# STRATEGIC MANAGEMENT OF PAKISTAN'S FOREX RESERVES: BOOSTING EXPORTS AND INVESTMENT FLOWS

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# Acronyms

| | |
|---|---|
| ARDL | Autoregressive Distributed Lag |
| BDT | Bangladeshi Taka |
| BE&OE | Bureau of Emigration and Overseas Employment |
| BOP | Balance of Payment |
| CAGR | Compound Annual Growth Rate |
| CAT | Current Account Transaction |
| ECT | Error Correction Term |
| FATF | Financial Action Task Force |
| FBR | Federal Board of Revenue |
| FCA | Foreign Currency Account |
| FDI | Foreign Direct Investment |
| FERA | Foreign Exchange Regulation Act |
| FOREX | Foreign Exchange |
| FSR | Financial Stability Review |
| FY | Fiscal Year |
| GBP | Great British Pound |
| GDP | Gross Domestic Product |
| GFC | Global Financial Crisis |
| ILO | International Labor Organization |
| IMF | International Monetary Fund |
| ITI | Industrial Training Institutes |
| LC | Letter of Credit |
| MLC | Marshall-Lerner Condition |
| MTO | Money Transfer Operators |
| NPC | Naya Pakistan Certificate |
| NRE | Non-Resident External |
| NRI | Non-Resident Indians |
| NRO | Non-Resident Ordinary |
| NRP | Non-Resident Pakistani |
| PKR | Pakistani Rupee |
| PMYSDP | Prime Minister Youth Skill Development Program |
| RDA | Roshan Digital Account |
| REER | Real Effective Exchange Rate |
| RTB | Retail Treasury Bond |
| SBP | State Bank of Pakistan |
| SDG | Sustainable Development Goals |
| SEIP | Skills for Employment Investment Program |
| SEZ | Special Economic Zones |
| T-Bill | Treasury Bill |
| TVET | Technical & Vocational Education & Training |
| USD | US Dollar |
| WEBD | Wage Earner Development Bond |

# Executive Summary

This report presents a comprehensive analysis of Pakistan's foreign exchange (FOREX) reserves and their management in the context of the country's broader economic stability. Foreign exchange reserves are vital for safeguarding the economy, particularly in a developing country like Pakistan, which faces ongoing balance of payments challenges. The country's reserves have fluctuated significantly, largely due to external factors such as global oil price volatility and internal issues like political instability. For instance, Pakistan's forex reserves dropped dramatically from US$ 23.5 billion in 2016 to a critically low US$ 11.3 billion in 2023, barely covering three weeks of imports. These fluctuations reflect deep-rooted external imbalances: a persistent trade deficit driven by a narrow export base (heavily reliant on textiles), rising imports of raw materials and consumer goods, a sharply depreciating rupee, and remittance inflows that, despite a 6.1% CAGR, remain modest compared to regional peers like India and the Philippines. These pressures emphasize the need for a robust and dynamic reserves-management framework to cushion against oil-price spikes, political instability, and other external shocks.

Although remittances have proven resilient, they remain insufficient as a standalone buffer for Pakistan's reserves. Measures such as the Roshan Digital Account (RDA) and the Naya Pakistan Certificates (NPCs) have helped increase remittances and attract foreign investment, but their impact is concentrated in sectors like real estate, with limited influence on industrial and agricultural growth. To better leverage diaspora capital, the report recommends dynamically adjusting the yields on Naya Pakistan Certificates to align with domestic monetary policy, reducing remittance transfer fees, and channeling Roshan Digital Account deposits into high-impact areas, such as Special Economic Zones (SEZs) and agro-processing industries. Additionally, simplifying the process for opening Corporate Foreign Currency Accounts and introducing temporary restrictions on discretionary foreign currency outflows, such as non-business foreign travel, when reserves dip below critical thresholds, would further bolster capital inflows and preserve foreign exchange buffers.

The management of Pakistan's foreign exchange reserves is further complicated by the volatility of the Pakistani Rupee. The country has alternated between fixed and floating exchange rate systems, contributing to significant depreciation in recent years. This depreciation has exacerbated trade deficits, inflated import costs, and weakened economic stability. A more strategic and stable approach to forex reserve management is essential to protect the currency and ensure resilience in the face of external shocks. Strengthening forex management is crucial to preventing financial crises, fulfilling external debt obligations, and maintaining investor confidence.

On the trade front, Pakistan must modernize the Federal Board of Revenue's customs valuation mechanisms and digitize payment and clearance systems to reduce the trade gap. Export diversification is critical and should be accelerated beyond textiles by identifying and nurturing new sectors with growth potential. A managed-float exchange-rate regime or a "peg-and-revalue" model, anchored to the Real Effective Exchange Rate

(REER), would help mitigate the rupee's erratic fluctuations. This model would preserve export competitiveness and protect against imported inflation. Additionally, regular assessments of the Marshall-Lerner condition should be conducted to ensure that currency depreciation leads to net export gains.

Taken together, the report outlines a series of measures aimed at improving Pakistan's forex management and external resilience. These include linking reserve management triggers to objective REER thresholds to stabilize reserves, optimizing remittance channels by revising transfer fees and incentivizing high-impact investments through the Roshan Digital Account, deploying calibrated capital controls to strengthen capital inflows, especially during periods of low reserves, and reforming trade and investment infrastructure to facilitate export diversification and improve the competitiveness of the industrial and agricultural sectors. By proactively addressing these structural vulnerabilities, Pakistan can enhance its forex reserves, improve reserve coverage ratios, and lay the foundation for sustainable, export-led growth. These strategic measures will better insulate the economy from future external shocks and help establish a more stable path toward long-term financial stability.

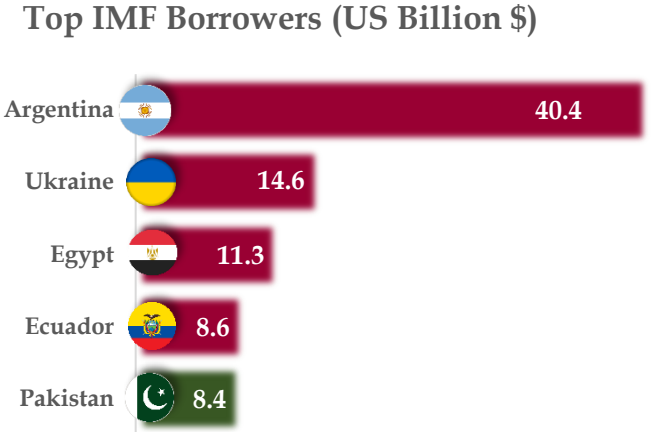
# 1. Introduction

In the dynamic landscape of global finance, foreign exchange reserves represent a cornerstone of economic stability and resilience for countries around the world. Held by central banks, these reserves are more than mere accumulations of foreign currencies; they are strategic assets that safeguard a nation's economic interests against external shocks and uncertainties. Effective management of foreign exchange reserves is, therefore, a critical function of central banking, demanding a nuanced understanding of the global financial market and its myriad risks. The essence of sound foreign exchange reserve management lies in its ability to balance and align with a nation's specific economic needs and policies. It encompasses a proactive approach to ensure that adequate official public sector foreign assets are available, accessible, and effectively controlled by the authorities.

The primary objectives of this management are multifarious, yet interconnected. Firstly, it aims to bolster and sustain confidence in the national policies governing monetary and exchange rates, including interventions to support the national currency. Secondly, it seeks to diminish external vulnerabilities by creating a buffer capable of absorbing shocks during periods of domestic or international distress, particularly when access to borrowing is constrained. This aspect is vital in instilling market confidence that a nation can meet its external obligations effortlessly. Furthermore, effective reserve management supports the government's foreign exchange needs, encompassing essential imports and international debt obligations. Last but not least, foreign exchange reserves significantly influence a country's exchange rate dynamics as lower levels of reserves put downward pressure on the local currency, which induces inflation and exposes businesses to exchange rate risks.

A pertinent illustration of these principles can be seen in the case of Pakistan's economy. Pakistan has long grappled with a Balance of Payment (BoP) crisis, primarily driven by an escalating trade deficit. This ongoing economic challenge has necessitated repeated interventions through IMF programs, positioning Pakistan among the top five recipients of IMF loans (as shown in Figure 1) with the highest number of such programs in South Asia. The persistent BoP issues underscore the critical need for astute foreign exchange management to maintain a healthy balance between foreign currency inflows and outflows.

*Figure 1: Countries with the Highest IMF Debt*

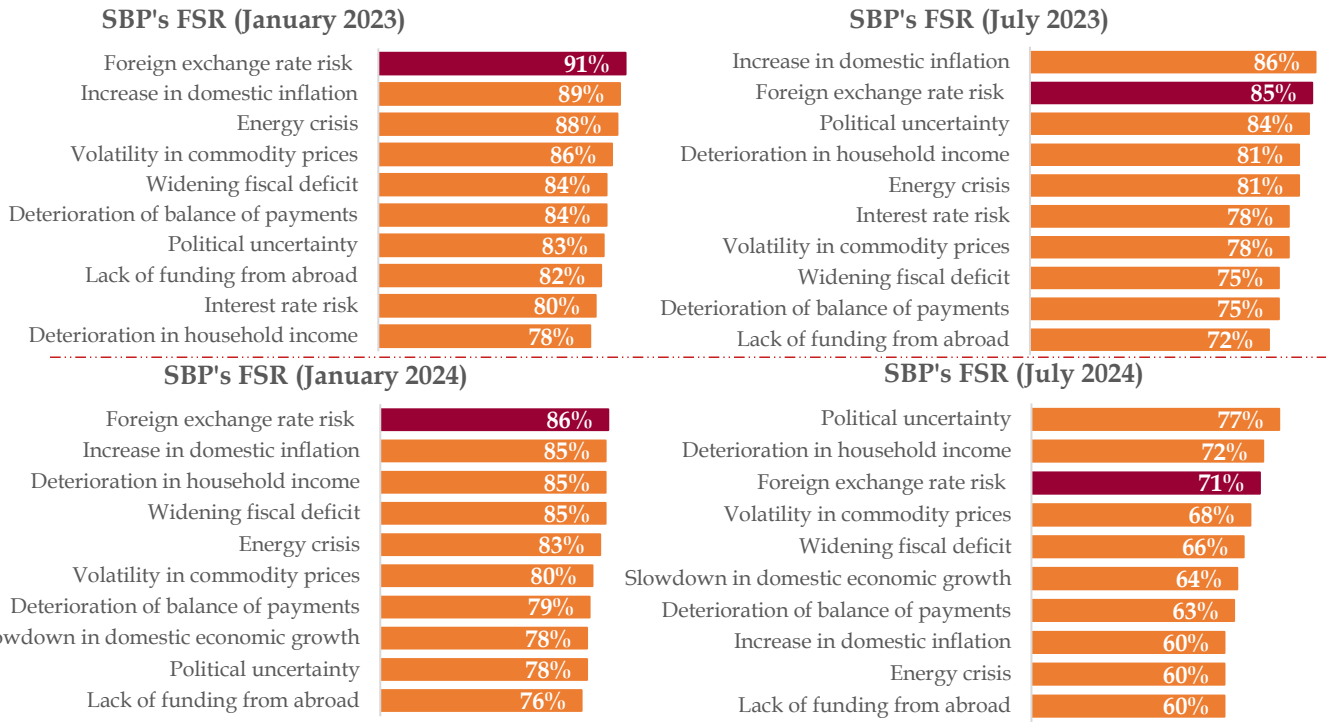



*Source: International Monetary Fund (IMF)*
*Note: Values are updated as of January 2025*

The recent decline of the Pakistani Rupee, making it among Asia's weakest currencies, has raised significant concerns about the nation's economic stability. It is further highlighted by the State Bank of Pakistan's (SBP) latest Systematic Risk Survey findings.

