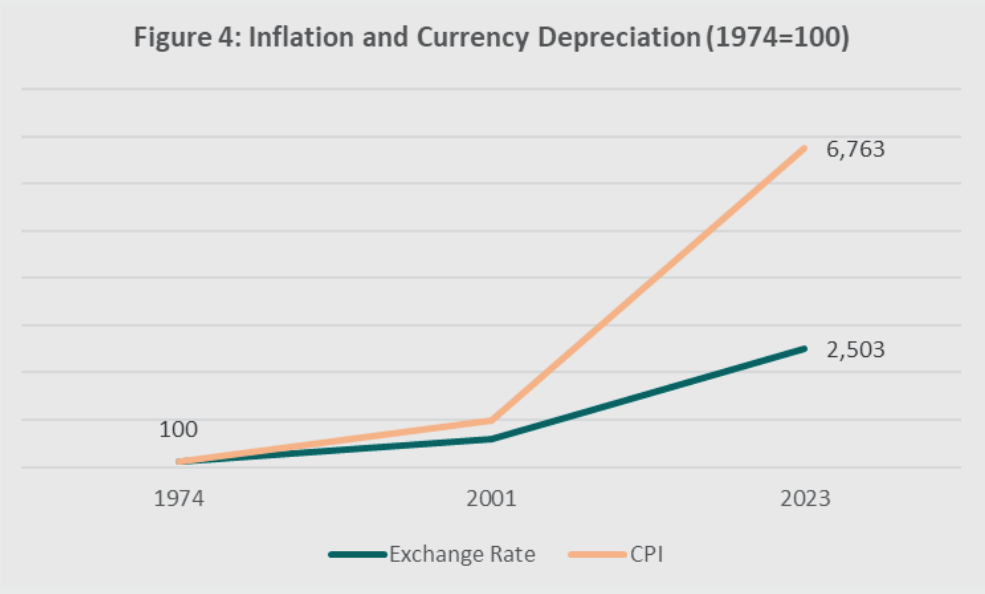


During the past five decades, money in Pakistan has also depreciated against other world currencies. For instance, one USD could have been purchased by PKR 9.9 in 1974 – one rupee was one-tenth or 10 percent of the USD. However, this parity could not be maintained, and the PKR/USD exchange rate was recorded at 58.4 in 2001 and 248 in 2023 (Figure 3). In 2001, PKR was worth just 1.7 percent of the USD, which further decreased to just 0.4 percent in 2023. Put differently, PKR lost its value against USD by one-sixth from 1974 to 2001 and by one-twenty-fifth from 1974 to 2023. We need to put US CPI in the analysis to see the effect of this loss of value on consumers' purchasing power in foreign markets. US CPI was 126.06 in 2023 against 18.76 in 1974, with 100 in 2015-16. Suppose a consumer with USD 18.76 could have purchased a basket of commodities in 1974 but needs USD 126.06 in 2023 to purchase the same basket. It means a Pakistani consumer needed PKR 185.7 to purchase a CPI basket in the US in 1974.

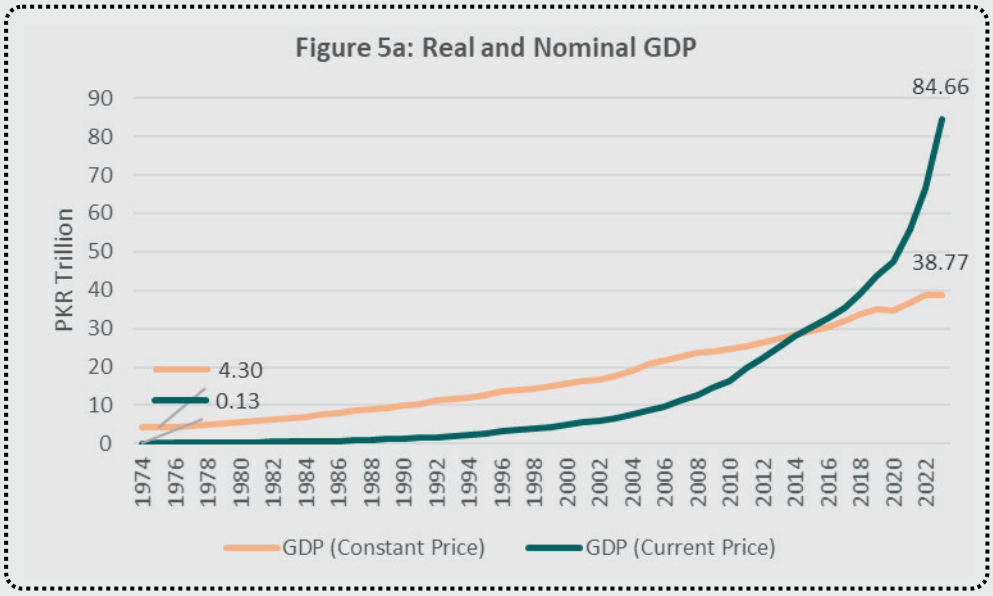
However, due to the frequent depreciation of PKR against USD, Pakistani consumers need PKR 31,262.9 to purchase the same basket in the US in 2023. This analysis shows that a consumer basket increased in value for Pakistani consumers by 68 times in Pakistan and 168 times in the US market. This shows how unsound money in Pakistan has remained over the past five decades regarding the functions of medium of exchange and store of value.

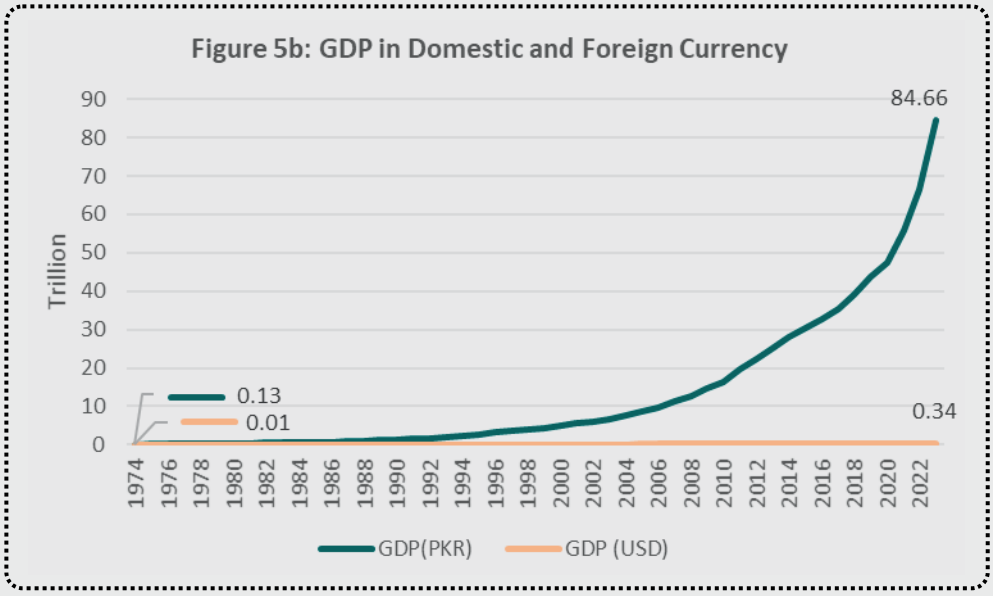


The following analysis compares the standardized values of the Consumer Price Index (CPI) and exchange rate, aiming to simplify the comparison process (Figure 4). The CPI denotes the domestic value of money, while the exchange rate represents its external value. The data indicates a continuous decline in both values of local money during the period of 1974-2001, with a steeper pace after that. The results reveal an overall depreciation of Pakistan's currency, which lost its value 68 times against goods and services that a typical consumer purchases and 25 times against the US dollar. As the US inflation rate remained positive throughout the studied period, Pakistan's currency lost value by more than 25 times in the US markets.



Money in Pakistan also remained a poor unit of account over the period under analysis. Measured in 2015-16 prices, Pakistan's GDP was PKR 4 trillion in 1974, which increased tenfold to PKR 39 trillion in 2023 (Figure 5a). This amounts to approximately 4.7 percent growth per year. However, GDP measured at current prices increased more than 644 times from PKR 0.13 trillion in 1974 to PKR 85 trillion in 2023. Money has become so worthless that a ten-fold real growth translates to 644 times nominal growth. This is precisely why GDP growth in Pakistan is always taken in the sense of real growth; nobody cares about the nominal value of GDP or its growth. Similarly, there is a significant difference between GDP measured in local currency and that measured in foreign currency. GDP measured in USD increased just 25-fold from USD 13 billion to USD 341 billion compared to a 644 times increase in GDP when measured in local currency (Figure 5b). Such a huge difference again signifies that money in Pakistan is a poor unit of account. This is the reason the GDP in Pakistan is mostly stated in USD.





To simplify the comparison, Figure 6 plots standardized GDP measured in local currency at current, constant, and foreign currency. For all three series, the base value was adjusted to 100 in 1974. In this case, GDP measured in constant PKR is somewhat comparable with that measured in current USD; the former increased from 100 to 2572, while the latter increased from 100 to 929. However, the GDP measured in the current PKR is incomparable with the other two measures; it increased from 100 to 64370. This signifies that money in Pakistan is a poor unit of account as such a large increase in GDP (644 times in 50 years) is meaningless.

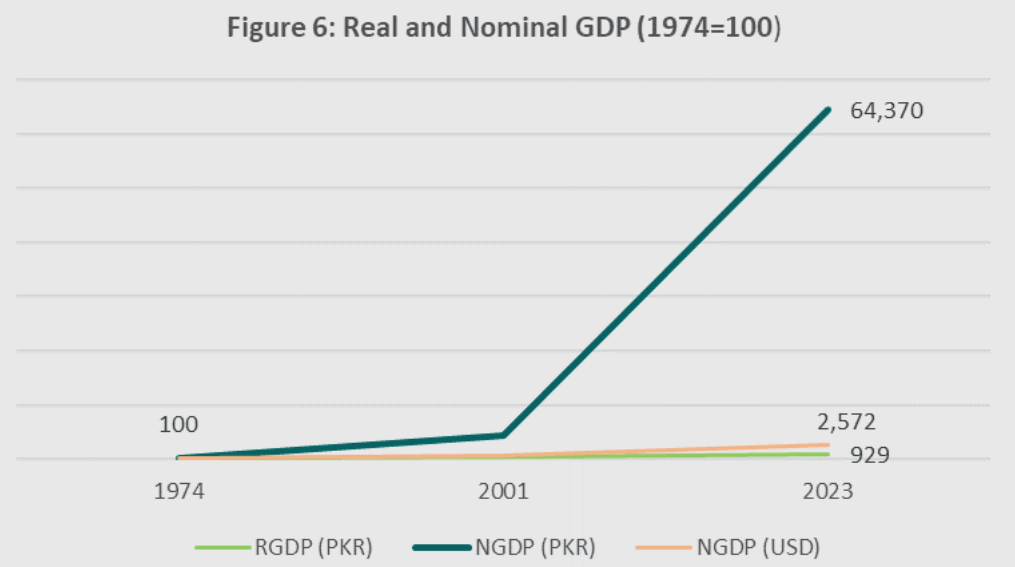


Figure 6: Real and Nominal GDP (1974=100)

5. MONETARY FRAGILITY AND POLICY FAILURE

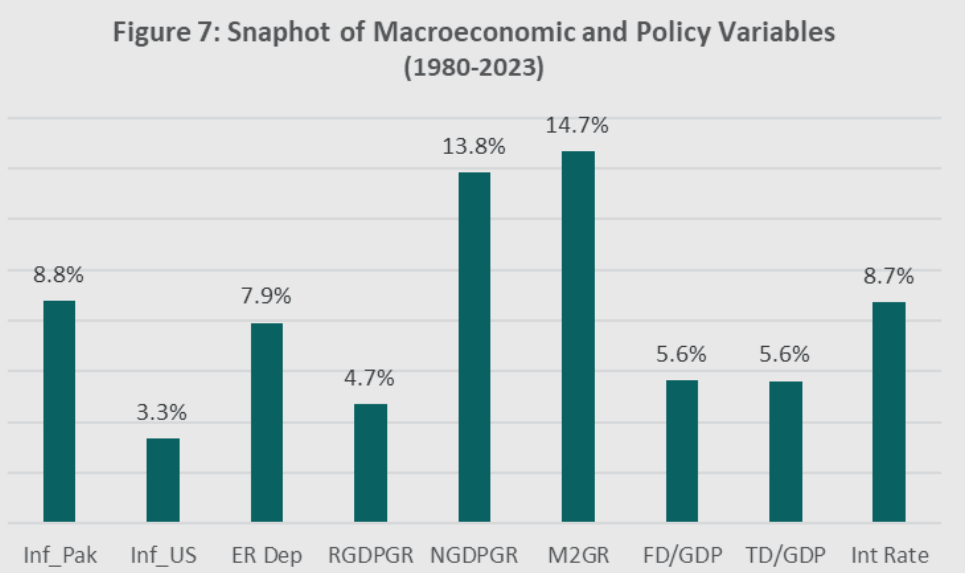
The analysis presented in the preceding section underscores the fragility of money in Pakistan over the past five decades. Numerous factors, including individuals' saving and investment behavior, inadequate communication between the government and private sector, and policy failure, have contributed to the unsatisfactory performance of money in Pakistan. While each of these factors is significant in its own right, the focus of this paper remains on policy failure, given the implications it carries for social welfare and individual economic freedom in a decentralized market economy. Poor policy outcomes can adversely affect economic performance and undermine economic freedom. In particular, policy failure resulting in monetary fragility can have deleterious consequences for citizens' economic freedom. Therefore, in a paper on sound money for economic freedom, it is appropriate to concentrate on policy failure while disregarding other components of monetary fragility.

The vast majority of macroeconomic policy decisions directly impact the stability of money and economic freedom. Among these policies, monetary policy is the primary determinant of the value of money, while exchange rate policy plays a crucial role in determining its external value. Additionally, fiscal policy and debt management are significant determinants of inflation, thereby influencing the value of money. In reality, the act of paying taxes and debts with money confers value to paper money that would otherwise be deemed worthless. In this paper, we examine each of these macroeconomic policies in detail.

5.1 A Brief Review of Macroeconomic Variables and Monetary Fragility

In order to thoroughly examine the contribution of each policy towards monetary fragility, it is essential first to provide a brief overview of the macroeconomic and policy variables. Over the past five decades, Pakistan has consistently experienced devaluation of its currency. During this period, the broad money (M2) has increased by an average of 14.7 percent per year, surpassing the value of economic transactions included in GDP (Figure 7).

Although nominal GDP increased at a slightly lower rate of 13.8 percent per year, the excess monetary growth caused the income velocity of money to drop. This results from money being used in economic transactions that are not included in GDP, such as assets. Despite the real GDP growth rate of 4.7 percent per year over the past five decades, which is considered moderate for a country like Pakistan, it is significantly lower than the monetary growth rate. Consequently, the inflation rate has been high, with the price of a typical consumer’s basket increasing at an average rate of 8.8 percent per year. This illustrates that monetary assets, if not compensated, lose value at a rate of 8.8 percent per year.



Inf_Pak: Inflation rate in Pakistan

Inf_US: Inflation rate in US

ER Dep: Exchange rate depreciation rate

RGDPGR: Real GDP growth rate

NGDPGR: Nominal GDP growth rate

M2GR: Growth rate of broad money

FD/GDP: Fiscal deficit as percent of GDP

TD/GDP: Trade deficit as percent of GDP

Int Rate: Interest rate

Over the past fifty years, the external value of Pakistani currency has experienced significant depreciation. Despite an inflation differential of 5.5 percent between Pakistan and the US economy, PKR has depreciated by an average of 7.9 percent per year against the US dollar. This has placed Pakistani consumers at a disadvantage in purchasing imported consumer items with domestic currency, as it has become increasingly expensive for them to do so.

Pakistan has encountered imbalances in both fiscal and external accounts, with fiscal and trade deficits remaining at an average of 5.6 percent of GDP between 1980 and 2023. These deficits have contributed to accumulating a substantial amount of public debt over time. Public debt has remained, on average, above 54 percent of GDP during the last four decades. Furthermore, the average short-term interest rate has remained at 8.7 percent per year from 1980 to 2023, which is slightly lower than the average annual inflation rate. As a result, the real interest rate has remained slightly negative. This low real interest rate, together with high trade and fiscal deficits, currency depreciation, high monetary growth, and public debt accumulation, has contributed to the fragility of the currency in Pakistan.

5.2 Monetary Policy and Fragile Money

As stated in the introduction, this research paper aims to identify the reasons for unsound money in Pakistan, specifically within the context of contemporary monetary policy practices. Notably, the Gold Standard is not discussed in this paper. In today's world, monetary policy aims to maintain a low inflation rate and stabilize output at a level consistent with the natural unemployment rate. This is typically achieved by setting an operating target for the short-term money market rate, which serves as an indicator of the monetary policy stance and is closely linked to economic activity and inflation rate. Additionally, central banks monitor monetary growth to preserve the stability of money's value. Therefore, analyzing the money growth rate and monetary policy instruments is crucial to understanding the value of money in an economy. To be more specific, monetary policy can stabilize the value of money if monetary growth aligns with economic expansion, the central bank has a clear mandate for price stability, the central bank is autonomous, policy targets are set to maintain the stability of money's value, the central bank's communication strategy is effective, and monetary policy's operating instrument is efficient in controlling inflation. Each of these factors is briefly discussed below.

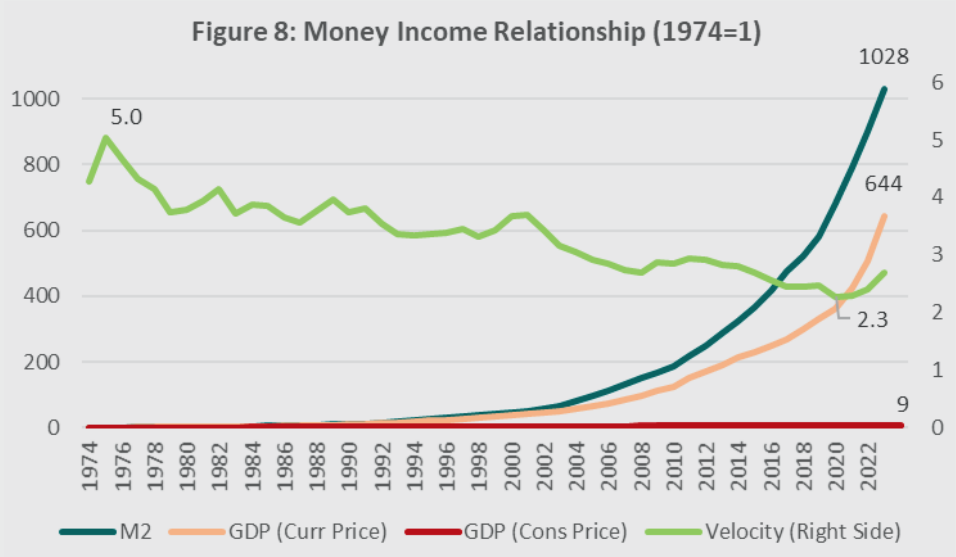
a. Money Growth

The Quantity Theory of Money (QTM) provides a framework for assessing money supply growth. It is based on the equation of exchange (EE), which posits that the product of money and its velocity is equal to the nominal value of economic transactions during a specific period. Nominal GDP, measured at the current general price level, is a proxy for economic transactions' value. The QTM and EE collectively offer a useful tool for evaluating monetary growth and its impact on the economy.

M x V = P x Y, where M is monetary aggregate, V is velocity, P is general price level, and Y is constant price GDP.

Inflation remains at zero under the assumption of constant velocity when monetary growth is commensurate with the real GDP growth rate. However, in reality, the inflation rate equals the difference between the money growth rate and the nominal GDP growth rate. In some instances, monetary growth may surpass the nominal GDP growth rate. This is because money is utilized in economic transactions that are not accounted for in the GDP. For example, purchasing an asset using money is not included in the GDP. High inflation rates resulting from an increase in monetary growth rates align with economic theory, which posits that an excess supply of a commodity leads to a decrease in its value. As such, the higher the growth rate of money, the lower its value.

Pakistan's money supply growth has remained high compared to the value of economic transactions. Specifically, the monetary aggregate M2 has increased by over a thousand times from 1974 to 2023 (Figure 8). During the same period, real economic activity, as measured by constant price GDP, increased ten times, while the current price GDP increased 644 times. This indicates that the rate of monetary growth in Pakistan has not only exceeded the real GDP growth rate but has also remained higher than the nominal GDP growth rate. The gap between the monetary growth rate and the nominal GDP growth rate reflects the use of money in transactions that are not accounted for in the GDP. This trend is also reflected in the decreasing velocity of money[9]. Even in the absence of the issue of velocity, it is noteworthy that nominal GDP growth is significantly higher than real GDP growth rates, which suggests a rapid expansion of the monetary supply. Such a rapid expansion of the monetary supply may lead to decreased currency value and an increased sense of instability.

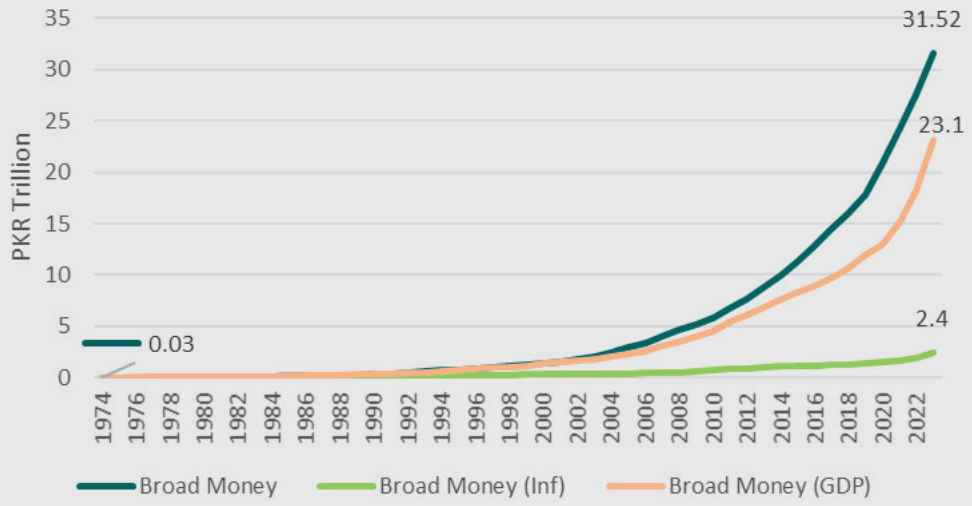


To elaborate further, Figure 9 plots actual and simulated money supply from 1974 to 2023. Two simulations have been conducted to evaluate the impact of monetary policy on the economy. In the first simulation, the money supply has been deflated by the inflation rate, while in the second, the money supply has been deflated by the nominal GDP. The purpose of these simulations is to assess the effectiveness of deflating money supply using different approaches. The findings of these simulations could offer valuable insights into the effectiveness of monetary policy in controlling inflation and

9.For a detailed discussion on velocity decline in Pakistan, see Shafiq and Malik (2021).

promoting economic growth. Inflation-deflated series represent real money supply, while nominal-GDP-deflated series represent the path of money supply consistent with the nominal value of transactions. Actual money supply increased from PKR 30 billion in 1974 to PKR 31.5 trillion in 2023. However, if the money growth rate had been equal to the inflation rate, the total amount of money would have increased only to PKR 2.4 trillion. Similarly, assuming the money growth rate had been commensurate with the nominal GDP growth rate, the monetary value would have surged to PKR 23.1 trillion by 2023. In this scenario, the money growth rate would have remained low, thereby stabilizing the value of money. However, in reality, the money growth rate was higher, leading to a decline in its value. This depreciation in value was a direct consequence of the higher money growth rate.

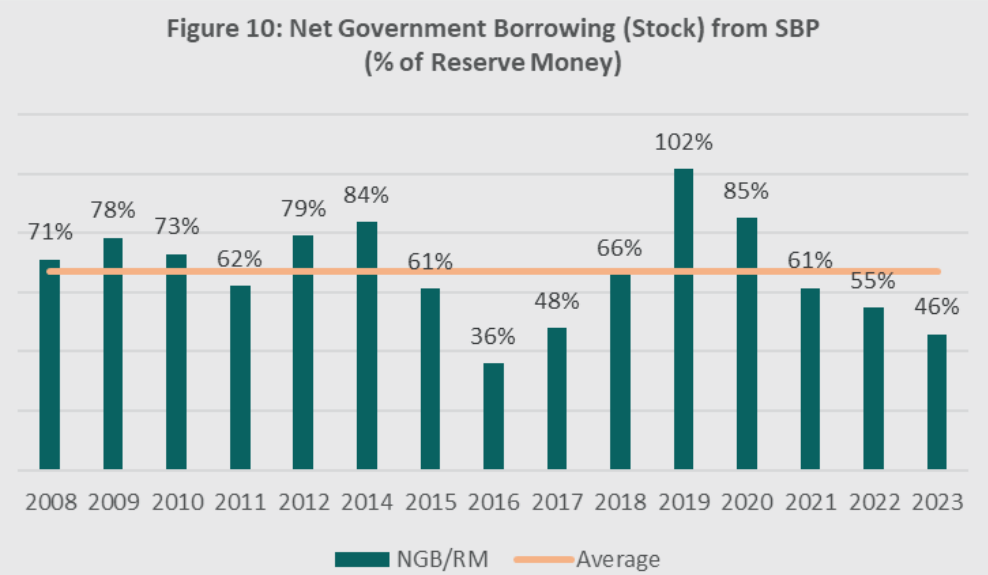
Figure 9: Actual and Simulated Broad Money



Broad Money (Inf): Simulated broad money when money growth equals inflation

Broad Money (GDP): Simulated broad money when money growth equals GDP growth

The remarkable surge in the money supply can be attributed, in part, to monetary policy. During the period under review, monetary policy remained passive, while fiscal policy took the lead in Pakistan. The government's budgetary borrowing from the State Bank of Pakistan has resulted in monetary expansion. Notably, over the past fifteen years, net government borrowing has accounted for nearly 70% of reserve money (Figure 10). Additionally, the government has a significant presence in the credit extended by scheduled banks in Pakistan, which has further contributed to the rapid expansion of the money supply. In this regard, the government bears responsibility for the escalating money supply growth.



However, SBP can also be blamed for high monetary growth. According to the amended SBP Act 1956, the government has been restrained from borrowing from the SBP since January 2022. As an alternative, the government has resorted to borrowing from scheduled banks. This impetus has culminated in credit expansion while simultaneously leading to the crowding out of the private sector. However, the SBP has primarily furnished liquidity to scheduled banks through Open Market Operations, thereby enabling scheduled banks to lend to the government (Table 2). Consequently, the SBP has provided the government with funds, albeit indirectly through scheduled banks.