The survey has consistently ranked 'Foreign Exchange Risk' as the predominant risk facing the country, followed closely by 'Increase in Domestic Inflation Risk'. This enduring perception of risk, maintained over 18 months, signals persistent instability in the market. Therefore, it is imperative to recognize that robust foreign exchange reserve management is not just a fiscal necessity but a strategic imperative. It is a key element in stabilizing and reinforcing a nation's currency, reducing vulnerabilities, and fostering an environment of economic certainty and growth. This report delves into the intricacies of foreign exchange management, with a particular focus on its implementation, challenges, and strategic importance in the context of both global and national economic landscapes.

*Figure 2: Top Risks Identified by SBP's Systematic Survey Risk*



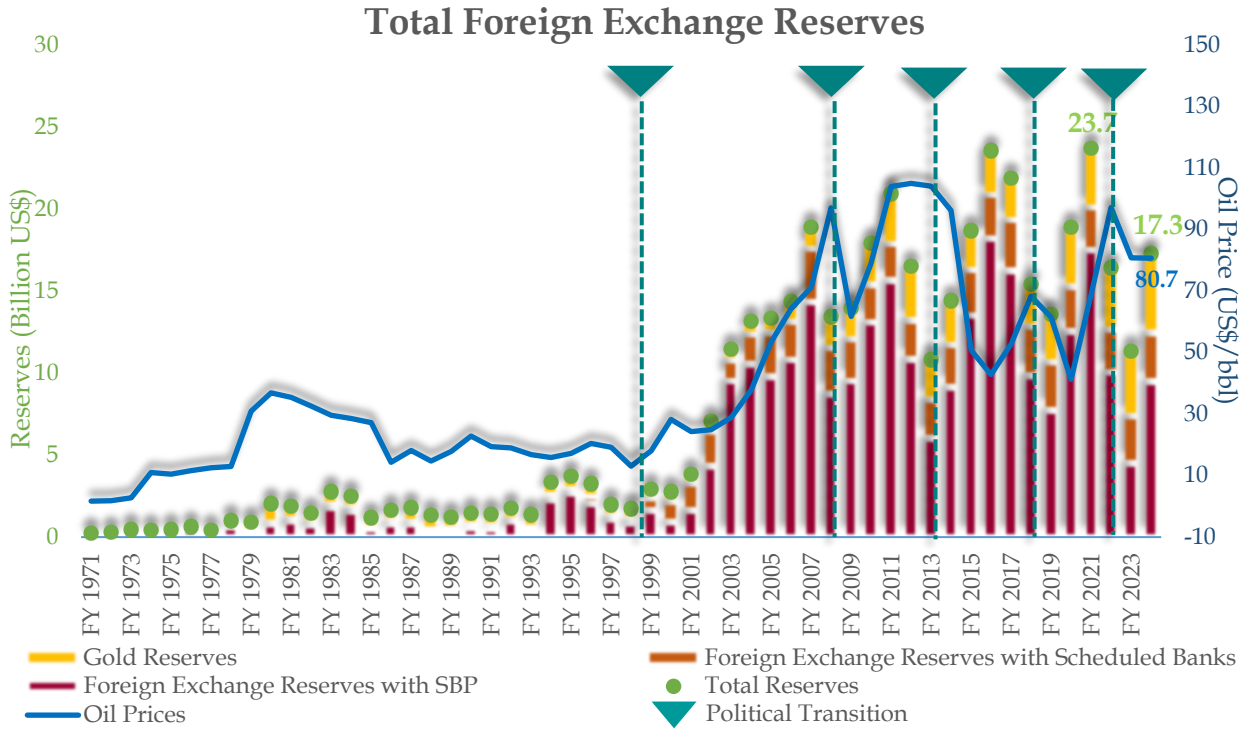

*Source: State Bank of Pakistan (SBP)*

## 2. FOREX Reserves and External Sector

Pakistan's foreign exchange reserves have experienced significant volatility over the years, reflecting the country's economic shifts and external factors. In 1960, reserves were just $0.2 billion, but by 2002, they had risen to $5.4 billion, driven largely by a sharp increase in remittances. The reserves peaked at $23.5 billion in 2016, marking a period of relative stability.

The fluctuation in the forex reserves is evident despite periods of growth. After peaking in 2016, reserves declined to $15.4 billion in 2018, before recovering to $18.9 billion in 2020, driven by increased remittances during the COVID-19 pandemic. However, reserves were depleted significantly, reaching an alarmingly low level of $11.3 billion in 2023, insufficient to cover even three weeks' worth of imports. In response, the government implemented measures, such as banning imports of over 500 items, restricting letters of credit (LCs), and introducing cash margin requirements. These steps helped curb import growth and conserve crucial foreign exchange reserves. By FY2024, Pakistan's liquid net forex reserves had rebounded to $17.3 billion, with the State Bank of Pakistan's (SBP) holdings rising to $9.5 billion.

*Figure 3: Pakistan's Foreign Exchange Reserves (FY1971-FY2024)*




*Source: State Bank of Pakistan (SBP)*

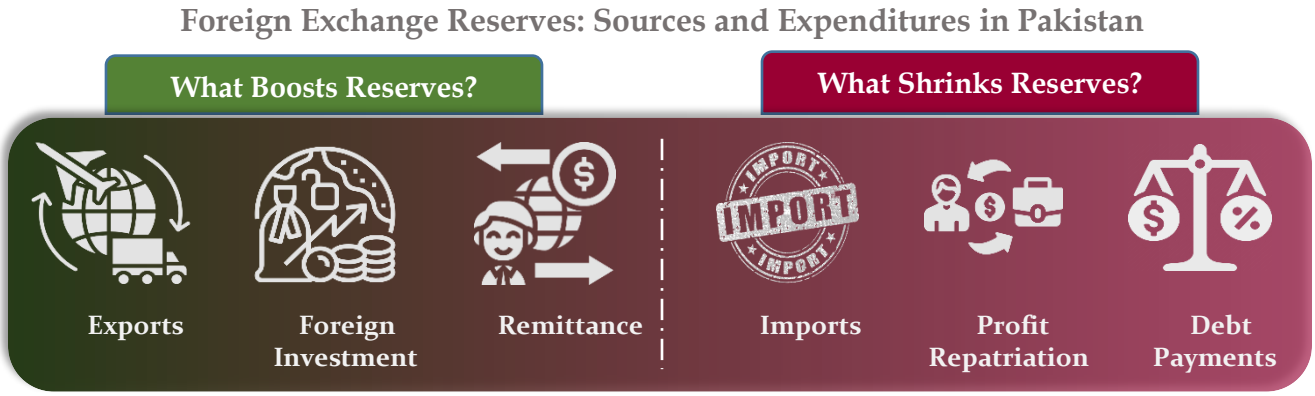
Oil prices, as a key component of imports, have a significant impact on Pakistan's economy, particularly in terms of foreign exchange reserves. As illustrated by the blue trend line in the graph above, rising oil prices place pressure on Pakistan's foreign

reserves by increasing import costs. The petroleum group represents roughly 30% of the total import bill and consumes approximately 55-65% of export earnings. For instance, the spike in oil prices in 2008, 2012-13, and 2022 was accompanied by a sharp decline in reserves, highlighting the vulnerability of foreign reserves to fluctuations in oil prices and the broader external factors that influence them.

Additionally, a noteworthy trend is the decline in foreign exchange reserves during political transitions, which often correlates with the political cycle. Political changes tend to erode investor confidence, leading to capital flight, stock market withdrawals, and a reduction in foreign inflows. This uncertainty surrounding economic policies during political transitions causes both domestic and foreign investors to adopt a more cautious approach, further straining reserves (Dogar and Khalid, 2024).

The decline in reserves has placed significant pressure on exchange rate stability, inflation, and the overall economic landscape. To fully understand these fluctuations, it is crucial to examine the key factors influencing reserves beyond exchange rate movements (Flow Chart 1). The primary sources of foreign exchange inflows in Pakistan include export proceeds, foreign direct investment (FDI), and remittances (Bashir et al., 2014).

*Flow Chart1: Understanding FOREX Reserves Flow in Pakistan*



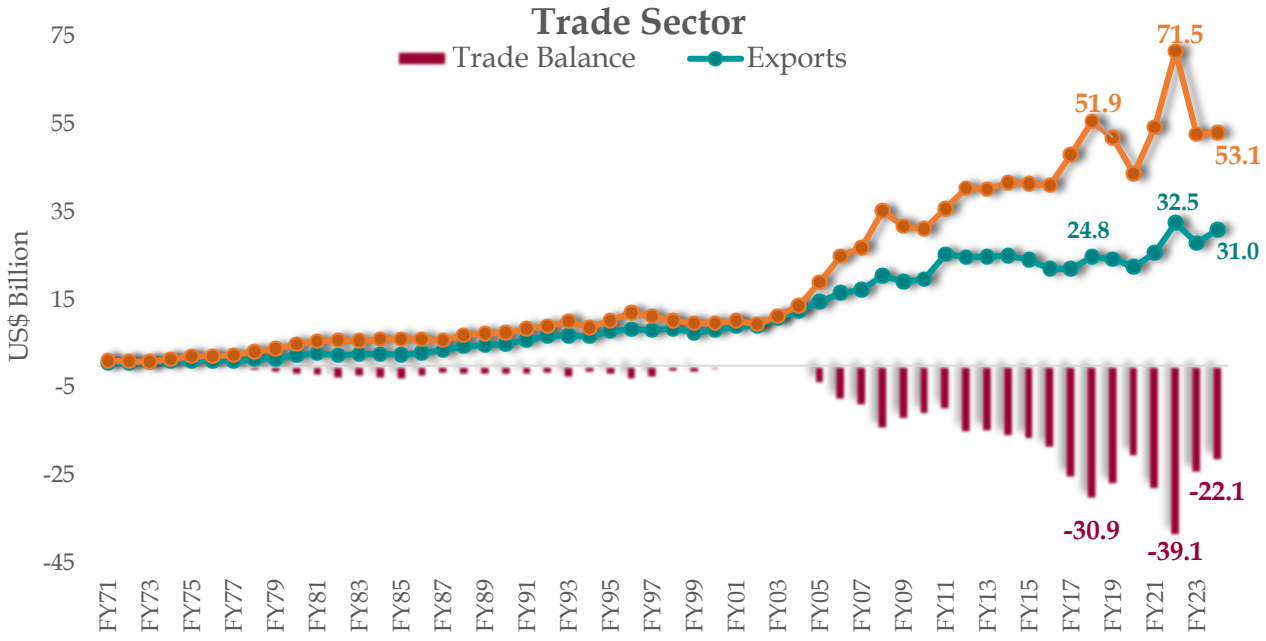

## 2.1. Trade Sector

Pakistan's trade dynamics have experienced significant shifts over the years, with a growing disparity between exports and imports. Until FY 2002, the difference between the country's exports and imports of goods was relatively small. However, the gap widened, resulting in a soaring trade deficit. Various factors, including the limited diversification of exports and an increasing reliance on imports, have fuelled this growing imbalance. The figure below shows Pakistan's trade in goods for the FY 1971-FY 2024. The value of Pakistan's exports crossed $1.0 billion in FY 1974 for the first time. Pakistan's exports reached a value of $31.0 billion in FY 2024. Since trade liberalization, exports' compound annual growth has been 5.7% during FY 02-FY 24. Pakistan's exports have been plagued with a narrow base and stagnant growth over the past several years. Over the past two decades, Pakistan's export composition has shown limited diversification. The share of semi-manufactured goods declined significantly from 14%

to 7%, primary product exports fluctuated between 11% and 22%, reflecting dependence on raw materials for exports during FY02-24. Meanwhile, manufactured goods remained dominant, with a decline from 75% to 71%, highlighting Pakistan's continued reliance on traditional exports like textiles, without significant expansion into high-value industries.

On the contrary, Pakistan's imports of goods have grown with a CAGR of 8.2% over the same period, implying imports the expansion has been 2.5% more than exports. Pakistan's imports of goods reached a value of $53.1 billion in FY 2024. The import restriction imposed by the government can explain the recent decline in imports. The share of capital goods in imports has declined from 28% to 12%, whereas the share of raw materials has increased from 61% to 69%, and consumer goods have increased from 11% to 21% during FY02-FY24.

*Figure 4: Pakistan's Trade (FY1971-FY2024)*




*Source: State Bank of Pakistan (SBP)*

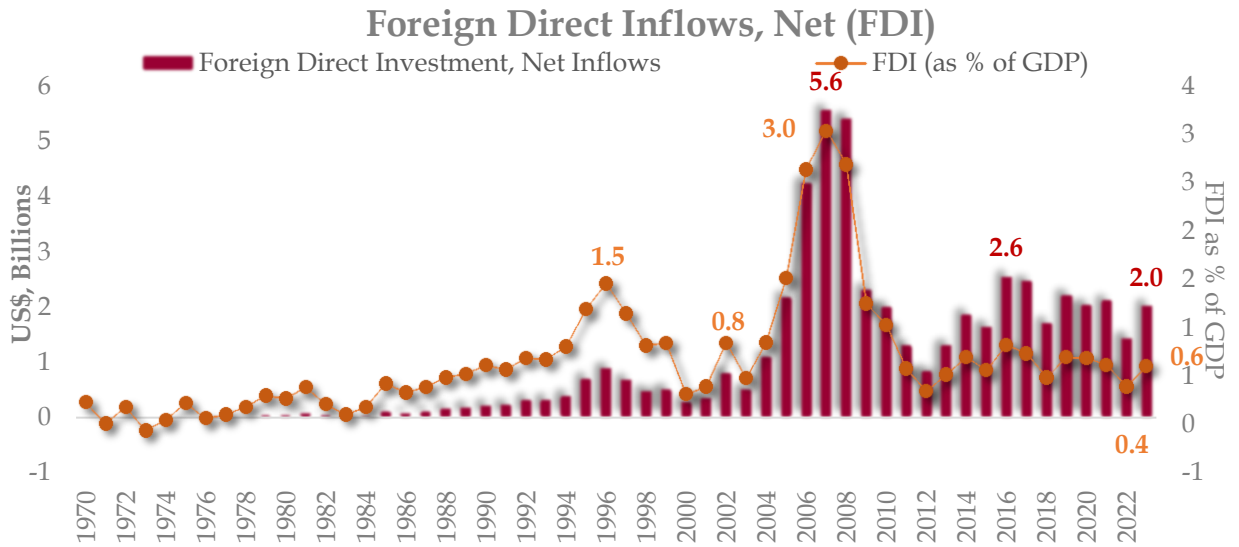
## 2.2. Foreign Direct Investment (FDI) Inflows

Foreign Direct Investment (FDI) plays a crucial role in the economic development of a country, serving as an important source of capital, technology, and expertise. Until 2001, Pakistan's FDI net inflows remained below $1.0 billion. Over the years, these inflows have experienced fluctuations, with periods of growth followed by notable declines. From 1970 to 1996, Pakistan's net FDI inflows increased from $0.02 billion to $0.92 billion. The country reached its peak FDI inflows of $5.59 billion in 2007, but the flow of FDI has since remained volatile, dropping to just $1.82 billion in 2023.

Two significant periods of FDI inflows occurred between 1990-1996 and 2006-2008. The growth in FDI during the 1990s can be attributed to the adoption of liberal foreign

exchange policies, including full convertibility of current account transactions, partial convertibility for capital account transactions, and the removal of restrictions on foreign equity participation (up to 100%), profit repatriation, and currency holdings (Akhtar et al., 2017). The mid-2000s FDI surge was driven by privatization efforts and the opening of new sectors, such as services, to foreign investment. However, political instability and security concerns led to a sharp decline in FDI in subsequent years. Since 2009, Pakistan's average FDI as a percentage of GDP has remained low at 0.67%, significantly lower than regional counterparts such as Bangladesh (0.87%), India (1.72%), China (2.12%), and Vietnam (4.76%). Additionally, while Vietnam's FDI is export-focused (mainly in manufacturing), Pakistan's FDI is largely consumption-driven, with significant investments in sectors like electricity, gas, steam, air conditioning, financial and insurance activities, information and communication, and wholesale and retail trade.

*Figure 5: Pakistan's Foreign Direct Investment (FDI), Net Inflows (1970-2023)*



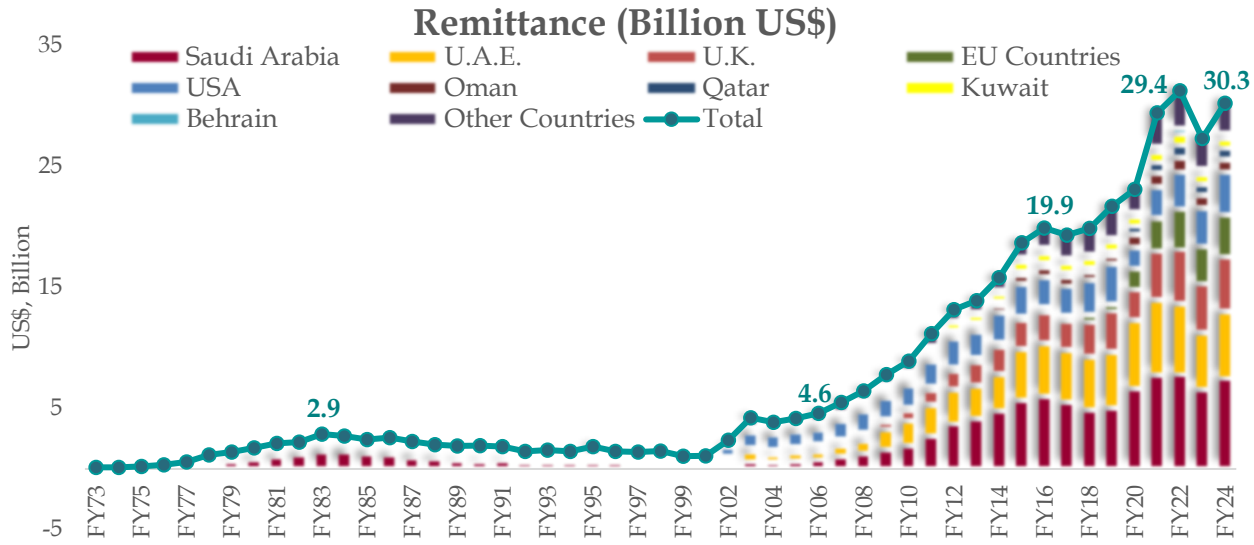

*Source: World Bank (WB)*

## 2.3. Remittances

Workers' remittances have played a crucial role in the foreign exchange reserves of many countries. The figure below illustrates the remittances received by Pakistan from FY 1973 to FY 2024. Between FY 1976 and FY 2006, remittances in Pakistan remained below $5.0 billion. However, from FY 2007 to FY 2024, remittances surged from $5.5 billion to $30.3 billion. On average, the largest remittance inflows come from Saudi Arabia (29.2%), the

UAE (15.0%), the US (12.7%), and the UK (11.5%). The graph below highlights the trend of remittances and their sources.

*Figure 6: Pakistan's Personal Remittances, Received (FY 1973-FY 2024)*




*Source: State Bank of Pakistan (SBP)*

Pakistan recorded one of the highest Compound Annual Growth Rates (CAGR) of 6.1% for remittances during the 2013-2023 period. However, the total remittances received remained lower than those of India, Mexico, the Philippines, and China. In 2021-22, Pakistan had 8.9 million overseas workers, yet its remittances per expatriate were lower than in Mexico, the Philippines, and India, though higher than in Indonesia and Sri Lanka. Similarly, while Pakistan outperformed India and China in per capita remittances, it lagged behind Mexico, Thailand, and the Philippines.

*Table 1: Personal Remittances, Received - Selected Competitor Countries (2003-2023)*

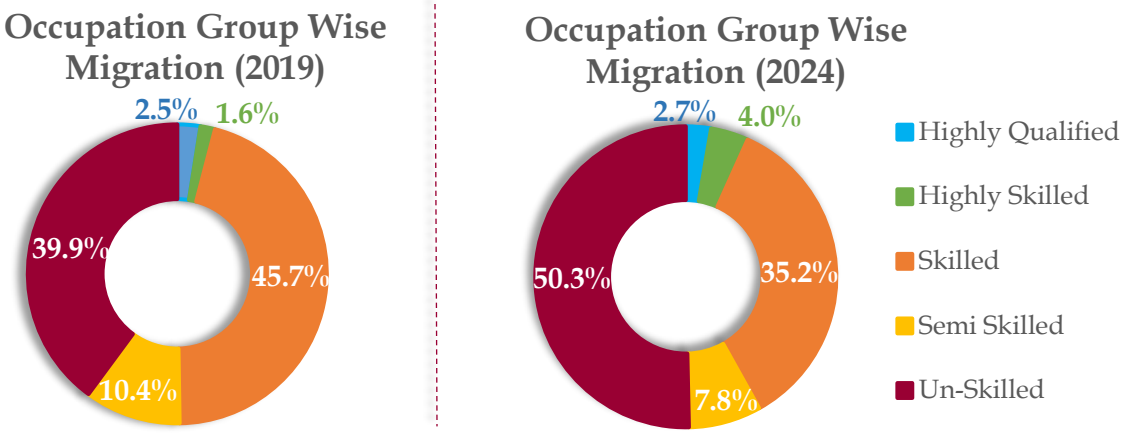
| Amount in US$ Million | | | | | | | |
|---|---|---|---|---|---|---|---|
| Country | Remittance | | | Remittance CAGR (%) | Remittance CAGR (%) | Remittance per Capita 2023 | Remittance Per Expatriate |
| | 2003 | 2013 | 2023 | 2003-2013 | 2013-2023 | | |
| Philippines | 10,239.0 | 26,716.8 | 39,096.9 | 10.1 | 3.9 | 340.3 | 16,779.8 |
| Thailand | 1,607.4 | 6,584.9 | 9,692.0 | 15.1 | 3.9 | 136.5 | 9,703.0 |
| Mexico | 16,653.7 | 23,976.1 | 66,237.8 | 3.7 | 10.7 | 510.5 | 5,914.2 |
| China | 4,625.3 | 17,790.1 | 29,110.3 | 14.4 | 5.0 | 20.6 | 4,626.2 |
| India | 20,999.2 | 69,970.4 | 119,526.1 | 12.8 | 5.5 | 83.1 | 3,906.3 |
| Bangladesh | 3,191.7 | 13,867.0 | 22,168.0 | 15.8 | 4.8 | 129.3 | 2,948.7 |
| Pakistan | **3,964.0** | **14,629.0** | **26,558.0** | **13.9** | **6.1** | **107.3** | **2,529.3** |
| Indonesia | 1,488.7 | 7,614.4 | 14,466.8 | 17.7 | 6.6 | 51.4 | 1,808.4 |
| Sri Lanka | 1,423.5 | 6,422.2 | 6,022.6 | 16.3 | -0.6 | 273.3 | 1,800.0 |
| Egypt | 2,960.9 | 17,833.1 | 19,532.1 | 19.7 | 0.9 | 170.5 | 1,728.6 |
| Turkiye | 729.0 | 1,901.0 | 1,029.0 | 10.1 | -6.0 | 12.1 | 133.5 |