Table 2: OMO and T-bill Auction Result

SBP Open Market Injection (PKR Million)			T-bill Auction (PKR Million)		
Date	**Tenor (Days)**	**Amount Accepted**	**Issue Date**	**Tenure**	**Amount Accepted**
3-Nov-23	7	2,869,550	2-Nov-23	3-Month	243,211
10-Nov-23	7	1,249,500	2-Nov-23	6-Month	77,217
10-Nov-23	14	632,000	2-Nov-23	12-Month	662,472
10-Nov-23	28	2,772,150	16-Nov-23	3-Month	450,847
14-Nov-23	3	250,550	16-Nov-23	6-Month	83,143
17-Nov-23	7	283,000	16-Nov-23	12-Month	491,097
17-Nov-23	14	241,700	30-Nov-23	3-Month	349,034
17-Nov-23	28	1,014,050	30-Nov-23	6-Month	76,083
24-Nov-23	7	581,350	30-Nov-23	12-Month	590,196
24-Nov-23	14	394,500			
24-Nov-23	28	947,250			
30-Nov-23	1	759,800			

b. Price Stability as the Prime Objective of Monetary Policy

There are two distinct approaches to setting monetary policy objectives, each with its unique characteristics. The dual approach is characterized by the mandate for central banks to pursue both price and output stability, with no clear prioritization. Conversely, the hierarchical approach assigns the central bank the primary objective of price stability, with other objectives being pursued only if price stability is not compromised. This approach is widely considered to be crucial for maintaining the stability of the value of money.[10]

Prior to the recent amendment in the SBP Act 1956, which took place in January 2022, the State Bank of Pakistan (SBP) was entrusted with the responsibility of regulating the credit and monetary sector. The primary objective was to foster economic growth, with only implicit consideration of price stability within the context of monetary stability. For instance, the SBP Act 1956 does not explicitly emphasize the importance of this objective.

> *WHEREAS it is necessary to provide for the constitution of a State Bank to regulate the monetary and credit system of Pakistan and to foster its growth in the best national interest with a view to securing monetary stability and fuller utilisation of the country's productive resources [SBP Act, 1956].*

The revised State Bank of Pakistan (SBP) Act has brought about a crucial change in the ranking of monetary policy objectives, with price stability now being accorded top priority. The achievement of financial stability and the optimal use of the country's productive resources must now take a backseat to price stability unless the latter is not compromised. Section 4(B) of the amended SBP Act clearly stipulates this shift in priorities.

> *4B. Objectives. – (1) The primary objective of the Bank shall be to achieve and maintain domestic price stability.*
>
> *(2) Without prejudice to the Bank's primary objective, the Bank shall contribute to the stability of the financial system of Pakistan.*
>
> *(3) Subject to sub-sections (1) and (2), the Bank shall support the Government's general economic policies with a view to contributing to fostering the development and fuller utilization of Pakistan's productive resources. [SBP Act 1956 amended up to 2022]*

10. See, for instance, Thomas J. Jordon's speech on 8 October 2020.

The State Bank of Pakistan (SBP) has been entrusted with the responsibility of ensuring price stability as mandated by the Act. Consequently, Pakistan's currency was expected to maintain a stable value in the future. However, in the last two years since the amendment, the SBP has failed to maintain price stability, as evidenced by various factors. While global inflation resulting from supply chain disruptions caused by the COVID-19 pandemic and the energy crisis caused by the Russia-Ukraine war have contributed to this failure, it is not the whole story. Further analysis reveals that the SBP's operating target for short-term interest rates has been ineffective in controlling inflation (Detailed discussions on this matter are present in the following sub-sections).

c. Autonomy of the SBP

To ensure the stabilization of the value of money, assigning the central bank the objective of price stability is insufficient. It is imperative to grant the central bank autonomy from the government to prevent fiscal policy actions from overriding its policy stance. The consequences can be significant if fiscal pressure is allowed to jeopardize the monetary and price stability established by appropriate monetary policy actions. In the past, fiscal pressure and the passiveness of monetary policy have contributed to the high monetary expansion in Pakistan. The government's reluctance to reform the revenue side has prevented it from collecting more in taxes, while its expenditures have not been restricted to the resource envelope. As a result, the government has had to rely heavily on budgetary borrowing from the central bank and scheduled banks.

The SBP Act 1956, as amended up to January 2022, clearly establishes the SBP as an autonomous entity independent of the government. To prevent government borrowing from the SBP, the Act restricts the SBP from purchasing government securities from the primary market. Section 46B of the Act grants functional and institutional autonomy to the SBP. The said section reads,

> *746B. Functional and Institutional Autonomy.—The Bank shall be autonomous in the pursuit of its objectives and in the performance of its powers pursuant to this Act.*
>
> *(2) Nothing in this Act, nor in any other law for the time being in force, shall be construed to allow any third party, including the Government or quasigovernment entities, to approve, suspend, annul or interfere with the management of the Bank, as well as the rights, duties and obligations of the Bank and of the members of its Board, the Executive Committee, the Monetary Policy Committee, or the staff of the Bank in the performance of their functions pursuant to this Act.*

> *(3) No Governmental or quasi-Governmental body or agency shall issue any directive, directly or indirectly, to any banking company or any other financial institution regulated by the Bank which is inconsistent with the policies, regulations and directives issued by the Bank pursuant to or in exercise of its powers under this Act or any other law for the time being in force.*
>
> *(4) The Bank, the members of its decision-making bodies and its staff shall neither request, nor take any instructions from any other person or entity, including Government or quasi-government entities. The autonomy of the Bank shall be respected at all times and no person or entity shall seek to influence the members of the Board, Executive Committee, Monetary Policy Committee, or the staff of the Bank in the performance of their functions.*

The extension of autonomy granted by the Act of Parliament to the State Bank of Pakistan (SBP) has led to the expectation that it will stabilize the value of the currency. However, the achievement of this goal is contingent upon the identification of an appropriate instrument and the establishment of a suitable operating target for that instrument. The success of the SBP in stabilizing the currency would be determined by the judicious selection of these factors and their effective implementation.

d. Transparency of Monetary Policy

The transparency of the actions taken by the State Bank of Pakistan (SBP) has steadily increased over time. The SBP is transparent regarding its objectives, targets, instruments, and operating targets. The Monetary Policy Committee (MPC), constituted under the SBP Act, is responsible for making monetary policy decisions. The MPC comprises ten members with no government representation. MPC meets eight times a year, and the schedule of these meetings is published on the SBP's website. After each MPC meeting, a Monetary Policy Statement is released in both English and Urdu. The statement is accompanied by the Monetary Policy Information Compendium, which presents detailed data for making monetary policy decisions. Additionally, meeting minutes are published on the SBP's website in English and Urdu, including non-attributed voting records for monetary policy decisions. As such, monetary policy in Pakistan is highly transparent. However, the SBP does not disclose its model generating inflation and other forecasts for the MPC. Furthermore, no effective accountability mechanism is in place if the SBP cannot achieve its assigned targets.

It is imperative to note that effective communication by the State Bank of Pakistan (SBP) is crucial. While the SBP is transparent in its policy-making decisions, it is insufficient to make the general public aware of the monetary policy's workings and decisions. For instance, a large section of the populace in Pakistan is unaware that price stability is the central bank's primary objective. Additionally, economic shocks create uncertainty, further contributing to the volatility of various macroeconomic variables.

Such a scenario was observed in the fiscal year 2022-23 when Pakistan's economy faced the risk of debt default. This created uncertainty, leading people to hoard foreign currency and non-perishable commodities. Consequently, the PKR plummeted by 40% against the USD and 29% against the representative consumer's basket of commodities in just one year. At that time, the SBP's communication failed to reduce uncertainty effectively. While the SBP released a few podcasts, they were not aimed at communicating with the common people and were too technical to be understood by the masses. As a result, the currency lost its value at an unprecedented rate, and the SBP failed to stabilize its value despite being an autonomous institution.

e. Setting Operating Target for Policy Instrument

The State Bank of Pakistan was granted autonomy and assigned the primary objective of ensuring price stability through the SBP Act, which the Parliament amended in January 2022. However, it is important to note that stabilizing the value of money cannot be achieved through price stability alone. The central bank must adopt an appropriate operating target to achieve this objective. Failure to do so may render both price stability and monetary stabilization unattainable.

The State Bank of Pakistan (SBP) employs a framework to target the overnight money market repo rate. This framework comprises a policy rate and associated floor and ceiling limits that restrict fluctuations in the market interest rate. However, a pertinent question is whether the policy rate set by the Monetary Policy Committee (MPC) is appropriate. In this regard, John B Taylor[11] has proposed a criterion to assess the efficacy of monetary policy instruments.

The Taylor rule stipulates that the short-term real interest rate should be determined as a weighted average of deviations in inflation from the target and output from its normal level. The real interest rate should respond positively to both deviations; any lack of such response would impede the achievement of desired targets. The rule may be expanded to encompass lagged interest rates and exchange rates if a country's monetary policy objectives include interest rate smoothing and exchange rate stability.

For this paper, an extended version of the Taylor rule[12] has been estimated, including inflation rate, output gap, exchange rate, and lagged interest rate as policy objectives and short-term interest rate[13] as the policy instrument. The time spans 1980 to 2023.

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11. For details, see Taylor (1993)

12. For details on the extended version of the Taylor rule, see Taylor (2001). For Pakistan-specific rule, see Malik and Ahmed (2010)

13. Call Money Rate has been taken as a short-term interest rate. This is the only interest rate for which long time series is available for Pakistan

Table 3: Taylor Rule for Pakistan		
Variables	**Coefficients**	**Standard Error**
Constant	1.67	1.11
Lagged interest rate	0.61	0.12
Inflation	0.11	0.05
Output gap	-0.03	0.14
Exchange rate depreciation	0.11	0.04
Adjusted R-squared	0.57	
Durbin-Watson Stats	2.07	
Dependent Variable: Interest rate		

Based on the results presented in the table above, it is evident that the SBP has prioritized interest rate smoothing, followed by exchange rate stability and price stability. Notably, there is no correlation between the output gap and interest rate fluctuations. The coefficient of lagged interest rate has been found to be 0.6 (Table 3), which is quite large and shows inertia in the decisions of the SBP and the reluctance of the SBP to change policy instruments according to the state of the economy. According to the analysis conducted, the long-run coefficient of inflation is estimated to be 0.27. This implies that the response of the interest rate to the inflation rate has been less than one-for-one in the past. Such a pattern of monetary policy behavior may not be effective in stabilizing the value of money as inflation becomes increasingly unstable. It is essential to note that the minimum requirement for price stability and, therefore, the maintenance of sound money is to respond to inflation at least one-for-one[14]. The coefficient of exchange rate depreciation, which stands at 0.28, indicates that the State Bank of Pakistan (SBP) has been actively pursuing exchange rate stability as one of its primary objectives. The SBP has responded to exchange rate depreciation by increasing interest rates to discourage capital outflows from the country. This policy has been implemented with the aim of stabilizing the external value of money. However, its efficacy is contingent on the elasticity of capital flight with respect to interest rates. Despite the SBP's efforts, this policy failed to produce the desired results in 2022-23, when despite a historic increase in policy rates, the Pakistani Rupee depreciated by 40% against the US dollar. Our analysis suggests that the SBP has not prioritized economic stability despite fostering growth as its primary objective before 2022.

f. Effectiveness of the Monetary Policy Instrument

The year 2022-23 witnessed a historically high depreciation of the value of money in Pakistan, raising questions about the effectiveness of monetary policy instruments. In response, the Monetary Policy Committee (MPC) increased the policy rate from 9.75 percent in January 2022 to an unprecedented 22 percent in June 2023. Despite this significant increase, the market did not perceive a tight stance on policy, and market uncertainty prevailed. The result was a massive depreciation of the Pakistani Rupee against major currencies and a historically high inflation rate.

This paper evaluates the effectiveness of monetary policy instruments using four variables, namely the Structural Vector Autoregressive (SVAR) Model. Appropriate identifying restrictions were employed to separate structural monetary policy shocks from the endogenous response of monetary policy to the state of the economy. Specifically, we utilized the Choleski decomposition method, which assumes that the interest rate responds contemporaneously to all variables in the model. Additionally, the exchange rate is causally prior to inflation and the output gap, while inflation is causally prior to the output gap.

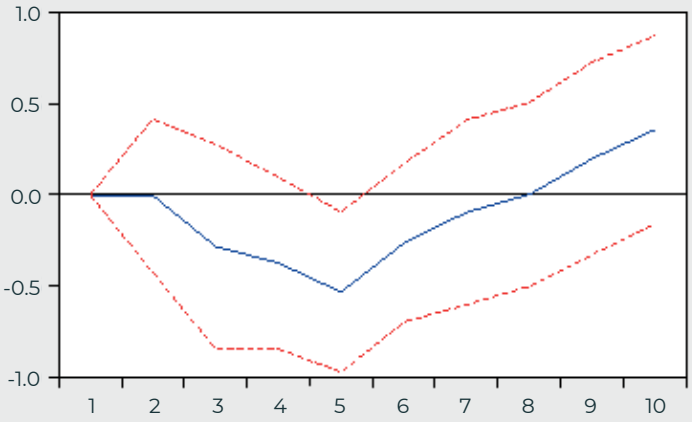
14. This is known as the Taylor Principle

We estimated impulse response functions (Figure 11) to evaluate the effectiveness of the short-term interest rate, which we present in the following Figure. This study is significant in that it sheds light on the efficacy of monetary policy instruments in a developing economy during a period of high inflation and market uncertainty, with implications for future policy decisions.

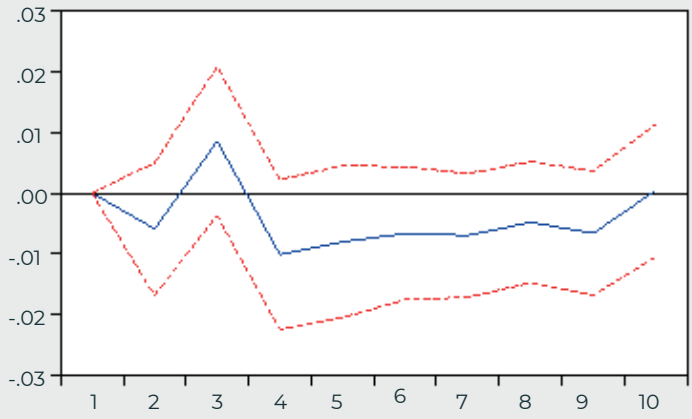
Figure 11: : Impulse Response Function

Response to Cholesky One S.D. Innovations ± 2 S.E.

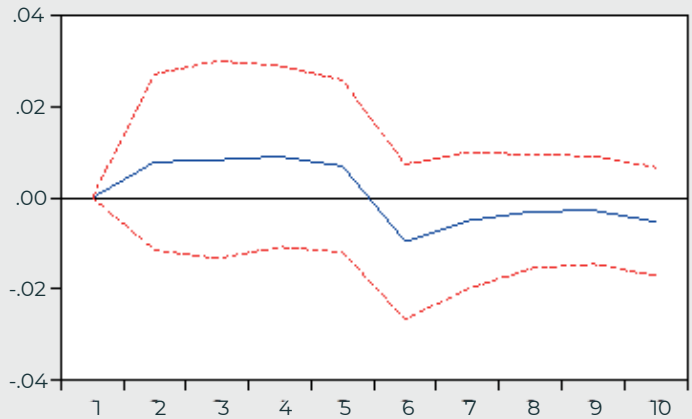
Response of GAP to INTRATE



Response of INF to INTRATE



Response of D(LOG(ER)) to INTRATE



The results presented in the above figure reveal that changes in interest rates do not affect either inflation or exchange rates. However, it is noteworthy that the output gap is the only variable that demonstrates a negative response to interest rate fluctuations. Such findings, when considered along with the Taylor rule, suggest that the State Bank of Pakistan (SBP) does react to currency depreciation and inflation; however, its policies appear to be ineffective in managing these variables. Instead, such policies may have unintended consequences, such as discouraging economic activity through increased interest rates.

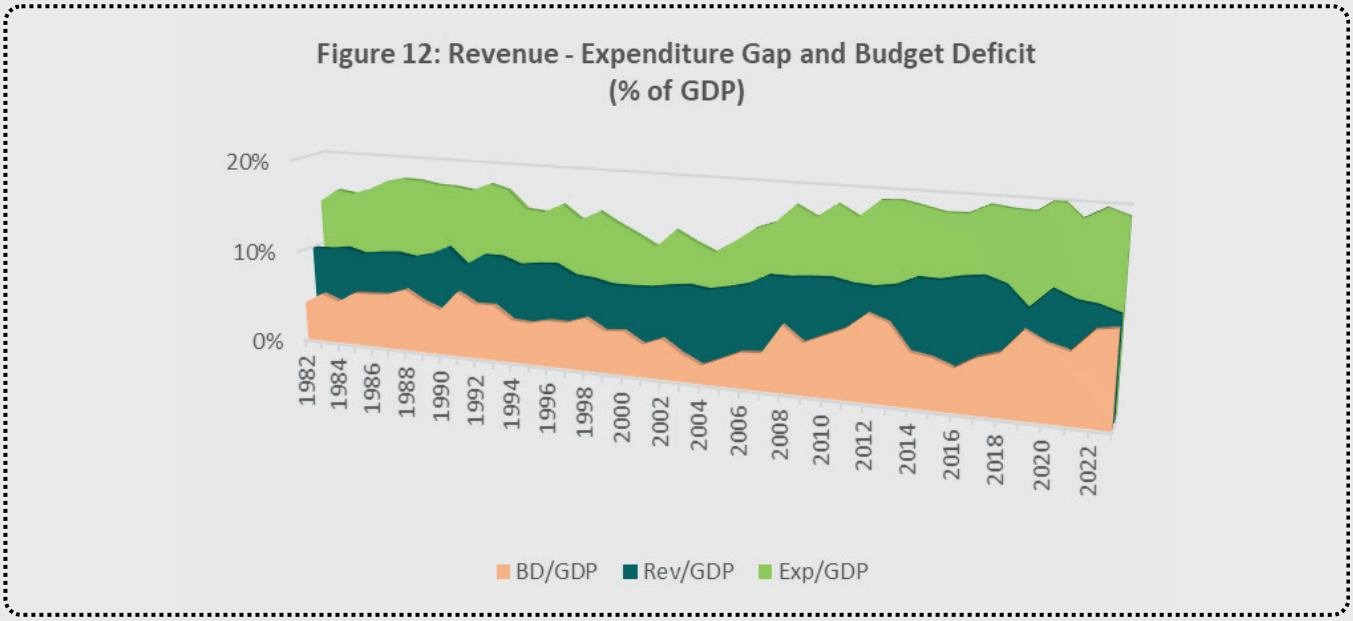
The ineffectiveness of monetary policy in controlling inflation can be attributed to several factors. Firstly, formal banking channels are primarily utilized by large-scale businesses, while small and medium enterprises rely heavily on informal credit. As a result, large businesses have alternative financing options available to them, such as issuing stocks and using retained earnings, which are not affected by changes in interest rates. Secondly, the government is a significant credit recipient from the banking system. Therefore, an increase in interest rates leads to an increase in the government's borrowing costs. As government expenditures are relatively insensitive to the cost of borrowing, an increase in interest rates only adds to the government's borrowing costs, exacerbating the debt servicing of existing debts and demand for further borrowing. This creates a vicious cycle and does little to control the inflation rate. Thirdly, capital flight and monetary assets are relatively inelastic to changes in interest rates. Despite historically high interest rates observed in 2023, interest-earning deposits have not increased substantially, rendering the exchange rate insensitive to changes in interest rates.

Historically, Pakistan's monetary policy has faced challenges in maintaining sound money. The dilution of monetary policy stance by fiscal pressure, along with the reliance of the State Bank of Pakistan (SBP) on short-term interest rates as the only policy instrument, has contributed to this problem. While the former issue may be resolved in the future with the extension of SBP's autonomy through an Act of Parliament in January 2022, the latter issue requires further research to identify the root cause of the ineffectiveness of monetary policy. To address this, an appropriate value of the monetary policy instrument should be determined based on the state of the economy. Additionally, effective communication and the use of non-traditional instruments should accompany policy rate setting.

5.3 Fiscal Policy and Monetary Fragility

Fiscal policy, one of the fundamental components of sound monetary management, plays a crucial role in the economic stability of a nation. A high budget deficit can have far-reaching consequences, such as increased domestic and external debt demands and credit creation. This, in turn, puts pressure on the central bank to expand monetary support for budgetary purposes. Additionally, fiscal deficits lead to high public debt, exacerbating uncertainty and resulting in domestic currency depreciation alongside high inflation. Thus, it is critical to ensure fiscal discipline to maintain monetary integrity.

Pakistan has faced a persistent budget deficit throughout its history, leading to the accumulation of both domestic and external public debt. Over the last four decades, spanning from 1982 to 2023, the country's revenue has averaged 10.5 percent of its Gross Domestic Product (GDP). In contrast, the average expenditure during the same period was 16.9 percent of GDP, resulting in an average steady budget deficit of 5.6 percent of GDP (Figure 12).



BD/GDP: Budget deficit as percent of GDP

Rev/GDP: Total revenue as percent of GDP

Exp/GDP: Total expenditure as percent of GDP

Throughout its history, Pakistan's economy has tended to fluctuate between periods of growth and contraction, with the national budget consistently remaining in a state of deficit. This persistent trend suggests that there are structural issues within the economy that perpetuate the budget deficit, even during times of economic expansion. In the following paragraphs, we will examine a number of these issues in detail to gain a comprehensive understanding of the factors contributing to this persistent challenge.

First, the efficiency of government spending is an issue that has long been the subject of debate and scrutiny. One of the primary concerns is the unwieldy size of the government, which has resulted in a significant footprint that is both unnecessary and costly. Despite the devolution of several functions in the 18th Constitutional Amendment, the federal government has failed to cut its expenditures significantly, while the expenditures of provincial governments have increased. Additionally, the government's involvement in markets for commodities such as wheat has resulted in substantial operational costs, which has led to a significant waste of taxpayers' money. More importantly, such operations distorted market signals and did more harm[15] than good. Similarly, state-owned enterprises (SOEs) in Pakistan are struggling with poor management, resulting in frequent financial losses that strain the country's fiscal resources. The overall efficiency of government spending is inadequate, leading to high costs of public service delivery. It is imperative that every budget allocation results in efficient public service delivery at minimal cost; however, this practice is currently lacking in Pakistan. The government must prioritize implementing effective management strategies to improve the performance of SOEs and optimize public service delivery [16]

Second, the revenue side of the government sector is plagued by a multitude of issues. Historically, the government has focused on increasing tax rates to enhance tax collection. However, this strategy has led to a shrinking tax base, which is the primary reason behind poor tax collection. Ideally, the government should adopt a taxation policy that does not impede economic activity. In fact, promoting expanded and flourishing economic activity should be the ultimate goal of any public policy.

Furthermore, the government has failed to maintain horizontal equity, which entails that not all economic activities are taxed at the same rate. Certain activities, such as agricultural income, are permanently exempt from the tax net, while others are granted intermittent tax exemptions through statutory regulatory orders (SROs). Conversely, some economic activities are taxed at such a high rate that they fail to expand, and such decisions are the primary obstacle to increasing tax collection. Tax policy also failed to maintain vertical equity by making taxes progressive.[17]

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15. Frequent shortages of commodities like wheat and sugar occur because of governments' involvement in these markets and poor management. If markets are allowed to function independently, these commodities will be efficiently produced and distributed to consumers, saving government expenditures.

16. Setting performance indicators and reporting the achievement of targets against budget allocations, as required by the PFM Act 2019, is a step in the right direction.

17. Taxes are progressive when higher incomes are taxed at higher rates while lower incomes are taxed at lower rates. Conversely, in regressive taxes, the tax burden is high for lower-income groups, while upper-income groups enjoy a low tax burden. A proportional tax system levies the same tax rate on all incomes

The government's reliance on indirect taxes, which are comparatively easier to collect, has been a source of concern due to their regressive nature, resulting in an undue burden on the lower-income classes. However, the share of indirect taxes in overall tax collection has decreased (Figure 13a), primarily due to reduced customs duty. Additional challenges, such as a lack of modernization, a shortage of appropriately trained professionals in tax departments, inaccurate forecasts, and inadequate targets for tax collection, contribute to suboptimal revenue collection, leading to a budget deficit. Non-tax revenues are also stagnant at 2 percent of GDP (Figure 13b).

Figure 13a: Direct and Indirect Tax (% of GDP)

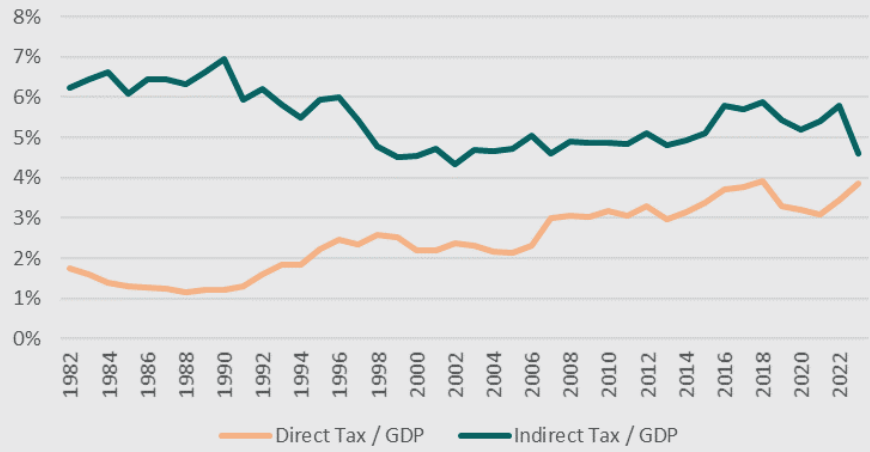
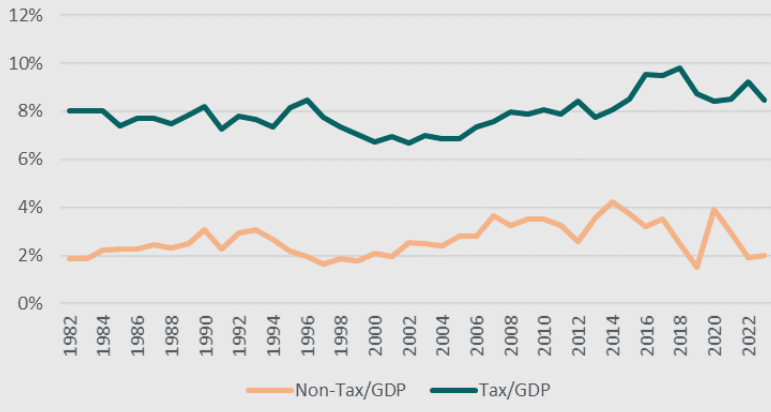
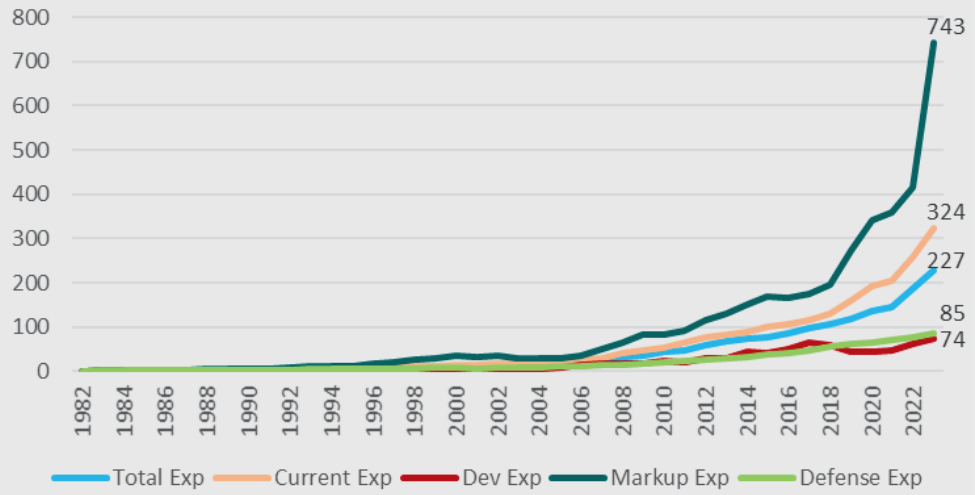


Figure 13b: Tax and Non-Tax Revenue (% of GDP)



Third, the 7th National Finance Commission (NFC) Award has led to a significant increase in the provincial share from the federal divisible pool, which currently stands at 57.5%. Additionally, the 18th Amendment in the Constitution of Pakistan assigns the collection of certain taxes, such as GST on services, to the provinces. As a result, the net federal financial resources are limited despite reasonable tax collection. Furthermore, debt servicing, mainly interest payments, consumes a substantial portion of the net federal resources. Notably, government expenditure has increased by 227 times over the past four decades, with current expenditure surging 324 times and development expenditure rising 74 times. However, interest payments have increased by a staggering 743 times during the same period (Figure 14). Recently, the net federal resources have been insufficient to cover interest payments, necessitating borrowing to sustain the government's operations and functions. Consequently, budget deficits are unavoidable unless an innovative approach is adopted to address the situation.