*Source: World Bank, and Authors' Estimations*
**World Bank Data is available only up to 2023*

Another key factor influencing remittances is the cost incurred by senders across different channels, including both formal and informal methods. The Sustainable Development Goal (SDG) 10 of the United Nations targets to reduce the transaction cost of migrant remittances to less than 3% by 2030. In addition, the higher fees on formal channels have made informal channels such as Hawala/ Hundi in South Asia more attractive comparatively. It has been observed that on average, the remittance fee charged is substantially higher than the actual remittance cost borne by the Money Transfer Operators (MTOs)[1].

**Workforce Migration:** The number of skilled migrants declined since 1995 and was replaced by low-skill migrants due to neglect of technical and vocational education (ADB, 2010). The statistics show that only 7.8% of the total migration in 2024 were highly qualified and skilled, whereas 39.2% were skilled and semi-skilled and 50.3% of the migrants were unskilled. The share of unskilled workers has been on an increasing trend since 2019 as shown below. This share is too underreported as the Ministry of Overseas Pakistanis & Human Resource Department only reports migrants registered by the Bureau of Emigration and Overseas Employment (BE&OE).

*Figure 7: Shifting Migration Trends by Occupation Group: 2019 and 2024 Comparison*




*Source: Bureau of Emigration & Overseas Employment (BE&OE)*

The International Labor Organization (ILO) emphasizes the need for comprehensive skills development, endorsing a comprehensive Skills Development Country Profile for Pakistan[2]It highlights Pakistan's 3,740 Technical and Vocational Education and Training (TVET) institutions, both public and private, which provide 437,000 annual training spots yet fall short in meeting demands due to population growth.

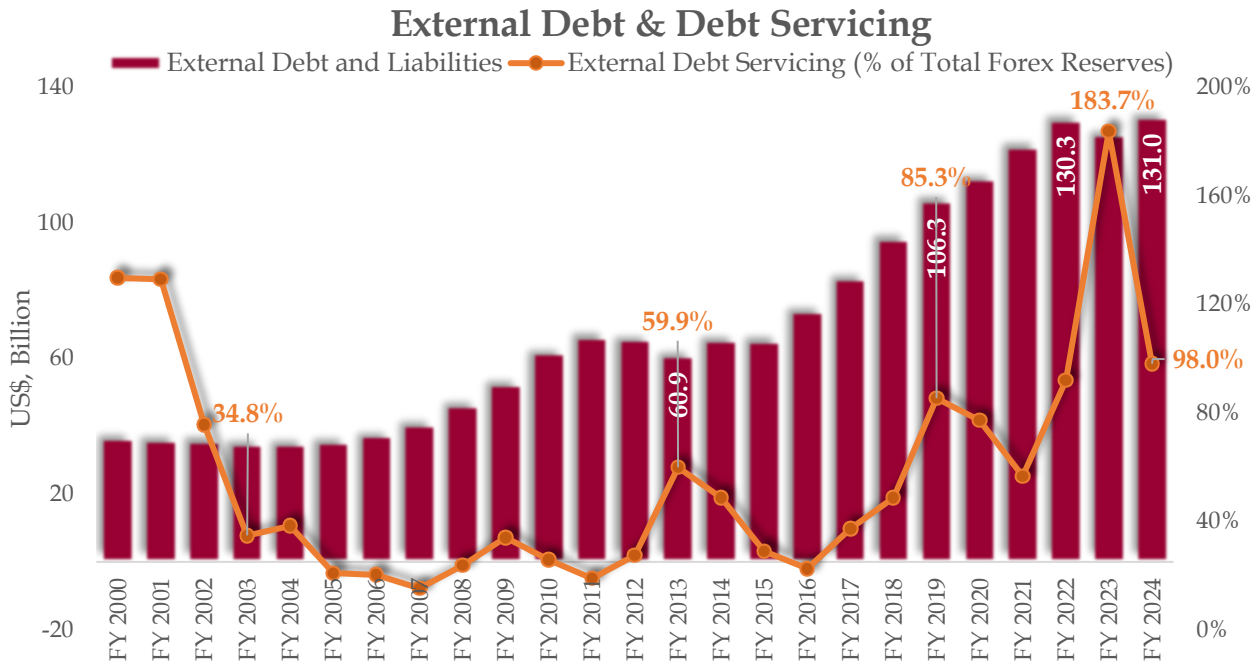
[1]https://documents1.worldbank.org/curated/fr/507301468142196936/841401968_200510319014045/additional/Global-economic-prospects-2006-economic-implications-of-remittances-and-migration.pdf
[2] https://www.ilo.org/islamabad/info/public/pr/WCMS_793275/lang--en/index.htm

## 2.4. Total External Debt

External debt servicing has traditionally been one of the major factors contributing to the depletion of Pakistan's foreign exchange reserves. The figure below illustrates Pakistan's external debt from FY2000 to FY2024, which increased from $32.2 billion to $114.1 billion over this period. Notably, Pakistan's debt remained relatively stable between FY2009 and FY2013. In contrast, a sharp increase of $59.4 billion was observed from FY2013 to FY2024. Within Pakistan's external debt portfolio, foreign commercial banks and multilateral sources continue to be the primary contributors.

Pakistan's external debt servicing as a percentage of total forex reserves is a key indicator of the burden debt repayment places on the country's reserves. In FY2003, external debt servicing accounted for 34.8% of total foreign exchange reserves, rising to 59.9% in FY2013. During the FY2013-FY2024 period, external debt servicing nearly tripled, reaching 98.0% of foreign exchange reserves in FY2024, highlighting the increasing strain on Pakistan's external financial position.

*Figure 8: Pakistan's Total External Debt & Debt Servicing (FY99-FY22)*




*Source: State Bank of Pakistan (SBP)*

## 3. Exchange Rate Regimes in Pakistan

The global exchange rate system has undergone significant evolution over the past century, exploring and adopting various exchange rate regimes. A broad analysis reveals a spectrum of regimes, ranging from fixed systems to floating ones, with hybrid models positioned in between, broadly classified into fixed, intermediate, and flexible systems. Key factors influencing the choice of an exchange rate regime include the degree of monetary autonomy, trade openness, and the need for economic stability. Arguably, an optimal exchange rate regime relies on a country's particular economic setting and circumstances (Husain, 1999). Factors such as inflation, trade balances, and monetary policy objectives often prompt nations to evaluate and adjust their regimes accordingly. The key characteristics of each exchange rate regime are discussed below:

**a. Fixed/ Pegged Exchange rate regimes: (pegged to another currency or basket, maintained through central bank intervention)**

- A fixed exchange rate regime boosts trade, investment, and capital flows by reducing currency risk and speculation (Frankel, 2012) while supporting lower inflation (Ilzetzki et al., 2022)
- Fixed systems limit monetary policy independence, requiring large forex reserves to maintain the peg, making them vulnerable to speculative attacks and economic imbalances (Ilzetzki et al., 2022)
- Common fixed regimes include Conventional Pegs, Dollarization, Currency Boards, and Currency Unions (IMF, 2004)
- Gulf nations use pegs for stability in oil-driven economies, while Ecuador adopted Dollarization to counter prolonged inflation and economic instability
- Economies with limited export diversity or those prioritizing stability for investment and growth favour fixed regimes.

**b. Floating Exchange Rate Regimes: (Determined by market supply and demand without a fixed target).** Following shifts in IMF policies during the 1990s, many countries adopted flexible exchange rate regimes to facilitate trade liberalization and enhance monetary policy autonomy.

- Flexible regimes enable central banks to adjust monetary policy independently, responding to economic conditions and external shocks
- They reduce reliance on large forex reserves, easing the burden on central banks
- However, floating currencies can cause volatility, impacting trade and investment, especially in import or export-dependent economies
- Stable economies like New Zealand and Germany adopt floating regimes, benefiting from robust financial systems and diverse trade bases
- Preferred by countries with diversified trade and highly developed financial systems, they allow currencies to adjust dynamically to global changes

### c. Intermediate Exchange Rate Regimes: (Floating between predefined bands/range)

Between the two extremes of fixed and free-floating exchange rate regimes, countries can adopt intermediate regimes that combine characteristics of both, offering flexibility while retaining some stability.

- Intermediate regimes enable central banks to retain some monetary policy independence while mitigating excessive exchange rate volatility
- These regimes provide greater flexibility than fixed systems, allowing for gradual adjustments to external shocks while maintaining a degree of exchange rate stability
- Managing intermediate regimes requires skillful central bank intervention to strike a balance between stability and flexibility. They may still face speculative attacks if credibility is questioned, particularly in developing economies with insufficient foreign reserves
- Types of these regimes depend upon the size of the barrier band, including managed floats, crawling pegs, and pegged-within-a-band systems (IMF, 2004)
- Many developing nations, including Malaysia and Bangladesh, have shifted toward hybrid approaches like managed float and crawling pegs to monitor exchange rates while pursuing monetary objectives

A summarized picture of broad exchange rate regimes being followed worldwide has been presented in the chart below along with their concept, types, benefits, challenges, and key adoption factors.