Figure 14: Standardized Government Expenditure (1982=1)



5.4 Exchange Rate Policy, Trade Deficit, and Monetary Fragility

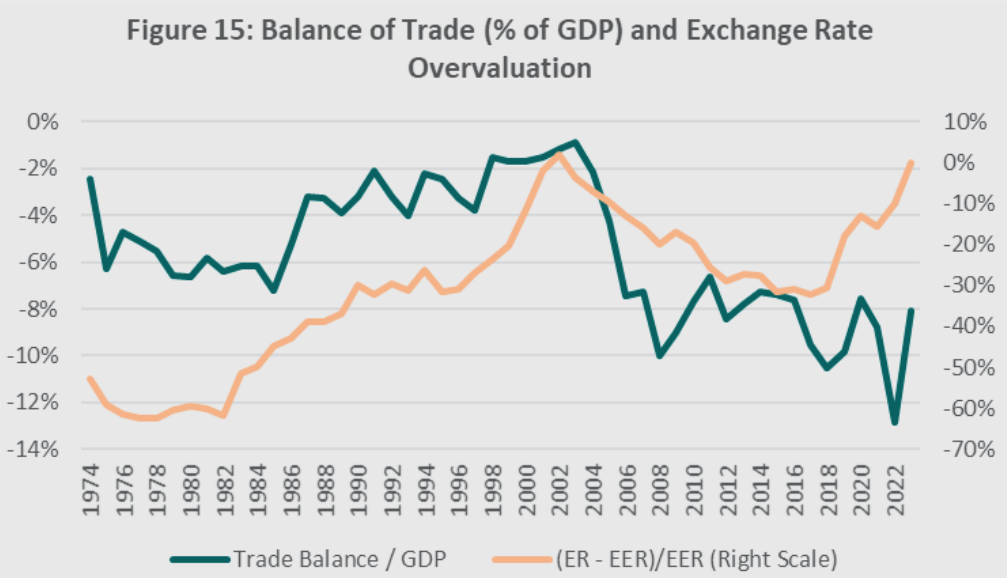
The exchange rate determines the external value of domestic money. The trade balance determines the exchange rate, whose deviation from its equilibrium value determines the trade deficit. A persistent overvalued exchange rate encourages imports while discouraging exports, causing an increase in the trade deficit. If the high trade deficit is not financed through other sources of foreign exchange, it results in the accumulation of external debt and depreciation of domestic money at some point. Therefore, allowing the exchange rate to adjust to the appropriate level, as determined by market forces, maintains the sound value of money. Otherwise, the currency is likely to lose its value despite short-term stability.

Pakistan's economy has faced a persistent trade deficit, with exports significantly lagging imports. Despite the sizable remittances received from overseas Pakistanis, the deficit remains uncovered. As a result, Pakistan has been grappling with a chronic current account deficit, which has led to the accumulation of external debt. Specifically, the country's average trade deficit has been 5.6 percent of GDP over the past five decades.

The persistent trade and current account deficit, accompanied by the external debt, have been the pressing concerns for Pakistan. In this paper, we aim to analyze the exchange rate policy as one of the reasons for the aforementioned economic issues. Over the years, Pakistan has not adhered to the market exchange rate system and has largely maintained an overvalued exchange rate. This emphasis on the overvalued exchange rate is fueled by the misconception that currency depreciation has a detrimental impact on economic growth and the well-being of citizens.

The impact of currency depreciation on economic activity and the lives of citizens is significant and occurs through various channels. One such channel is the effect on the exchange rate, where the depreciation of the local currency makes domestic goods cheaper for foreigners, but foreign goods become more expensive for domestic residents. This leads to an improvement in the external account balance and discourages further exchange rate depreciation. However, this effect is only significant if the currency is deliberately devalued to an undervalued level and the elasticities of imports and exports are relatively high. The latter requirement can only be satisfied through generating an exportable surplus and improving production quality through investments in knowledge.

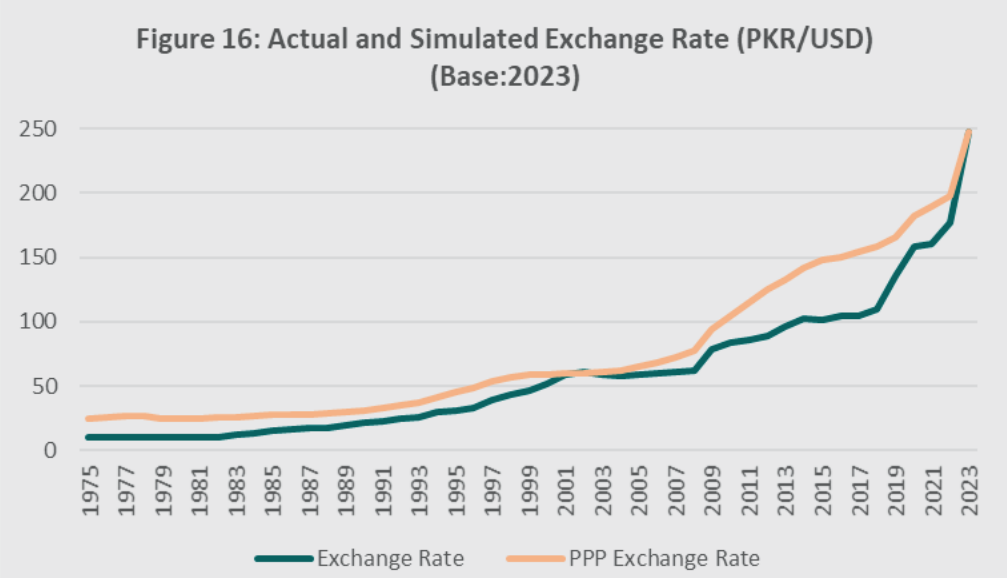
According to evidence, Pakistan's trade deficit experiences expansion due to exchange rate overvaluation. Specifically, in the 1970s, the exchange rate was overvalued by an average of 60 percent, resulting in a high trade deficit of 5.6 percent of GDP (Figure 15). As the exchange rate adjusted towards its equilibrium value, estimated through Purchasing Power Parity, the trade deficit began to shrink. In the 1990s, exchange rate overvaluation averaged 25 percent, and the trade deficit was 2.7 percent of GDP. Similarly, between 2013 and 2018, the exchange rate was overvalued while the trade deficit averaged 8.4 percent of GDP.



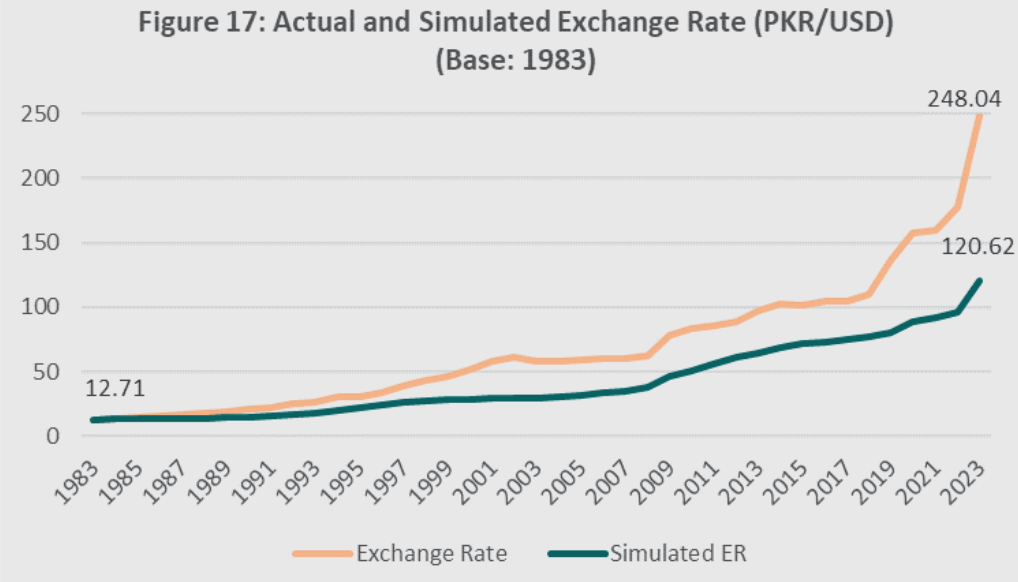
ER: Actual Exchage Rate (PKR/USD)

EER: Equilibrium exchange rate measured through purchasing power parity

Pakistan has faced a persistent issue of currency depreciation throughout its history, particularly after the year 2000. A frequently raised question is why the depreciation has not led to an increase in exports and a decrease in imports. However, this question is misguided, as, despite the significant depreciation, the Pakistani currency has actually appreciated in real terms and remained overvalued. For example, from 1974 to 2023, the Pakistani currency has undergone massive depreciation by almost 2400%. However, during the same period, the price of a typical consumer's basket of goods and services increased by 6,600% (Figure 16). This implies that the Pakistani currency has actually appreciated in real terms, resulting in an overvaluation of the exchange rate. The current situation of overvalued currency has caused a rise in imports and a decline in exports, leading to a continuous deficit in the current account and a build-up of external debt. These factors together have resulted in the depreciation of the currency, leading to an unsound monetary system.



The question that arises pertains to the potential consequences of maintaining an overvalued currency in Pakistan. Allowing the exchange rate to reach the equilibrium value is a viable option that may have been overlooked. Such an adjustment would encourage export growth while keeping imports under control, thus reducing the trade deficit. Notably, a balanced external account and accelerated economic growth are two crucial factors that contribute to currency stability and sound money. For instance, Pakistan adopted a managed floating exchange rate system in 1982 after keeping the exchange rate overvalued for an extended period. The currency depreciated by 28 percent within a year. Alternatively, had Pakistan allowed the exchange rate to adjust by the inflation differential between Pakistan and the US without artificially overvaluing the currency, the exchange rate would have only increased to PKR 120.6/USD in 2023 (Figure 17) instead of PKR 248/USD. This evidence suggests that Pakistan's excessive focus on exchange rate overvaluation has resulted in unsound money.

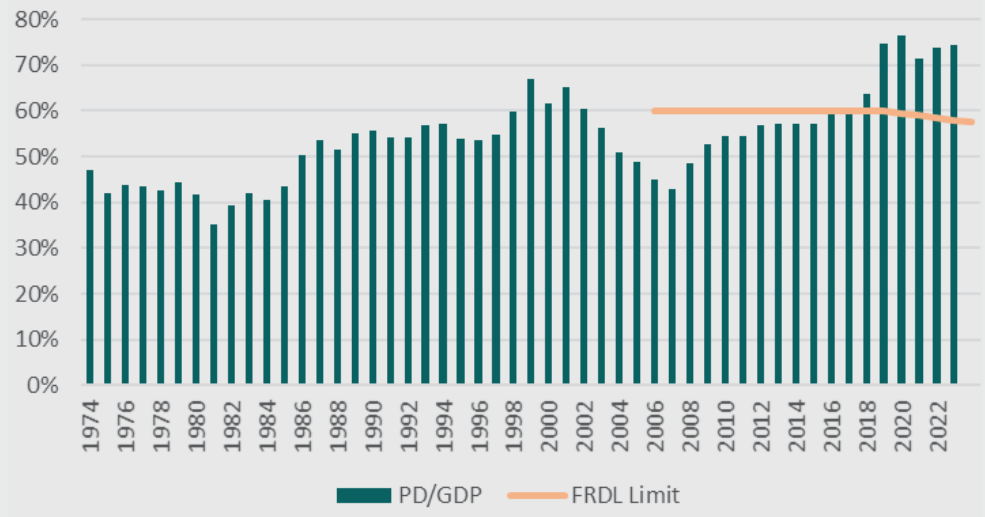


5.5 Public Debt and Monetary Fragility

The accumulation of public debt is a byproduct of fiscal and external imbalances, wherein fiscal deficit contributes to domestic debt, while current account deficit adds to external debt. Although there is no direct relationship between public debt and the value of money, a strong negative correlation exists between the two. The high stock of debt, coupled with high interest rates, imposes an enormous burden on government budgets. Debt servicing consumes a significant portion of public resources, leaving fewer resources available for public service delivery. Governments also have to impose higher tax burdens to generate resources for debt servicing, discouraging economic activity and resulting in job losses. In this process, money loses value as higher budget deficits create credit. Additionally, governments may become heavily indebted, and public debt may exceed a threshold level, beyond which investors lose confidence, and rating agencies indicate higher risks involved due to the possible risk of default on public debt. In such cases, interest rates on government securities increase sharply, and uncertainty increases, resulting in a free fall of domestic currency and an increase in the inflation rate. Therefore, public debt is inversely related to the soundness of money.