*Flow Chart 2: Comparison of Exchange Rate Regimes*

| | Pegged/ Fixed Regime | Intermediate/ Managed Float Regime | Floating Regime |
|---|---|---|---|
| | Exchange Rate Flexibility → | | |
| Concept | •Domestic Currency is fixed to another currency/ basket of currencies. Fixed Rate is maintained by buying & selling the domestic currency. | • Hybrid Exchange Rate Regime; rate is defined by the market forces within controlled bands. Central bank intervenes directly or indirectly when necessary. | •Determined by forex market forces, with minimal or no direct interventions; monetary and fiscal policies may indirectly influence rates during extreme violatilty |
| Types | •Conventional Pegs, Dollarization Currency Union, Currency Board Arrangement | •Stabilized Arrangement, Crawling Pegs, Crawl-like Arrangement, Managed Float with no determined path | •Free Floating |
| Strengths | •Reduces volatility, Ensures trade & investment stability, Prevents speculation | •Exchange Rate Stability, Easy Exchange Rate Targetting, Curbs Speculative Activities | •Strong external shock absorption and flexible trade balance adjustment |
| Challenges | •Resource intensive, Loss of Monetary Independence & Responses to shocks | • Reqires skillful intervention, May face speculation in countries with limited FOREX | •Increases volatility & uncertainty, harming trade and investment; Vulnerable to Speculative attacks |
| Adoption Factors | •Countries with dominant trade/assets in the pegged currency or facing high speculation | •Emerging Economies seeking to export competitiveness and stabilization in financial markets | •Economically Stable Countries, Diversified Trade, Well Regulated Financial Markets |
| Countries | •Hong Kong (pegged against US$), Saudi Arabia (pegged against US$), Denmark (pegged to Euro) | •Bangladesh, Sri Lanka, Kenya, Ghana, Argentina, Iran | •New Zealand, India, Indonesia, Canada, Mexico, France, Germany, Australia, UK |
| | ← Loss of Monetary Independence | | |

*Sources: IMF (2004), Ilzetzki et al. (2022) and Frankel (2012)*

## 3.1. Exchange Rate

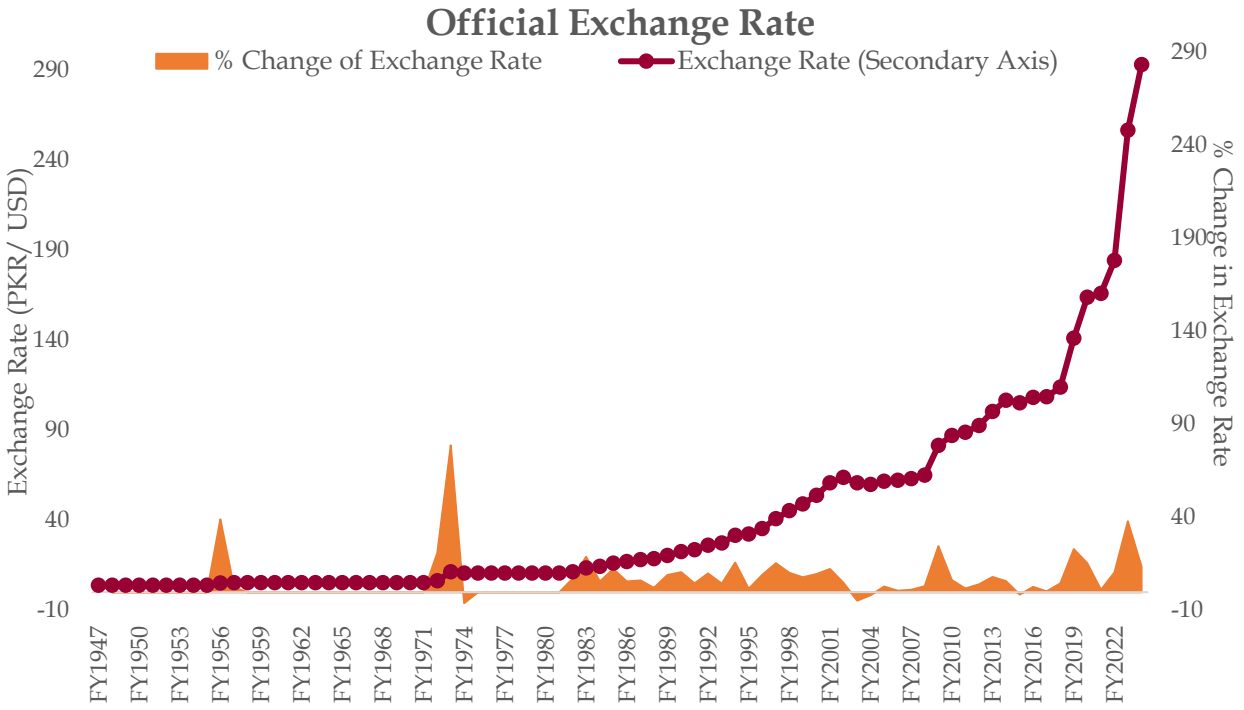
The Pakistani rupee was pegged against the Pound Sterling for the 1947-1971 period (Ejaz & Akhtar, 2017). The corresponding exchange rate for Pakistani currency against the US Dollar was such that to buy 1 US Dollar, 4.8 Pakistani rupees were required for the 1960-1971 period. The figure below shows the historical exchange rate in Pakistan for the 1947 to 2022 period. The currency of Pakistan was then pegged against the US Dollar at the rate of roughly PKR 9.9/US Dollar for the 1971-1981 period.

The Pakistani currency was following a managed floating exchange rate regime for the 1982-1999 period. Since 1999, the State Bank of Pakistan (SBP) claims that Pakistan has

maintained a fully market-based flexible exchange rate regime.[3] However, according to IMF, the Pakistani government has intervened several times to keep foreign exchange rates in a certain range, therefore adopting a managed float regime during 2008-2017.[4] Moreover, since June 2024, the SBP has already injected around $5 billion in the domestic forex market to stabilize the exchange rate around PKR 278 per USD.

Apart from the period of changes in the exchange rate regime, there are five notable periods when the Pakistani Rupee (PKR) witnessed massive depreciation including FY97 & FY98 (26.9%) as the result of nuclear sanctions, 2001 (12.8%) influenced by large-scale capital flight, FY08 & FY09 (28.9%) linked to recovery in oil prices post Global Financial Crisis (GFC), FY18 &FY19 (28.8%) attributed to delays in negotiations with IMF and most recently in 2022-2024 (64.6%) influenced by depleting reserves, and political uncertainty.

*Figure 9: Pakistan's Exchange Rate against US Dollar (1947-2024)*




*Source: State Bank of Pakistan*

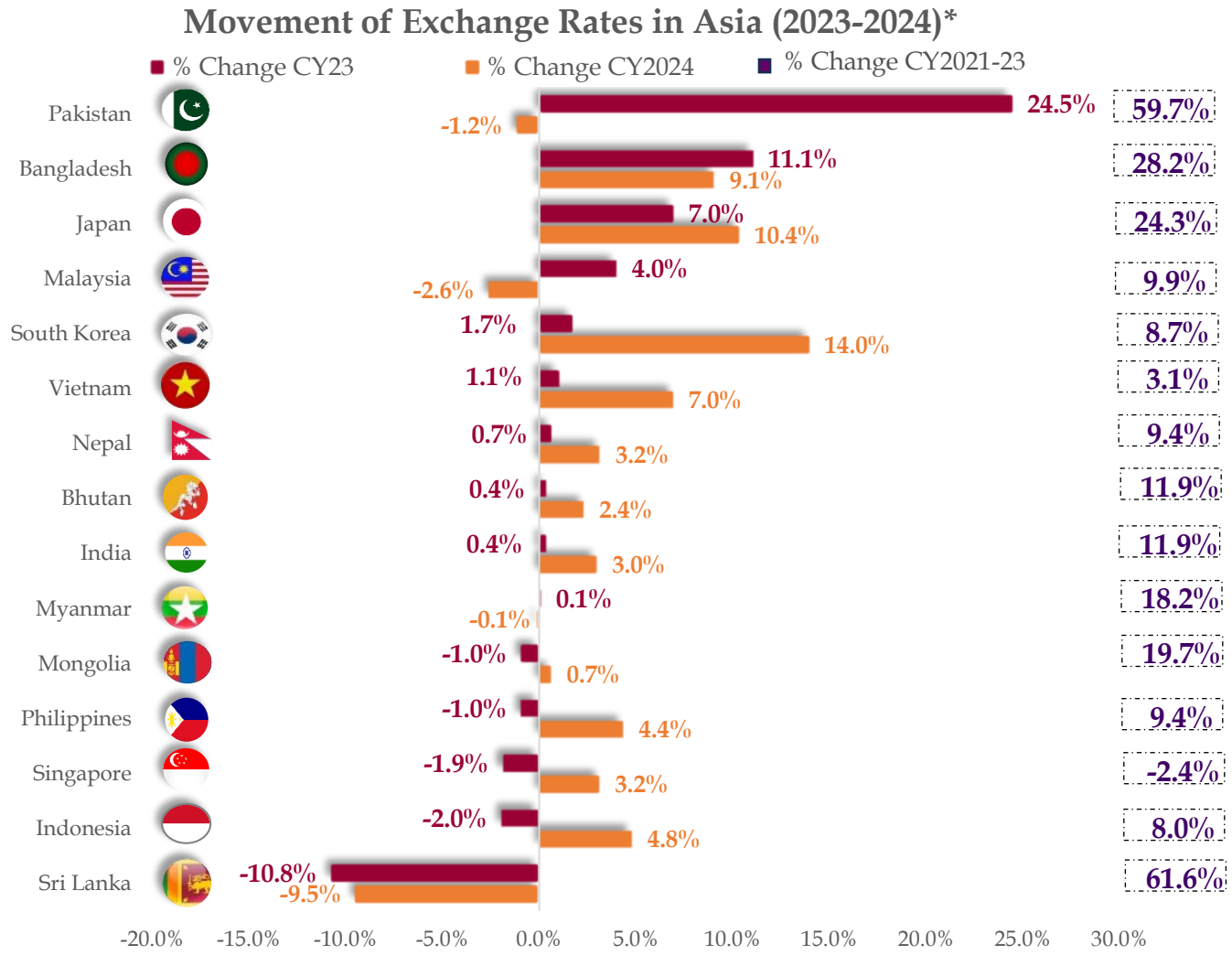
Pakistani currency appears to be the worst performing in Asia regarding exchange rate depreciation. The graph below illustrates the fluctuation of the various foreign currencies of the regional countries for the past two years. While all the countries exhibited currency depreciation, it is notable that Pakistan experienced the most significant depreciation in

[3] State Bank of Pakistan. Available at https://www.sbp.org.pk/dfmd/FS-Exg.asp

[4] IMF Country Report No. 08/364, Report No. 12/35. Available at https://www.imf.org/external/pubs/ft/scr/2008/cr08364.pdf; https://www.imf.org/external/pubs/ft/scr/2012/cr1235.pdf; https://www.imf.org/external/pubs/ft/scr/2016/cr1601.pdf

the last two years. The Pakistani currency (PKR) lost 25.8% and 36.8% of its value against USD in 2022 and 2023, respectively.

*Figure 10: Asian Currencies Performance during CY22-CY24*




**The top 15 countries have been taken with the most significant currency fluctuations*

*Source: International Monetary Fund (IMF)*

# 4. Pakistan's FOREX Management and Stakeholder Perspectives

## 4.1. Pakistan's Forex Policy

This section analyzes key aspects/metrics of Pakistan's foreign exchange policy beyond the Exchange Rate Regime. The policy is governed by the Foreign Exchange Regulation Act (FERA) of 1947, which regulates foreign exchange transactions, imports, exports, and

foreign securities. The FERA has been amended several times, most recently in 2016, 2017, 2018, and 2019, to strengthen the regulatory framework.[5]

### 4.1.1 Foreign Exchange Regulations in Pakistan

- ***Foreign Currency Accounts (FCAs):*** In Pakistan, FCAs are used for receiving remittances, foreign currency payments from Government Securities, and issuing travelers' cheques abroad.
  - Individuals/Corporations can open FCAs to receive foreign loans or equity for investment purposes, such as in securities, real estate, or other assets.
  - Since 2018, locally purchased dollars can also be held in these accounts only by active tax filers to discourage malpractices.
  - Available in selected banks, FCAs for corporates require extensive documentation, NTN numbers, and biometric verification, making the process time-consuming.
  - Limited coordination between local banks and intermediary banks in Pakistan causes delays in processing international remittances, payments, and refunds via commercial banks.
- ***Restrictions on Transaction and Remittances:*** According to the Foreign Exchange Manual, banks, money exchangers and exchange companies are designated as authorized dealers of foreign currencies in Pakistan. However, since 2022, SBP has tightened regulations to strengthen the forex regime. The following table summarizes these restrictions imposed on forex companies.