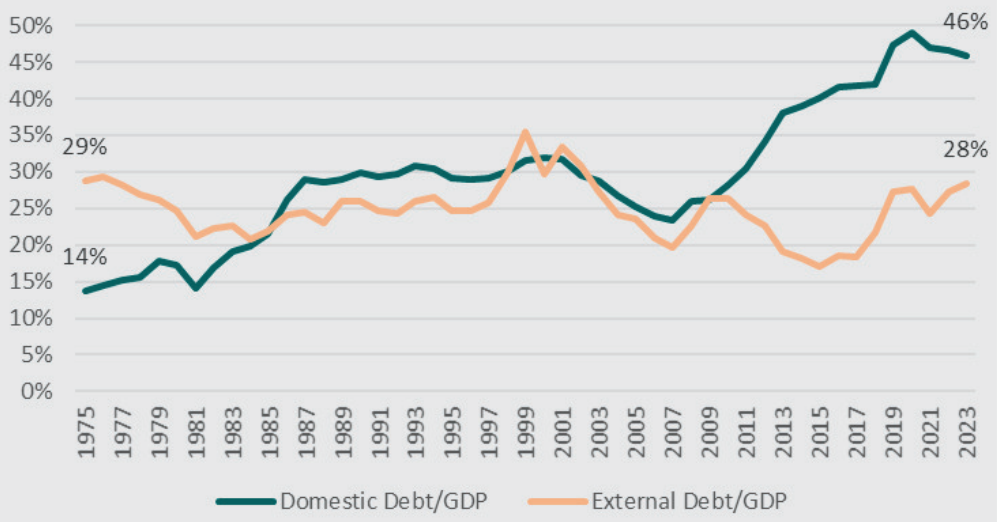
Over the past five decades, Pakistan has maintained an average public debt of 54 percent of its GDP. However, the country has experienced significant fluctuations in its debt-to-GDP ratio, ranging from 35 percent in 1981 to 77 percent in 2020 (Figure 18). Notably, from 2007 onwards, the public debt as a ratio to GDP has been steadily increasing. To address this issue, the Parliament passed the Fiscal Responsibility and Debt Limitation Act in 2005, which sets a limit of 60 percent on the debt-to-GDP ratio. This limit is expected to be reduced to 50 percent by 2030. Unfortunately, the public debt-to-GDP ratio exceeded the allowed limit in 2016 and has remained above it since then.

Figure 18: Public Debt (% of GDP)



Pakistan's high public debt can be attributed to various factors, whereby persistent twin deficits, namely the government budget deficit and the current account deficit, are among the main culprits. The root cause of the twin deficits is the persistent budget deficits that are unfeasible to be financed through private sector savings. As a result, the government has to resort to external financing sources, which leads to the accumulation of both domestic and external public debt (Figure 19).

Figure 19: Domestic and External Debt (% of GDP)



The interest rate is a crucial determinant of the cost of borrowing. High interest rates increase debt servicing costs, which must be met using budgetary resources. If tax collection fails to keep pace with the debt servicing requirements, the budget deficit increases, leading to a further rise in the debt burden. Pakistan initiated financial sector reforms in 1989, encompassing the liberalization of financial markets and introducing market-based monetary policy instruments. The State Bank of Pakistan (SBP) was granted autonomy in multiple phases, restricting government borrowing from the institution. Regrettably, there were no corresponding reforms on the fiscal front, either in terms of expenditure or revenue. As a result, the cost of debt increased without a corresponding increase in revenue, leading to a build-up of public debt. In recent years, unsustainable levels of debt servicing costs have compelled the government to borrow heavily to service its debt.

Pakistan's economy has experienced an average GDP growth rate of 4 percent per year over the past six decades, which is low compared to the growth rate of newly industrialized countries and other fast-growing economies. This modest growth rate is coupled with high interest costs and low revenue collection, accumulating substantial public debt over time. To compound the issue further, Pakistan has historically experienced an average annual inflation rate of 9 percent. However, this inflation rate has prevented debt in Pakistan from skyrocketing and has remained within sustainable limits.

One of the primary reasons for the accumulation of external debt in Pakistan is due to an overvalued exchange rate. Over the past five decades, the inflation rate in the country remained at 9 percent. Still, the government did not allow its exchange rate to depreciate at the same rate, resulting in an appreciated and overvalued real exchange rate. This domestic currency valuation has made exports less competitive globally, while imports have become cheaper for domestic residents. As this situation persisted for an extended period, the domestic industry could not survive, and many firms left the production sector. The demand for goods and services was fulfilled through high imports, resulting in a current account deficit financed through foreign saving in the form of external borrowing, thereby increasing external debt.

Furthermore, governments' irresponsible spending for political gain and the lack of fiscal discipline have contributed to this issue. Additionally, corruption, particularly in government departments, has increased the cost of public service delivery while reducing revenue collection, which has further increased public debt.

6.CRITICAL ANALYSIS OF METHODOLOGY OF SOUND MONEY

6.1 Issues in Methodology

a. Money Growth:

The Fraser Institute's methodology measures the component of money growth by comparing the average annual growth rate of broad money over the last five years to the average annual growth rate of real GDP over the last ten years. Countries with a significant gap between money growth and real GDP growth receive lower ratings. This approach is appropriate since the growth rate of money is a primary driver of monetary fragility. Economic principles affirm that an increase in the supply of a commodity reduces its value. A rapid expansion of the money supply also lowers its worth, making it unsound. An excessive increase in the money supply beyond what is required to match economic activity is essentially a tax that individuals must pay. However, the burden of this tax is disproportionately distributed among different segments of society, making it a breach of the economic freedom of individuals. Moreover, this tax exceeds the limits of what Parliament, the elected representatives of society, allows the government to impose. Such an increase in tax rate changes the terms of agreed-upon economic contracts and arbitrarily redistributes wealth. Consequently, it can be considered a violation of individuals' economic freedom.

The Quantity Theory of Money (QTM) serves as the theoretical foundation for the component in question. This economic theory posits that the nominal Gross Domestic Product (GDP), which represents the total value of goods and services produced within an economy during a specified period at current prices, is equal to the product of money and its velocity. Specifically, the QTM is grounded in the following identity:

$$MxV = PxY;$$

where M represents money stock, measured as M1 or M2, V is the income velocity of money, P is the general price level measured as GDP deflator, and Y represents the constant price (or real) GDP.

This can be converted into logarithmic form and then can be differentiated with respect to time to get the equation in growth rates:

$$GRm + GRv = INF + GRy$$

GR represents the growth rate of respective variables, while INF represents the inflation rate measured as the growth rate of the GDP deflator.

If velocity is assumed constant, GRv = 0. In this case, the above equation becomes:

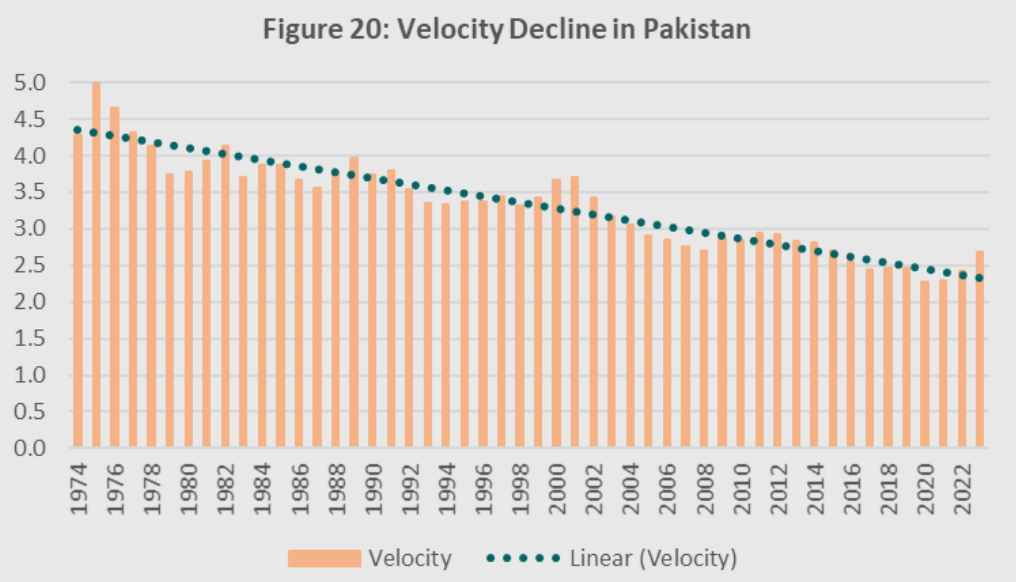
$$INF = GRm - GRy$$

This mathematical equation posits that inflation is equivalent to the discrepancy between the growth rates of the money supply and real gross domestic product (GDP). The significance of this equation is evidenced by the fact that the divergence in growth rates between the money supply and real GDP is a key factor in the composition of the sound money index.

Certain issues arise when considering the utilization of this particular component in the sound money index. Firstly, a country can only achieve the maximum score if the growth rate of money equals the growth rate of real GDP. This scenario leads to an average inflation rate of zero over the long run, contradicting contemporary central banks' definition of price stability. Central banks typically define price stability as a low and stable but positive inflation rate. The justification behind this approach is manifold. For instance, central banks maintain positive inflation rates to avoid deflation. In the absence of inflation, contraction in aggregate demand would lead to deflation, a scenario that central banks strive to prevent. Additionally, a zero-inflation target would limit the role of monetary policy when the interest rate falls to the zero lower bound. At such times, central banks cannot implement expansionary monetary policy to stimulate the economy and counteract recessions.

Second, the viability of net monetary growth as a fundamental aspect of a stable currency system relies heavily on the existence of a predictable correlation between money supply and inflation. However, over time, this relationship has become increasingly tenuous. One of the primary reasons for this is the unrealistic assumption that velocity remains constant. If velocity is indeed variable, then the relationship between money supply and inflation becomes much less clear-cut.

Third, the Quantity Theory of Money (QTM) fails to account for using money as a medium of exchange for transactions that are not included in the Gross Domestic Product (GDP). This is evidenced by the consistent decline in velocity over a prolonged period in many countries, including Pakistan, as outlined in the accompanying Figure 20. Notably, Pakistan has experienced a consistently high rate of monetary growth, which exceeds even the average growth rate of nominal GDP, let alone real GDP. This is because cash remains the primary mode of transaction in many areas of the country. Consequently, the disparity between the growth rates of money supply and real GDP is an unsuitable indicator of the overall stability of the currency in such a case.



b. Standard Deviation of Inflation

The principle of sound money is based on a standard deviation of the annual inflation rate over the past five years. Countries with volatile inflation receive low ratings in this component. For instance, in the event of two countries, A and B, having the same average annual inflation rate, if the standard deviation of the annual inflation rate is higher for country B, then it is considered to have more sound money. This is because price stability necessitates a low average annual inflation rate and minimum fluctuation around that average. Uncertain inflation increases uncertainty, resulting in sub-optimal contracts. Individuals and businesses cannot engage in long-term contracts, such as price contracts, wage contracts, or others. Uncertainty discourages saving and increases current consumption.

Additionally, volatile inflation fuels inflationary expectations that drive average inflation in turn. The inability of individuals and businesses to participate in long-term contracts and the reduced opportunity for individuals' intertemporal resource allocation reduce their economic freedom. Unstable and unpredictable inflation rates distort economic choices for individuals.

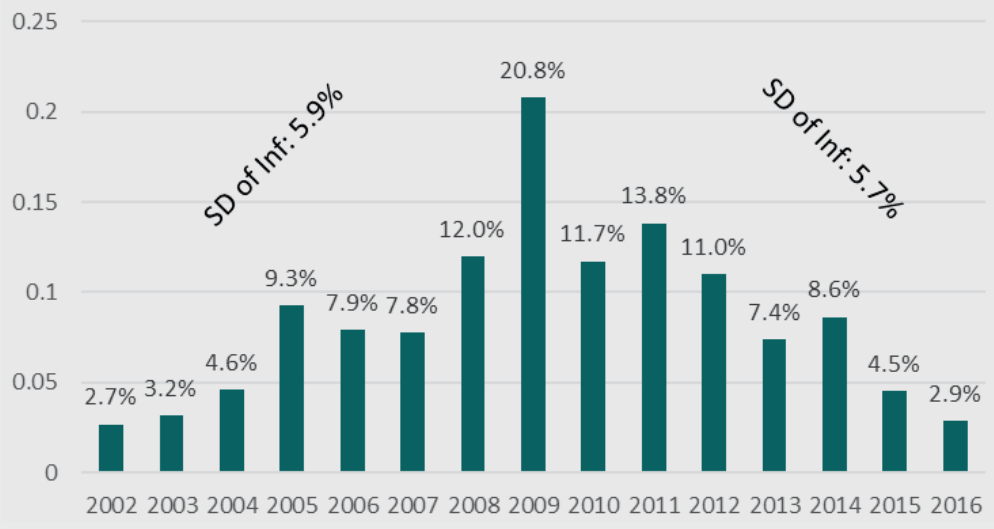
The component under consideration derives its theoretical foundation from misperception theory, which suggests that demand-side policies can be effective only if they are unanticipated. In this context, the government can achieve policy effectiveness by introducing unanticipated inflation to the public. However, rational economic agents learn such behavior of policymakers and anticipate a higher inflation rate. Consequently, policymakers have no choice but to increase inflation to the expected level, failing which the aggregate economic activity would face contraction. Such a course of action taken by policymakers renders price stability impossible and results in high inflation volatility, as measured by the standard deviation, leading to uncertainty, higher inflation, and unsound money.

The component of sound money that pertains to standard deviation is crucial. However, there are certain issues surrounding it that require discussion. Standard deviation is an appropriate measure of volatility, uncertainty, and the solidity of money only if inflation does not exhibit a trend. The inflation rate is usually measured as the growth rate of a general price level, such as the CPI or GDP deflator. Such a measure is based on another variable's change, making it the least likely to exhibit a long-term deterministic trend. However, inflation has been found to be sticky in several research studies. In such cases, inertia accompanies inflation, which makes it a trend variable over brief periods. As the sound money index takes the standard deviation of inflation for only the last five years, it is highly possible that the inflation rate has exhibited an upward or downward trend during that period. In such cases, the standard deviation of inflation is an inadequate proxy for measuring the solidity of money. Specifically, the standard deviation cannot differentiate between upward and downward inflation trends.

To elaborate on the issue, suppose there are two episodes of five years, p and q. In episode p, inflation slopes upward, while in q, it slopes downward. Suppose further that the absolute value of the slope is the same in both episodes and there is no deviation from the trend. In this case, the standard deviation of both episodes would be the same despite a significant difference between their desirability.