*Table 2: Foreign Currency Transaction Guidelines and Restrictions*

| Transaction | Restriction (s) |
|---|---|
| **Buying & Selling Foreign Currency (FC)** | |
| US$ 500 or above | ID & Biometric Verification |
| > US$ 1,000 (or Other FCs) | Documents related to purpose |
| US$ 10,000 or above (or equivalent currency) | Payment should be through Cheque/ Bank Transfer issued from the personal account of the customer along with ID |
| **Inward Remittances of Exchange Companies** | |
| | 100% surrender of FCs in equivalent US$ in interbank market. |
| Deposit of US$ 10,000 or above (or equivalent currency) | Proof Required: Original Receipt of Acquisition |
| **Outward Remittances of Exchange Companies** | |
| Regardless of Amount | Copies of ID (CNIC/ NICOP/ Passport) & Biometric Verification |
| Record of Transaction | Maintenance of Record for 10 years and Readily Available to SBP |
| **Other Requirement** | |
| Raising Minimum Capital Requirement* | Exchange Companies A: 500 Mn from 200 Mn<br>Exchange Companies B (Money Changers): 25 Mn |

Sources: Foreign Exchange Manual, 2020

[5]https://primeinstitute.org/wp-content/uploads/2021/04/Foreign-Exchange-Regulations-in-Pakistan.pdf

*Category B exchange companies can either merge with an existing company, upgrade to an exchange company, or consolidate with other Category B companies.

- ***Realization of Export Proceeds and Closing of Letter of Credit (LCs):*** According to SBP's FE Circular No. 02 (2023), delayed export payments beyond 180 days face fines of 3% to 9% of the realized amount:
  - 3% lien for delays up to 30 days
  - 6% lien for delays over 60 days
  - 9% lien for payments exceeding 60 days

  The fines aim to prevent forex shortages, stabilize the rupee, and curb exchange rate volatility. However, exporters argue that delays often result from banking procedures, such as importing banks' documentation approvals, rather than deliberate withholding.

  In 2022, Pakistan restricted LC openings to preserve forex reserves, helping reduce the trade deficit and stabilize the exchange rate. However, it disrupted exports by limiting access to imported inputs, slowing industrial activity. While the move provided short-term relief, it also hampered economic growth, underscoring the need for a balanced forex policy during crisis.

- **Restrictions to Curb Outflow of Foreign Currency:**

- ***Foreign Currency Spending Limit:*** The individual foreign currency accounts are free from any strict foreign exchange restrictions. The limit of spending foreign exchange on the individual credit card, introduced in 2022, is very high at USD 30,000 (Rs. 8.4 million), making a total of USD 63.4 billion on 2.1 million cards currently in use[6]. In addition, frequent foreign trips for tourism have also been putting downward pressure on reserves.

- ***Foreign Currency Travelling Limit:*** The annual foreign currency travelling limit is $30,000 and $15000 for Adults and Minors respectively, while the foreign currency travel limit (per visit) for adults decreased from $10,000 to $5,000, and for minors, it dropped from $5,000 to $2,500.

- **Absence of International Money Transfer Agencies:** Despite relatively weak economies like Somalia and Sri Lanka accessing international payment gateways, Pakistan has struggled to bring services like PayPal and Stripe due to regulatory issues (minimum capital requirement and three-stage license approval)[7], fraud risks, uncertainty, weak security laws. Freelancers often use foreign IDs to access PayPal due to limited payment gateways in Pakistan. Existing alternatives like Payoneer and Skrill are less popular due to high transaction and annual fees, forcing many freelancers to keep their forex earnings abroad to avoid high margins. This further limit foreign exchange inflows into the country. Although Pakistan is no longer on the

[6]SBP's Payment Systems Quarterly Review (Q12024-25). Available at: https://www.sbp.org.pk/psd/pdf/PS-Review-Q4FY25.pdf

[7]https://www.sbp.org.pk/ps/EMI.htm#:~:text=Under%20the%20Regulations%2C%20Prospective%20EMI,the%20Final%20Approval%20i.e.%20License.

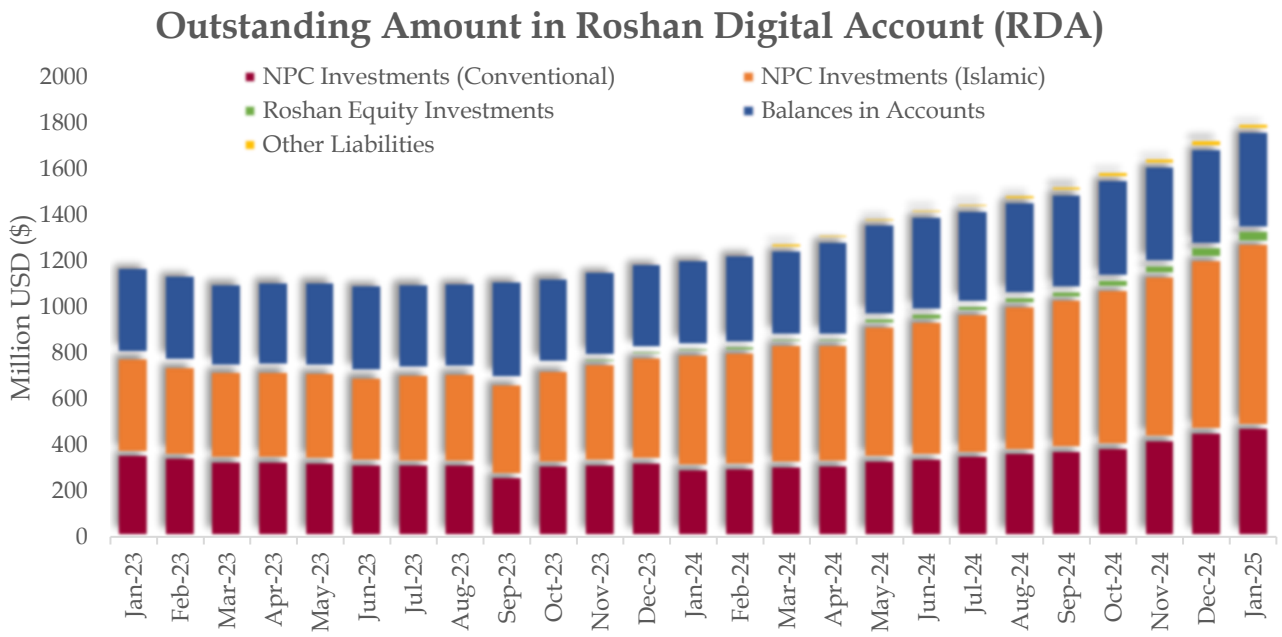
FATF grey list, ongoing economic challenges, uncertain policies, low financial inclusion, and the government's reluctance continue to hinder PayPal's potential user base. This has hindered the potential of the IT sector and freelancers, with around $1 billion in services exports going undocumented due to the lack of these payment systems.

### 4.1.2. Pakistan's Remittance Programs and Investments:

#### Roshan Digital Account (RDA)

The Roshan Digital Account, launched in 2020, by the SBP in collaboration with commercial banks, presents a distinct opportunity for Non-Resident Pakistanis (NRPs) to digitally open a bank account in Pakistan regardless of their location worldwide[8]. This account also allows for the convenient transfer of foreign remittances and investments to Pakistan. The table below depicts the trend in Roshan Digital Account (RDA). Since its launch in September 2020, total net investments made through RDA have reached $1.8 billion.

*Figure 11: Investment in the Roshan Digital Account (RDA)*




*Source: State Bank of Pakistan (SBP)*
*Note: Other Liabilities include outstanding position in Government securities like T-bills, Sukuk, and real estate, mutual funds, etc., but exclude NPCs*

[8]https://www.ophrd.gov.pk/Detail/M2EyZGQ4ZGMtNjlmMi00M2RhLWJlNWUtNmIxMmYyOTRlODA4

The table below compares the strengths and challenges of Roshan Digital Account (RDA).

*Table 3: Roshan Digital Account: Strengths vs Challenges*

| Strengths | Challenges |
|---|---|
| $ **Convenient Online Access** enhances financial inclusion<br>$ **Supports multiple currencies** (USD, GBP, EUR), reducing conversion costs<br>$ **Competitive deposit rates** vs. other countries<br>$ **Investment options** in stocks, real estate, and securities.<br>$ **Premature encashment**, providing investors with flexibility.<br>$ **Easy fund repatriation** to foreign accounts.<br>$ **Tax benefits for NRPs**, including exempted profits & no tax filing. | • **Potential account breaches** raise concerns for users.<br>• **Lack of awareness,** trust issues, and preference for foreign banks hinder RDA's reach among the diaspora.<br>• **Frequent early withdrawals** with minimal penalties disrupt stable forex inflows for the government.<br>• Investments are **concentrated in non-productive sectors**, limiting economic impact. |

## 4.1. Comparative Analysis with Other Countries

### 4.2.1. Diaspora Bonds

Diaspora bonds have emerged as a vital financial tool, especially during economic crises, allowing governments to tap into the financial resources of their overseas communities and create a sustainable revenue stream. The concept gained recognition when USAID acknowledged remittances as a development resource in 2002. Revenues generated from these bonds are typically allocated to relief efforts during crises or infrastructure development projects. Successful examples of diaspora bond utilization include Nigeria, Greece, and Kenya. Table 4 presents a comparative analysis of diaspora bonds offered by the top remittance-receiving countries

*Table 4: Comparison of Non-Resident Bonds*

| Country / Features | Pakistan | India | Bangladesh | Philippines |
|---|---|---|---|---|
| **Program Title** | **Naya Pakistan Certificate (NPC)** | **Non-Resident Indian (NRI) Bond** | **Wage Earners Development Bond** | **Retail Treasury Bond (RTB)** |
| **Requirement** | Roshan Digital Account (RDA) | NRO / NRE Account | Overseas Account | Savings Account |
| **Currency** | PKR, USD, GBP, Euro | Any FC or INR | BDT | Any FC or Peso |
| **Minimum/ Maximum Investment** | Min.: 5K for PKR, GBP & Euro, 10K for USD, Max.: None | Min.: Varies across types of bonds (INR 1,000) Max.: None | Min.: BDT 25,000 | Min.: PHP 5,000 |
| **Tenure** | 3, 6, 9 Months, 1, 3, 5 yr | 1 to 40 yrs | 6 months - 5 yrs | 5 year |
| **Profit Rates** | 5.25% - 13.50% | 5-10% | 6.53%-12% | Fixed Rate: 6.25% |
| **Profit Payment Frequency** | For 3,6,9 Months: Paid on Maturity, For 3-5 yr: Semi-Annually | Semi-Annually/ Annually | Semi-Annually (BDT only) | Quarterly |
| **Pre-Mature Encashment** | Fully/ Partially at a lower return linked to the nearest maturity | Allowed | Allowed at lower returns in BDT; Principal can be repatriated in FC on maturity | - |
| **Tax Treatment** | 10% WHT on Profits No Return Filing | Mostly Tax-Exempt | Tax Exempt on Funds & Profits | 20% Final WHT with some exemption |
| **Additional Benefits** | Pledgeable in certain cases | Offers Investment in State/ Municipal Development Loans, Corporate Bonds, Green Bonds | Pledgeable<br>Reinvestment is available up to 15 years | Convertible Reinvestment Options<br>Duty-free Import of Households<br>-Access to FOREX at favorable Rates |

*Sources: SBP, ICICI Bank, Vance.Tech, Policy Bazar, Bangladesh Bank, Philippines Bureau of the Treasury*

*Notes: *NRO = Non-Resident Ordinary, NRE = Non-Resident External, FC = Foreign Currency, WHT = Withholding Tax*

## Key Highlights from the Bond Comparison:

- Unlike India's NRI Bonds and Bangladesh's Wage Earner Development Bonds (WEDB), Pakistan's Naya Pakistan Certificates (NPCs) and the Philippines' Retail Treasury Bonds (RTBs) are open to both resident and non-resident investors, providing broader and more inclusive investment opportunities.

- While countries like Pakistan offer foreign currency investment options, Bangladesh's WEDB limits returns strictly to the local currency (BDT), reducing its appeal to international investors.

- Pakistan previously offered the highest returns among the countries compared, with NPC rates peaking at 21.5% until January 2025. However, these rates were reduced to 13.5% following a significant 10-percentage-point policy rate cut.

- NPCs continue to offer highly competitive returns, flexible maturities, and smooth repatriation options. However, India's NRI Bonds have the added advantage of being backed by robust institutional frameworks across both state and local levels—something Pakistan currently lacks, as its offerings are limited to the federal level.

### 4.2.2. Skill Development Programs

Skill development is key to workforce competitiveness and remittance growth, especially in migrant-heavy economies like Pakistan, India, and Bangladesh. Pakistan lags, with only 6% TVET participation and 2.5% on-the-job training. Differences in TVET implementation, industry alignment, and global recognition impact each country's ability to supply skilled workers and boost remittances. The table below highlights these key differences.

*Table 5: Comparison of Skill Development Programs*

| Heads | Pakistan | India | Bangladesh |
|---|---|---|---|
| **Government Based Popular TVET Program** | **Youth Skill Development Program (PMYSDP)** | **Skill India Mission** | **Skills for Employment Investment Program (SEIP)** |
| **Internationally Recognized Certification** | Provincial certifications lack federal recognition, Limited international exposure | National & Internationally recognized Certificates | International certification for the SEIP trainees for certain occupations |
| **Focus Sectors** | National/Public Institutions: IT & Computer Services- | IT & Agriculture, Drone, tech-based farming, Auto Mechanics | Sector-specific, aligned with GCC markets (Pharma, IT, Agro-food Processing-) |
| **RPL Programs** | Still in development, with mechanisms and criteria for assessment, equivalencies, being established | Strong: 47% of certified earn higher, 63% workplace recognition | Focused on migrant workers (post-COVID) |
| **Industry Engagement** | Low Participation<br>Outdated Curriculum<br>The gap between supply and industry needs<br>Few players like Engro & Lucky Cement- | Strong engagement in all sectors via Industrial Training Institutes (ITIs) in Curriculum Development | Engagement of Textile, Garment, and Leather Associations for workforce development |
| **Incentives for Industry** | Limited government incentives | The government bears 25-50% of the training costs | SEIP covers almost 90% of the training expenses |

| Heads | Pakistan | India | Bangladesh |
|---|---|---|---|
| Marginalized Group | Dedicated Female Institutions, Lack of Awareness & Limited Reach, especially in rural areas | More females certified in RPL than men | Coverage of Marginalized groups (women, Indigenous communities, & persons with disabilities) |

*Source: UNDP (2017), UNESCO (2023), SEIP (2022)*[9]

**Key Highlights:**

- India and Bangladesh excel in private sector engagement, aligning skills training with industry demands, while Pakistan struggles with a TVET-industry mismatch due to minimal private sector involvement.
- Stronger government incentives boost TVET success—Pakistan's limited support hinders private sector participation, while India and Bangladesh subsidies drive higher enrollment, industry engagement, and workforce competitiveness.
- Despite initiatives such as HEC's collaboration with Microsoft and Coursera, access to globally recognized certifications in Pakistan remains constrained. This limitation restricts the global employability of Pakistani workers, confining many to low-skilled occupations abroad and reducing their potential for higher earnings in international labor markets.
- Pakistan's TVET programs majorly focus on IT and computer services, while India diversifies into IT, agriculture, drone technology, and auto mechanics. Bangladesh aligns its trainings with the GCC market needs —Bangladesh's largest labor market.

# 5. Effect of Pakistan's Currency Depreciation on Trade Dynamics

## 5.1. Elasticities Approach

The elasticities approach represents a microeconomic view as only the exchange rate and trade balance are being taken into consideration.

Elasticity = % change in supply or demand / % change in price

### 5.1.1. Marshall-Lerner Condition (MLC)

Marshall-Lerner Condition describes the combination of exports and import demand elasticities such that depreciation of the domestic currency will move the trade balance towards trade surplus and vice versa. (Export share in trade*demand elasticity of export + Import share in trade*(demand elasticity of import -1) > 0)

Increase in **quantity** exported = Demand elasticity of export*depreciation of the domestic currency

[9] https://seip-fd.gov.bd/wp-content/uploads/2022/07/Skills-for-Employment-Investment-Program-SEIP.pdf

Change in exports = % Change in domestic currency*Initial export value*demand elasticity of export

Decrease in **quantity** imported = Demand elasticity of import*depreciation of domestic currency

Impact on the imported **value** is twofold due to a depreciation in the domestic currency:

1. Import prices of foreign goods increase in domestic currency terms
2. The quantity demanded of foreign goods by domestic citizens decrease

Net Impact on the imported **value** = % increase in price - % decrease in quantity demanded

Change in imports = % Change in domestic currency*Initial import value*(demand elasticity of import-1)

Change in trade balance = **Value** of Marshall-Lerner Condition*% Change in domestic currency*Initial trade balance value

*Table 6: Impact of Currency Depreciation on Trade Balance*

| | Marshall-Lerner Holds | Marshall-Lerner does not Hold |
|---|---|---|
| **Domestic Currency Appreciates** | Trade Balance moves towards deficit (X-M decreases) | Trade Balance moves towards surplus (X-M increases) |
| **Domestic Currency Depreciates** | Trade Balance moves towards surplus (X-M increases) | Trade Balance moves towards deficit (X-M decreases) |

*Source: IFT*

## 5.2. Empirical Assessment of Price Elasticities

### 5.2.1. Data and Variables

The study uses the annual data from 1990-2021 to estimate the price elasticities of exports and imports of Pakistan. World's Export Price has been computed following the same methodology as Aftab & Aurangzeb's (2002), which is taking trade-weighted export price indices of all the countries. The table below describes the set of variables and sources used in this study:

*Table 7: List and Description of Variables for Econometric Model*

| Variables | Description | Source |
|---|---|---|
| Exports | Real Exports of goods (BoP, US$) | WDI, World Bank |
| Imports | Real Imports of goods (BoP, US$) | WDI, World Bank |
| World Income | World Real GDP Growth (%) | WDI, World Bank |
| Pakistan's Income | Pakistan's Real GDP Growth (%) | WDI, World Bank |
| Real Effective Exchange Rate (REER) | REER is measured as the Pakistani Rupee against a weighted average of several other foreign currencies after being adjusted by inflation (LCU per US$, period average) | WDI, World Bank |
| Pakistan's Export Price | Pakistan's Export unit value index (2015 = 100) measures the price changes in the exported goods | WDI, World Bank |
| World's Export Price | World Export Unit Value Index | WDI, World Bank |

| Variables | Description | Source |
|---|---|---|
| | (2015 = 100) | |
| Pakistan's Import Price | Pakistan's Import unit value index (2015 = 100) measures the price changes in imported goods | WDI, World Bank |
| Pakistan's Domestic Price | Consumer Price Index (CPI) reflects the annual percentage change in the average consumer's cost of purchasing a basket of goods and services. These prices may be set or vary at predetermined intervals, such as yearly. (CPI, annual, %) | WDI, World Bank |

### 5.2.2. Methodology

Most of the researchers believe that testing the Marshall Lerner condition is a long-run testing phenomenon between the exchange rate and trade balance for which co-integration methodologies particularly Johansen Co-Integration Method has been used by several studies. However, Mah (2000) denoted that estimating long-run relationship using the co-integration technique by Johansen (1988) and Johansen and Juselius (1990) may not provide consistent results in the case of a smaller sample size. Therefore, Autoregressive Distributed Lag (ARDL) by Pesaran et al. (2001) has been employed to estimate the co-integration and coefficients of variables in this study. The key assumption of ARDL model is that all the variables of the model are integrated to the order of I (0) or I (1) or both. The level of integration can be determined by the Augmented Dicky Fuller (ADF) Test, the results of which are attached in the Annexure-II. The study is based on two functions: the Export and Import demand functions.

**Exports Demand Function**

$$\text{Log } X_t = \alpha_0 + \alpha_1 \text{ Log } RXP_t + \alpha_2 \text{ Log } REER_t + \alpha_3 WGDPG_t + \in_t$$

**Imports Demand Function**

$$\text{Log } M_t = \beta_0 + \beta_1 \text{ Log } RMP_t + \beta_2 \text{ Log } REER_t + \beta_3 PGDPG_t + \in'_t$$

Where X represents Pakistan's Real Exports, and M is Pakistan's Real Imports. RXP is the relative price of exports, a ratio of Pakistan's Exports Price and the World Export Price. Similarly, RMP is the relative price of imports, a ratio of Pakistan's Import Price and Pakistan's Domestic Price. REER is the Real Effective Exchange Rate, WGDPG is the World's Income Growth and PGDPG is Pakistan's Income Growth, $\in$ is the white noise error. Logarithm has been taken on variables to calculate demand elasticities of exports and imports.

### 5.2.3. The Empirical Results

To estimate the long-relationship exists between the variables, an ARDL Bound Test was performed. According to the results presented in the table below, they are co-integrated suggesting that there exists a long-run relationship between variables as the value of F-statistic under the F-Bounds Test is 4.73 and 6.66 in exports and imports model respectively which is greater than the critical values of both upper and lower bound at each significance level.