The inflation rate, as measured by the annual change in the Consumer Price Index (CPI) in Pakistan, provides an illustrative example of this fundamental issue. Specifically, the inflation rate rose from 2.7% in 2002 to 20.8% in 2009 before dropping to 2.9% after precisely seven years. During the first seven years of the period, the inflation rate rose by 18 percentage points, while it decreased by the same amount during the next seven years (as depicted in Figure 21). The standard deviation of inflation was 5.9% during the initial seven years, while it was 5.7% for the subsequent seven years, with 2009 serving as the reference year. Both periods would receive the same assessment concerning the soundness of money methodology regarding economic freedom. However, the fluctuation in inflation during the first period led to unsound money, while the variation in the second period contributed to sound money. Such anomalies render this component less than ideal for assessing the stability of money.

Figure 21: Inflation Rate of Pakistan: 2002-2016



c. Inflation of Most Recent Year

The inflation rate denotes the degree of alteration in the value of money. It is widely known that higher inflation rates lead to lower monetary value. Individuals hold money as a medium of exchange and a store of value. In the former, it is utilized for present purchases of goods and services, whereas in the latter, it is employed to procure commodities and services in the future. Inflationary pressures can reduce purchasing power, rendering the exchange medium ineffective and vulnerable.

The value of money is determined by its ability to purchase goods and services; hence, higher inflation rates restrict the volume of commodities and services that can be procured with a particular sum of money. In conclusion, excessive inflation endangers the soundness and stability of money.

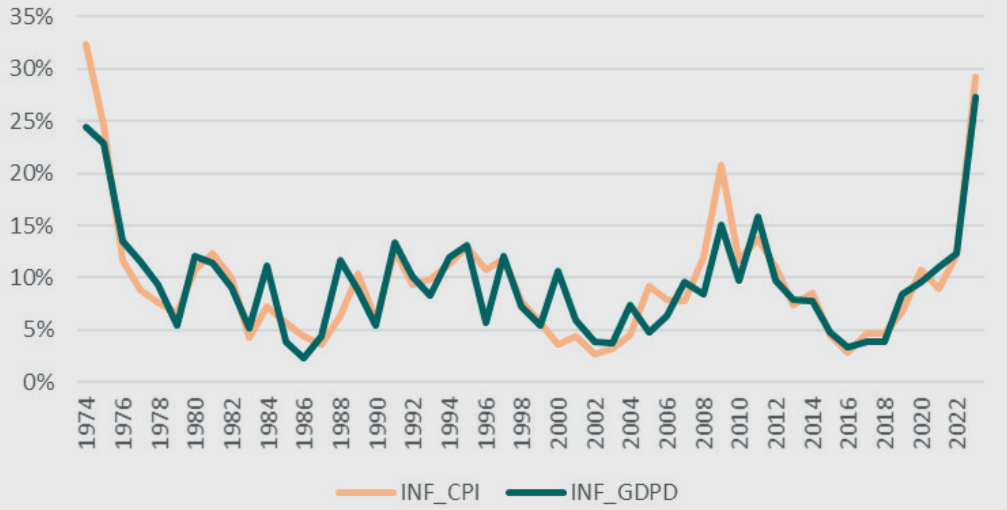
Numerous writings in economic literature underscore the various costs associated with inflation. High inflation, for instance, requires individuals to hold other assets, which may require time and energy to convert into money before engaging in shopping activities - a phenomenon referred to as the shoe leather cost. Additionally, inflation redistributes wealth between lenders and borrowers arbitrarily. High inflation also leads to tax bracket creep, a situation wherein inflation pushes taxpayers into higher tax brackets without a corresponding rise in real income. Furthermore, high inflation, especially when unanticipated, diminishes the value of inflation-non-indexed assets. The negative consequences of inflation distort economic choices and lead to a reduction in the economic freedom of individuals.

Using the most recent inflation as a measure of money's solidity presents several problems. Firstly, the methodology lacks an explicit mechanism to address deflation. Under this component, two countries would receive the same rating, one with zero inflation and the other undergoing deflation. However, deflation, much like high inflation, poses significant risks, yet the index treats deflation as positive, assigning a score of 10 for any deflation rate. Secondly, the maximum inflation rate is arbitrarily limited to 50 percent. The history of hyperinflation indicates that inflation increases exponentially once it exceeds its threshold. On the other hand, inflation remains stable around the historical average. As such, inflation could be well below 50 percent or significantly higher than 50 percent. Therefore, the 50 percent maximum inflation rate does not justify consideration as a ceiling. There is no mutually agreed-upon high value of inflation; however, an inflation rate of 50 percent per month is usually regarded as hyperinflation. Therefore, a maximum inflation rate of 50 percent per year is unjustified.

Thirdly, contemporary central banks do not target a zero percent inflation rate, as deflation is more likely to occur when inflation is near zero. According to the sound money index, a country with zero inflation is assigned the maximum rating. However, given that central banks actively avoid such a scenario, a maximum score cannot be assigned to such a case. which measures the external value of money, should be considered along with the inflation rate.

Fifth, the economic freedom index's sound money sub-index considers the Consumer Price Index (CPI) for inflation and the Gross Domestic Product (GDP) deflator only if the CPI is unavailable. Although the CPI is a better measure of inflation and indicates the value of money more accurately, considering CPI for some countries and GDP deflator for others makes global comparisons unreliable. Although, on average, CPI and GDP deflator indicate the same inflation trend, there are significant differences at times. Therefore, comparisons based on these two measures would be unreliable when they portray different pictures. For example, the inflation rate was at a historic high rate in 1974, according to CPI inflation, but in 2023, according to the GDP deflator. More surprisingly, while the CPI inflation decreased from 5.7 percent in 1999 to 3.6 percent in 2000, the GDP deflator inflation increased from 5.5 percent to 10.6 percent (Figure 22).

Figure 22: CPI Inflation and GDP Deflator Inflation Compared

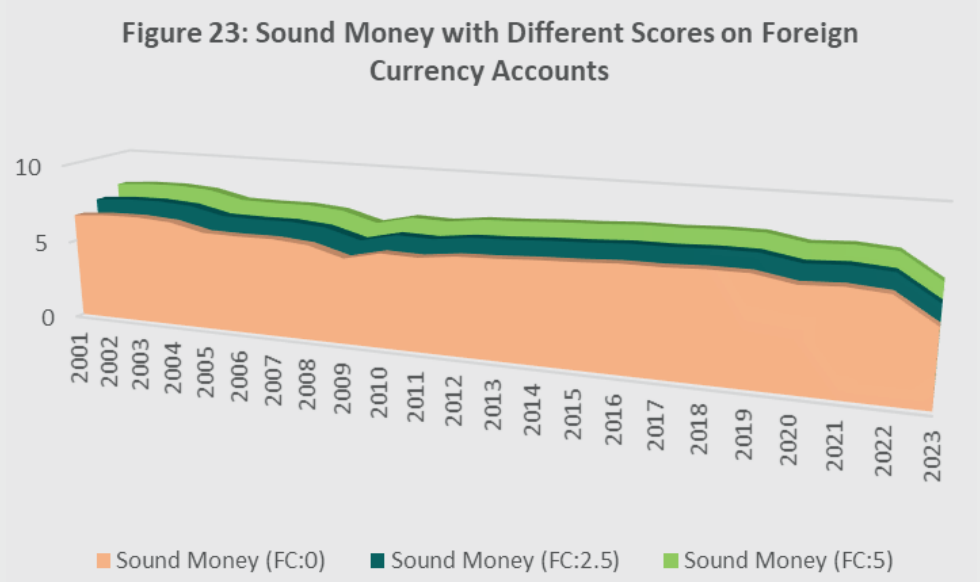


d. Permission to Have a Foreign Currency Bank Account

This aspect of sound money is dedicated to evaluating the permissibility of foreign currency accounts, domestically and abroad, without any restrictions. This criterion directly indicates economic freedom, allowing individuals and businesses to hold the currency of their choice, independent of the country's native currency. A country is awarded a maximum score of 10 when unrestricted foreign currency accounts are permitted domestically and internationally, a score of 5 if only one option is available, and a score of 0 if neither option is available.

The methodology employed for measuring economic freedom is suitable, albeit with some points requiring careful consideration. Firstly, the methodology's limitation to only three scores, namely 0, 5, or 10, may not be adequate for measuring economic freedom concerning foreign currency options. For instance, in Pakistan, exporters cannot deposit their export earnings into foreign currency accounts, although foreign currency accounts are allowed. Consequently, the assignment of a zero score would be unsuitable. The zero score is assigned to Pakistan in the Economic Freedom of the World report, as permission to have a foreign currency account is not unrestricted. However, permission to have a foreign currency account with some restrictions is better than no permissibility to have such an account. Therefore, developing a more comprehensive questionnaire to measure economic freedom concerning foreign currency options may be necessary. This approach would enable the identification of additional categories of scores based on other alternatives available. For instance, Pakistan can be assigned a score of 2.5, as foreign currency accounts are permissible, though some types of funds cannot be deposited in these accounts. Figure 23 compares different sound money ratings when foreign currency accounts have been assigned different scores.

Figure 23: Sound Money with Different Scores on Foreign Currency Accounts



Secondly, the authorization to open foreign currency accounts can adversely affect the soundness of domestic currency. The option encourages speculation against the domestic currency, which leads to currency depreciation and high inflation rates. This outcome renders economic freedom counterproductive, particularly in developing countries. While developed countries may not face such issues, they are relevant and critical in the context of developing countries.

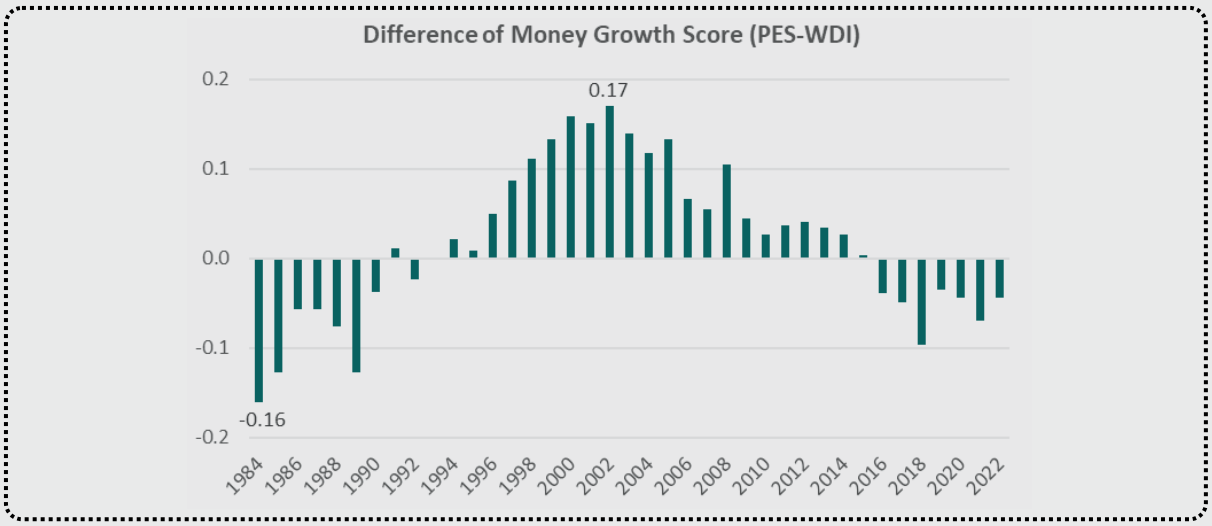
Therefore, it is crucial to consider the drawbacks of economic freedom policies to avoid exacerbating the problems they aim to address. Such considerations are essential in developing a holistic approach to economic freedom that accounts for the complexities of the global economic landscape.

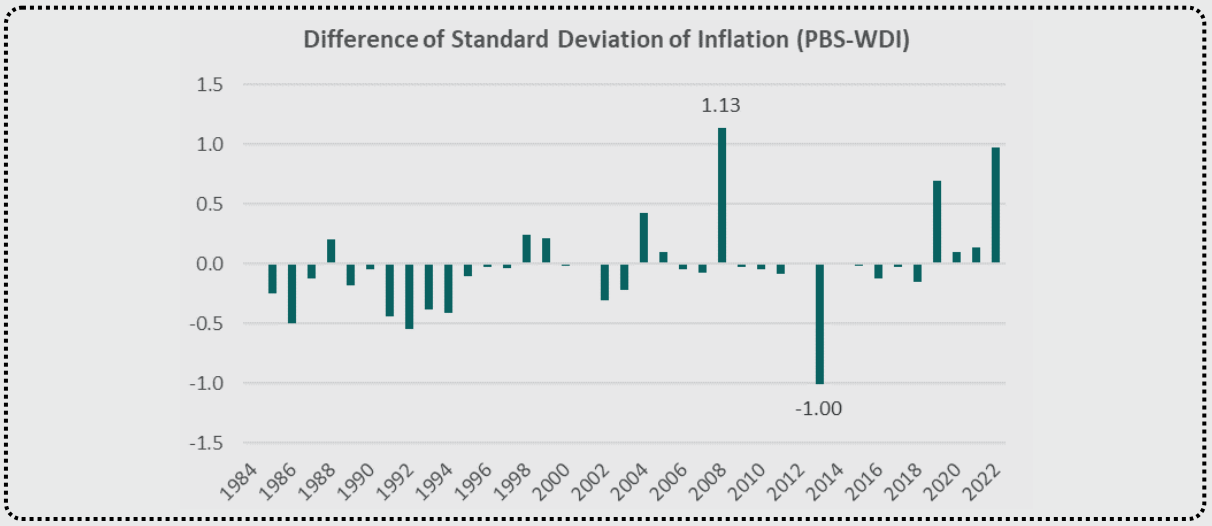
6.2 Issues in Data

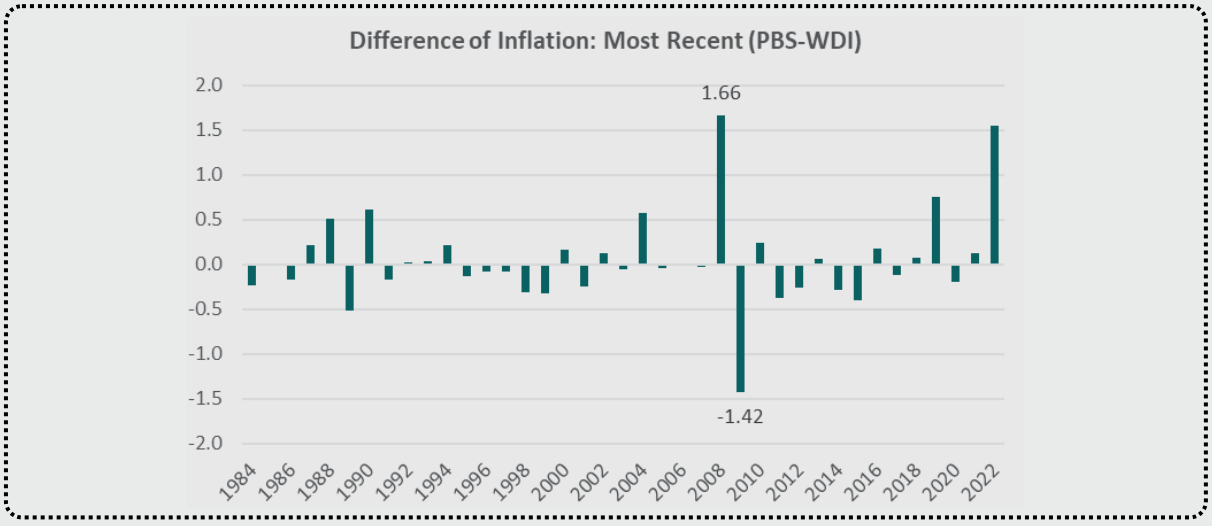
The Economic Freedom of the World report evaluates countries' economic freedom based on a ranking system. The report achieves this objective by using international data sources, particularly the World Bank's World Development Indicators, the IMF's International Financial Statistics, and the UN's National Accounts for Sound Money Index. These data sources are considered the most dependable for global comparisons. However, macroeconomic data can be subject to revisions and modifications. For instance, nominal GDP data can be subject to revision in methodology, while real GDP data can be subject to change in the base year for prices. GDP data is also subject to revision in the subsequent year following its publication. Although CPI data is not revised after its publication, the basket of goods and services remains subject to revision. Countries frequently update their data series when changes occur. However, global data repositories do not always adjust their series following data changes. As a result, the local and global data sources may exhibit different data at various times, and the difference may be significant at certain points.

We compared data from international and local sources by calculating the first three components of the sound money index. The World Bank's WDI is used as the international source, while the Pakistan Economic Survey (for GDP), the Handbook of Statistics on Pakistan Economy (for M2), and the Pakistan Bureau of Statistics (for CPI) are used as the local sources. The local source data was adjusted for changes in the base year using the most recent base. Figure 24 shows the differences in scores of the first three components of sound money calculated from the two data sets. The results indicate stark differences in scores based on different data sources. Notably, there was a huge difference at times between the inflation of the most recent year taken from different data sources. This difference was 1.66 in 2008, while it was -1.42 in 2009. The difference in the standard deviation of the inflation component was 1.13 in 2008 and -1.00 in 2013. For the money growth component, the score was higher from 1994 to 2015 when calculated from the local data source compared to the international data source and lower in other years.

Figure 24: Comparing Sound Money for Two Data Sources







PES: Pakistan Economic Survey

WDI: World Development Indicators

PBS: Pakistan Bureau of Statistics

7.CONCLUDING REMARKS

This study presents an audit of the Sound Money Index (SMI) as a crucial aspect of economic freedom in Pakistan. The research endeavors to construct the SMI ratings for the last fiscal year and historical periods while also assessing the country's monetary fragility or solidity. Furthermore, it evaluates the macroeconomic policies that contribute to the state of monetary value. The study also critically analyzes the methodology of the SMI sub-index to determine its efficacy in measuring economic freedom.

According to recent evaluations, Pakistan's economy's sound money rating for the year 2023 was 5.22, indicating a worrisome state of affairs regarding the nation's sound money and economic freedom. Specifically, this score is the lowest achieved by the country in the last four decades, and the index has also exhibited a significant decline compared to previous ratings, with a decrease of over 20 percent. Furthermore, the average rating for sound money has remained below seven over the last two decades. Notably, the sound money rating increased when the economy experienced a recession due to demand contraction, whereas it decreased during stagflation. In addition, except for the last fiscal year, 2022-23, the sound money index did not exhibit high fluctuations.

The fragility of monetary value has remained a persistent issue throughout history, with the value of money consistently depreciating over time. The consumer price index provides evidence of this trend, with the value of money against a representative basket of goods and services decreasing by a factor of one-tenth between 1974 and 2001 and by a factor of one-seventieth between 1974 and 2023. The Pakistani rupee (PKR) has also suffered a similar fate, with its value against foreign currencies decreasing significantly. For instance, in 1974, one Pakistani rupee was equivalent to one-tenth of a United States dollar (USD). However, by 2001, this value had decreased to a mere 1.7 percent; by 2023, it had further declined to a meager 0.4 percent. In light of these trends, our study reveals an overall depreciation of Pakistan's currency, which has lost its value 68 times against goods and services that a typical consumer purchases and 25 times against the US dollar.

The currency's depreciation has been primarily attributed to the high growth rate of money above GDP growth. From 1974 to 2023, real GDP increased ten-fold, while nominal GDP increased 644-fold. However, monetary growth surpassed both rates, with broad money increasing more than a thousand times during this period. The fast monetary growth can be attributed to fiscal slippages, and the State Bank of Pakistan (SBP) continued to supply excess liquidity to banks even after it was granted autonomy in January 2022 through an Act of Parliament. The banks utilized this excess liquidity to lend to the government.

Moreover, the SBP's setting of the operating target for its instrument does not align with the Taylor rule or even satisfy the Taylor principle. Even if the central bank commits to a Taylor-type rule for setting a target for interest rates, it cannot achieve the desired monetary policy objectives. The analysis has found that interest rates are ineffective in controlling inflation and exchange rates while significantly negatively affecting output. Fiscal slippages and the government's fixation on exchange rate overvaluation have contributed significantly to Pakistan's monetary fragility.

The evaluation of the methodology employed to measure sound money reveals that while the four components used for rating countries on soundness have their merits, they are not without issues. Specifically, the most recent year's inflation and the money growth components attribute a maximum score to zero inflation or deflation, which contradicts the preferences of almost all central banks that aim to maintain positive inflation. Furthermore, the standard deviation of inflation is an accurate measure of money soundness only in the absence of inflation exhibiting a trend. However, as a sticky phenomenon, inflation demonstrates a trend, particularly for short periods. In such cases, the sound money index treats high inflation and disinflation episodes equally desirable. Finally, the rating schema for having a foreign currency account is too inflexible and narrowly defined, resulting in a high degree of measurement error in the rating assigned to countries.

7.1 Suggestions to Improve the Solidity of Money

To ensure the preservation of the value of money, a comprehensive reform agenda is required rather than mere partial interventions. Implementing measures to reform monetary, fiscal, and exchange rate policies is imperative. In particular, the following recommendations can enhance the stability of money in Pakistan.

1. There exists a pressing need to reassess the current monetary-fiscal policy mix. Presently, the State Bank of Pakistan (SBP) independently sets a target for its operating instrument, the policy rate, with the objective of controlling. Conversely, the fiscal branch has failed to produce a primary surplus on a sustainable basis. This policy blend, wherein both policies are active, in Eric Leeper's[18] terminology, results in rising debt coupled with imperfect control over inflation. SBP conducts long-tenor and large-amount injections through open market operations in an attempt to maintain the money market rate on target, as necessitated by substantial government borrowing from the banking system. Consequently, this increase in money supply dilutes the impact of the monetary policy stance indicated by the policy rate. Thus, SBP must re-evaluate its operating instrument and exercise its autonomy to restrict monetary expansion. Pursuing a strategy of setting the policy rate to contain inflation while simultaneously expanding the money supply to achieve this target in response to government borrowing is counterproductive. A suitable monetary-fiscal coordination mechanism can be designed to come out of this high inflation and high debt trap.

18. Leeper (2023).

2. It is crucial for fiscal policy to comply with the Fiscal Responsibility and Debt Limitation Act. Creating an accountability mechanism for the government's failure to comply with the Act can help limit the government's budget deficit and financing obligations. However, it is important to note that controlling the fiscal deficit is not an easy task, as debt servicing exceeds the federal government's net resources. In fact, the federal government is unable to achieve a primary fiscal surplus. Additionally, an incumbent government can only partially control debt servicing since interest payments on existing debt are not affected by current fiscal policy decisions. Therefore, a comprehensive reform agenda is necessary to minimize the government's footprint, improve coordination between fiscal and monetary policies, make debt management more efficient, and create an enabling environment for sustained economic growth, providing opportunities for all.

3. The current exchange rate of PKR 275 per US dollar seems to be balanced with its equilibrium value. Therefore, it is an ideal time for the State Bank of Pakistan to allow the exchange rate to adjust to inflation in the future. This action will help reduce the trade deficit and minimize the possibility of currency speculation. This measure will make economic conditions more stable, reducing the risk of significant currency depreciation and high inflation. There should be a constitutional provision that limits keeping the exchange rate overvalued for a long time. An appropriate indicator of over-valuation can be developed in this regard.

ANNEX:

Methodology of Sound Money Index

a. Money Growth

This component measures the average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years. Countries where growth of the money supply greatly exceeds growth of real output receive lower ratings. The broad money supply (basically what used to be called M2) is used to measure the money supply.

The rating is equal to:

$$(Vmax - Vi) / (Vmax - Vmin) \times 10.$$

Vi represents the average annual growth rate of the money supply during the last five years adjusted for the growth of real GDP during the previous ten years. The values for Vmin and Vmax are set at 0% and 50%, respectively. Therefore, if the adjusted growth rate of the money supply during the last five years is 0%, indicating that money growth is equal to the long-term growth of real output, the formula generates a rating of 10. Ratings decline as the adjusted growth of the money supply increases toward 50%. When adjusted annual money growth is equal to (or greater than) 50%, a rating of 0 results.

b. Standard Deviation of Inflation

This component measures the standard deviation of the inflation rate over the last five years. Generally, the GDP deflator is used as the measure of inflation for this component. When these data are unavailable, the Consumer Price Index is used.

The following formula is used to determine the 0-to-10 scale rating for each country:

$$(Vmax - Vi) / (Vmax - Vmin) \times 10.$$

Vi represents the country's standard deviation of the annual rate of inflation during the last five years. The values for Vmin and Vmax are set at 0% and 25%, respectively. This procedure will allocate the highest ratings to the countries with the least variation in the annual rate of inflation. A perfect 10 results when there is no variation in the rate of inflation over the five-year period. Ratings will decline toward 0 as the standard deviation of the inflation rate approaches 25% annually.

c. Inflation: Most Recent Year

Generally, the Consumer Price Index is used as the measure of inflation for this component as it is often available before the GDP deflator is available. When these data are unavailable, the GDP deflator inflation rate is used.

The 0-to-10 country ratings are derived by the following formula:

$$(Vmax - Vi) / (Vmax - Vmin) \times 10.$$

Vi represents the rate of inflation during the most recent year. The values for Vmin and Vmax

are set at 0% and 50%, respectively: the lower the rate of inflation, the higher the rating. Countries that achieve perfect price stability earn a rating of 10. As the current annual inflation rate moves towards 50%, the rating for this component moves toward 0. A 0 rating is assigned to all countries with an inflation rate of 50% or more.

d. Foreign Currency Bank Accounts

When foreign-currency bank accounts are permissible without any restrictions both domestically and abroad, the rating is 10; when these accounts are restricted, the rating is 0. If foreign currency bank accounts were permissible domestically but not abroad (or vice versa), the rating is 5.

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ABOUT AUTHOR:

Dr. Wasim Shahid Malik specializes in macroeconomics, monetary policy, and applied econometrics. He currently works for an EU-funded PFM project. Before this, he held various esteemed positions such as SBP Memorial Chair Professor at the University of Peshawar, SBP Memorial Chair Professor at the University of Balochistan, Associate Professor at Quaid-i-Azam University Islamabad, and Research Economist at PIDE. For the past 15 years, he has worked as a consultant with renowned organizations such as the World Bank Group, Adam Smith International, and GIZ. He has also provided training services to reputable institutions including the Pakistan Institute for Parliamentary Services (PIPS) and the National Institute of Banking and Finance (NIBAF).

He earned a Ph.D. in Economics from the Pakistan Institute of Development Economics, a Master of Applied Science in Economics from the Applied Economics Research Centre Karachi, and a Master of Economics from the University of Punjab.

Professor Malik has authored many research papers in national and international journals with a good reputation. His research interests revolve around monetary policy, inequality, and asset prices. He has been teaching both graduate and undergraduate courses in Macroeconomics and Time Series Econometrics at various universities.

In this spectacular paper, Dr. Wasim Shahid delivers a vigorous analysis, offering a clearly written and compelling exploration of the reasons behind the failure of traditional banking tools in Pakistan. It is not uncommon for nations to introduce good reforms for positive impact, but long term implementation remains undermined.

Delve into the author's fascinating discussion on the 2022 reforms and their potential long-term impact. He notes that the State Bank of Pakistan has shown improvement in performance but is it nearly enough? Bad fiscal policy can undermine the ability of the Central Bank and put it in a quagmire of bad choices. The author recognizes that the key challenge is the successful implementation of the Fiscal Responsibility and Debt Limitation Act.

Fred McMahon
Fraser Institute Resident Fellow
Dr. Michael A. Walker Chair
Economic Freedom Studies

First Floor, 15-E, Rehmat Center, Jinnah Ave, Block D, Blue Area,
Islamabad Capital Territory 44000

Tel: +92 (51) 831 4339

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