*Table 8: ARDL Bound Test Results*

| Exports Model | | | | Imports Model | | |
|---|---|---|---|---|---|---|
| **Test Statistic** | **Value** | **Degree of freedom** | | **Test Statistic** | **Value** | **Degree of freedom** |
| F-statistic | **4.73** | 3 | | F-statistic | **6.66** | 3 |
| **Level of Significance** | **Lower Bound** | **Upper Bound** | | **Level of Significance** | **Lower Bound** | **Upper Bound** |
| 10 percent | 2.01 | 3.10 | | 10 percent | 2.01 | 3.10 |
| 5 percent | 2.45 | 3.63 | | 5 percent | 2.45 | 3.63 |
| 2.5 percent | 2.87 | 4.16 | | 2.5 percent | 2.87 | 4.16 |

In line with the methodology discussed in the previous section, the empirical findings are as follows:

**Exports Model & Import Model: Interpretation**

The error correction term (ECT)—representing the speed of adjustment toward long-term equilibrium within a year—is negative, with coefficient estimates of -0.16 for the exports model and -0.04 for the imports model. These values confirm the presence of co-integration between relative prices and trade flows, indicating that deviations from the long-run equilibrium are gradually corrected over time.

In the exports model, all independent variables exhibit statistically significant long-run effects, except for global GDP growth. The estimated price elasticity of exports is -1.38, implying that a 1% increase in relative export prices results in a 1.4% decline in Pakistan's global exports, ceteris paribus. This negative and significant elasticity aligns with findings from Hasan and Khan (1994), Aftab and Aurangzeb (2002), and Bano and Rasool (2014), suggesting that higher export prices reduce global demand for Pakistani goods. For the imports model, the price elasticity is estimated at -3.32, indicating that a 1% increase in relative import prices leads to a 3.3% reduction in imports in the long run. This finding is consistent with Aftab and Aurangzeb (2002) and Ali et al. (2022), who highlight that higher import prices constrain foreign spending, thereby contributing to trade balance management.

The real effective exchange rate (REER) exerts a positive influence on both exports and imports. Specifically, a 1% increase in REER is associated with a 5.28% increase in exports and a 4.41% increase in imports in the long run. While depreciation makes exports more competitive globally, it simultaneously raises the cost of imports.

In the short run, exports are not significantly affected by the explanatory variables. However, domestic economic activity—as measured by Pakistan's GDP growth—positively influences imports, with a 0.02% increase in import demand. This reflects the typical pattern of growing economies increasing imports to support expanded production.

*Table 9: ARDL Bound Test Results*

| Variable | Coefficient | Standard Error (Newey-West) | t-Statistic | Prob. |
|---|---|---|---|---|
| **Exports Model** | | | | |
| **Speed of Adjustment Coefficient** | | | | |
| Log Real Exports $_{t-1}$ | -0.165* | 0.04 | -4.61 | 0.00 |
| **Short-run Estimates** | | | | |
| Δ World Real GDP Growth (WGDPG) | -0.00 | 0.01 | -0.14 | 0.89 |
| Δ Log REER | -0.09 | 0.35 | -0.26 | 0.79 |
| **Long-run Estimates** | | | | |
| Log Relative Export Price (LOGXP) | -1.38* | 0.15 | -9.00 | 0.00 |
| Log REER | 5.28* | 0.05 | 112.65 | 0.00 |
| World Real GDP Growth (WGDPG) | -0.15 | 0.07 | -2.05 | 0.05 |
| **Imports Model** | | | | |
| **Speed of Adjustment Coefficient** | | | | |
| Log Real Imports $_{t-1}$ | -0.04* | 0.01 | -5.46 | 0.00 |
| **Short-run Estimates** | | | | |
| Δ Log Relative Import Price (LOGRMP) | 0.13 | 0.14 | 0.95 | 0.35 |
| Δ Pak's Real GDP Growth (PGDPG) | 0.02** | 0.01 | 2.53 | 0.02 |
| **Long-run Estimates** | | | | |
| Log Relative Import Price (LOGMP) | -3.32** | 1.42 | -2.33 | 0.03 |
| Log REER | 4.41* | 0.55 | 8.02 | 0.00 |
| Pak's Real GDP Growth (PGDPG) | 1.09 | 0.71 | 1.54 | 0.14 |

**Significant at 1% level of significance, ** Significant at 5% level of significance*

To summarize, it is notable that demand elasticities for exports and imports are less than 1, suggesting that both are inelastic in the case of Pakistan.

# 6. Recommendations

To improve Pakistan's foreign exchange reserves, trade competitiveness, and economic stability, the following recommendations are categorized into two key sections: export-related measures and broader forex-related strategies.

## 6.1. Strengthening FOREX Reserves Management

i) **Adequate Exchange Rate Regime:** The government should introduce a currency peg exchange rate regime incorporating a mechanism for periodic revaluation of the local currency based on multiple criteria, including adequacy ratios and REER index among others.

### ii) Measures for Enhancing Remittances:

- **NPC rates should be revised regularly** in response to fluctuations in the monetary policy rate to ensure they remain competitive and attractive for both domestic and overseas investors. [10] & [11]
- **The Roshan Digital Account (RDA) needs revision;** it should allow and incentivize investment in more productive sectors such as Special Economic Zones (SEZs) and agricultural processing units, rather than focusing primarily on the non-productive and untaxed sector of the economy, i.e., the real estate sector. This redirection of investment would align to promote industrial and agricultural growth, similar to the incentives offered through amnesty schemes.
- **Added benefits** facility for long-tenure (3 & 5 years) NPCs to stabilize the investment in the bonds. Attract overseas Pakistanis to invest in long-tenure NPCs by offering additional incentives at the time of maturity.

### iii) Redirecting Foreign Exchange from Informal to Formal Channels:

- **Single Remittance Fee:** Money Transfer Operators (MTOs) should charge a single low fixed amount for remittance services, in line with SDG 10, ensuring the cost remains less than 3% of the remitted amount by 2030.
- **Incentives at Maturity:** SBP may consider either offering cash incentives at the time of foreign currency withdrawal or aligning exchange rates closer to open market rates, similar to Bangladesh's Wage Earner Development Bond (WEDB), to encourage higher inflows.
- **Formalize Forex Channels:** SBP should strengthen regulatory frameworks to formalize foreign exchange inflows. Over time, this can be achieved by gradually integrating exchange companies into the formal banking sector and curbing illegal hoarding and smuggling through strict measures to align the open market rate with the official rate.

### iv) Capital Control Measures for forex flows:

- Restrictions on foreign travel for leisure should be imposed during periods of low foreign exchange reserves. Non-business foreign travel, including education, training, medical purposes, and tourism, should require purpose documentation. Additionally, tourism abroad should be subject to a fee in two out of every three years.
- The annual ceiling of foreign exchange spending using individual credit cards must be reduced from US$ 30,000 to US$ 15,000, with a 5-10% fine introduced for extravagant spending during periods of low forex reserves, similar to measures implemented in Argentina.

[10] https://www.sbp.org.pk/Ecodata/Auction-TBills.pdf
[11] https://www.sbp.org.pk/NPC/index.html

### v) Other Measures for Boosting FOREX Reserves

- **Dollar Holdings into Banks:** The government should launch an incentive scheme to channel dollar holdings from lockers and personal safes into bank accounts. The government may exempt such deposits from any taxes if held in local accounts for at least one year.
- **Encourage Digital Transactions:** The fee per transaction should be reduced, and the annual fee should be waived to encourage businesses across all sectors to adopt payment gateway agreements with banks, promoting digital financial inclusion and ease of transactions.

## 6.2. Advancing Trade and Foreign Investment Strategies

### i) Strengthening Trade and Export Regulations

- **Updating FBR Valuation System:** Update FBR's valuation system regularly in real time to deter under-invoicing; consequently, exporters would avoid informal channels in trade transactions.

- **Resolving Import Restrictions:** Ad-hoc measures, including imposing unexpected import restrictions or non-issuance of LCs which cripple the industry, to control foreign trade are to be avoided. The government should set an import quota for exporters as per their export volume to mitigate effects on exports at least.

- **Amend Export Fines Policy:** Modify the SBP FE Circular No. 02 of 2023 to introduce sector-specific exceptions for delays in export proceeds realization. These exceptions should be based on identified challenges, such as extended payment cycles and banking issues, after thorough consultations with industry stakeholders. This amendment will ensure fair treatment for exporters while maintaining the policy's objective of encouraging timely payments.

### ii) Enhancing Payment and Banking Infrastructure

- **Corporate Foreign Currency Accounts (FCAs):** Corporations should be allowed to open FCAs under simple conditions, especially Travel & Tour Companies.

- **Prevent Bank Payment Delays:** Encourage the use of multinational banks for enhanced coordination or support local banks in opening international branches to avoid payment delays.

### iii) Expanding Regional Trade and Payment Mechanisms

- **Enhanced use of Asian Clearing Unit (ACU):** Increased trade within the Asian region using the Asian Clearing Union is critical for Pakistan to avoid recurring balance of payment crises. The SBP should emphasize the inclusion of the Pakistani Rupee as one of the modes of trade payments.

- **Attracting Productive Investments:** SBP should prioritize policies to attract export-oriented and productivity-driven FDI by offering sector-specific incentives and streamlining regulatory frameworks to align with regional best practices.
- **Bringing International Money Transfer Agencies in Pakistan:** The Pakistani government should actively attract global digital payment platforms like PayPal by ensuring policy consistency, relaxing three-stage regulatory requirements, and offering incentives such as reduced registration fees, transaction rates, and capital requirements to boost foreign exchange reserves.

### iv) Skill Development for Enhancing Export Competitiveness

- **Public-Private Partnerships:** Similar to India, institutions in Pakistan need to be revitalized through a public-private partnership by introducing programs with private sector involvement in curriculum development and training personnel, supported by offering incentives.
- **Making Technical Education Mandatory:** Introduce compulsory vocational education alongside secondary schooling to improve labor market skills.
- **Expanding TVET & RPL Programs:** TVET institutions must be prioritized in areas with higher school dropout ratios in Pakistan, and the expansion of Recognition of Prior Learning (RPL) centers must be further emphasized to accommodate non-formal learning and skills recognition.
- **Aligning Local Certifications with Global Standards:** Ensure Pakistani degrees and certifications are affiliated with internationally recognized institutions, similar to The Hunar Foundation (THF), to boost global employment prospects.

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# Annexures

## Annexure-I

*Table 10: List of Stakeholders*

| Sr. # | Associations/Organizations |
|---|---|
| 1 | Exchange Companies Association of Pakistan |
| 2 | Towel Manufacturers Association |
| 3 | Pakistan Cutlery Association Wazirabad |
| 4 | Pakistan Hotel Association |
| 5 | Arabian Sea Country Club |
| 6 | Pakistan Suzuki Motor Company Limited |
| 7 | Travel Agents Association of Pakistan |

## Annexure-II

*Table 11: Results of Unit-Root (ADF) Test*

| Variables | t-statistics | |
|---|---|---|
| | At level, I(0) | At first difference, I(I) |
| Log Exports (X) | -1.70 | -4.92* |
| Log Imports (M) | -1.97 | -4.40* |
| Log Nominal Effective Exchange Rate (NEER) | -3.33*** | -5.18 |
| Log Relative Export Price (RXP) | -1.43 | -4.83* |
| Log Relative Import Price (RMP) | -1.09 | -4.21** |
| Pakistan's GDP (PGDP) | -1.62 | -4.60* |
| World GDP (WGDP) | -1.62 | -1.62* |

**Significant at 1% level of significant, ** significant at 5% level, *** significant at 10% level,*