FISCAL RISK STATEMENT

FY2023-24

ECONOMIC ADVISER'S WING
FINANCE DIVISION
GOVERNMENT OF PAKISTAN

Foreword

The Fiscal Risk Statement FY2023-24 provides an overview of potential risks and uncertainties that could impact country's fiscal outlook in the coming years. The development of the Fiscal Risk Statement is a complex process that requires collaboration and input from various stakeholders, and I am confident that it will be a valuable resource for all those interested in future outlook of Pakistan's economy. Pakistan's economy has faced multiple challenges in recent years, affecting economic growth and fiscal deficit. Government of Pakistan (GoP) has taken various measures to address these challenges, including implementation of key economic reforms to contain fiscal deficit hence increasing investment in key sectors to embark on a path of economic growth.

However, Pakistan faces multiple fiscal risks due to exogenous factors that could impact the country's economic stability and growth prospects. These include changes in global economic conditions, fluctuations in commodity prices, and geopolitical tensions. In this year's Fiscal Risk Statement, we have identified these risks, and assessed their potential impact on the economy and public finances. The report also includes recommendations for stakeholders to help mitigate these risks and ensure a more stable and sustainable fiscal outlook for the country.

I would like to express my gratitude to Asian Development Bank for providing support in the preparation of this report. The efforts of the officers of the Economic Advisor's Wing, Finance Division, have been critical in preparing this document. At the same time, the support of the Corporate Finance Wing, Budget Wing, and Debt Management Office, of the Finance Division, Public Private Partnership Authority and Ministry of Climate Change must be commended. In Particular, I would like to appreciate the hard work done by Mr. Awais Manzur Sumra, Special Secretary Finance, Dr. Imtiaz Ahmed, Economic Advisor, Dr. S. M. Naeem Nawaz, Director (Fiscal), Dr. Khurram Ejaz, Director (MTFF), Dr. Nazia Gul, Director (Macro) and Dr. Naseem Faraz, Deputy Economic Advisor in the preparation of this comprehensive document. I hope that this report will serve as a valuable resource for policymakers, investors, and stakeholders.

(Imdad Ullah Bosal)
Secretary Finance

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1. INTRODUCTION

The Fiscal Risk Statement (FRS) FY2023-24 is prepared in compliance with Section 4, Sub-Section 3 (b) of the Public Finance Management Act, 2019, which states that the Annual Budget Statement shall also contain a statement of fiscal risks.

Fiscal risks are risks that may lead to potential threats or uncertainty in fiscal forecasts presented in the Medium-Term Budgetary Statement, as defined in section 5 of Fiscal Responsibility and Debt Limitation (FRDL) Act 2005. This Statement applies the principle of 'reasonableness', which means that only those fiscal risks that have a reasonable chance of materializing over the medium-term are included.

FRS FY2023-24 provides a qualitative discussion of key fiscal risks, and where available, some quantitative analysis. The possible sources of fiscal risks are summarized in Table 1.

Table 1: Key sources of fiscal risk and the nature of the risk exposure

Source of Risk	Risk Exposure
Macroeconomic Risk	
Macroeconomic	Fiscal position vulnerable to key macroeconomic variables, including GDP growth, interest rates, inflation, and exchange rate
Specific Risks	
Environmental Risks	Globally, almost 500 disasters in the past decade, especially, floods, droughts**,** and earthquakes; exacerbated by climate change. In Pakistan, the 2022 floods contributed to a 2.2 percent GDP downturn, and resulted an estimated USD 16.2 billion in rehabilitation costs[1].
State-owned Enterprises (SOEs)	Federal government exposure to SOEs, in the form of outstanding stock of loans and guarantees, stood at 9.7 percent of GDP in FY2021; Circular debt (the payment shortfall created primarily because of non-payment of arrears and liabilities, transmission and distribution losses, as well as delays in charging periodical tariff adjustments).
Debt	Public and Publicly Guaranteed Debt (PPGD) stock reached 78.4 percent of GDP at the end of FY2022**;** External debt, which entails currency risk, constitutes about **37 percent** of the total public debt; the fixed-rate debt portfolio has decreased in recent years and currently stands at only 26 percent of total public debt, increasing refinancing risks. Further, the average time to maturity of domestic debt was 3.6 years for FY2022
Guarantees	Stock of 4.5 percent of GDP in FY2022**;** Guarantees issued against commodity operations are not part of the guarantee stock since they are self-liquidating.
Public Private Partnerships	Public Private Partnership (PPP) capital stock is expected to grow at the federal level**;** Risk Management Unit (RMU) is being established; Guarantees issued for PPP projects are recorded as a part of guarantee stock.
Provincial governments	Short term risks arising from provincial surplus targets**;** Longer term risks arising from the growing PPP capital stock and spending pressures
Institutional Risks	
Policy Implementation and Governance	Delays in implementing structural measures to reduce debt and to reform the power sector**;** Governance and capacity difficulties in oversighting SOEs and PPPs

FRS FY2023-24 focuses primarily on macroeconomic shocks, debt and guarantees, climate and natural disasters, SOEs and PPP, given that these represent most important fiscal risks facing the Government of Pakistan (GOP). These key fiscal risks are presented in the form of a fiscal risk matrix, highlighting their combined impact and realization probabilities, in Table 2.

[1] 4RF, Planning Commission

Table 2: Fiscal Risk Matrix

Potential fiscal impact		Likelihood of realization: Remote	Likelihood of realization: Possible	Likelihood of realization: Probable
	High	Environmental risks	Public corporations	
	Medium		Macroeconomic risks	Policy implementation
	Low	Public private partnerships		

2. MACROECONOMIC RISKS

The global economy has entered 2023 with significant challenges, that is, persistent supply chain issues, inflationary pressures, prolonged Russia-Ukraine war, and catastrophic disasters (earthquakes and climatic issues). According to IMF estimates, the global growth is projected to fall from an estimated 3.5 percent in 2022 to 3.0 percent in both 2023 and 2024. As such, the forecast for 2023 is below the historical (2000–2019) average of 3.8 percent. The rise in central bank's rates to fight inflation and Russia-Ukraine war continue to weigh on economic activity. The reopening of China has paved the way for the expected recovery. Global inflation is expected to remain around 6.8 percent in 2023 and 5.2 percent in 2024, still above pre-pandemic (2017–2019) levels of about 3.5 percent. This situation in the major economies has impacted many developing economies including Pakistan.

2.1 Medium Term Macroeconomic Framework

In Pakistan, the inflation rate has been volatile in recent years, influenced by various factors such as currency devaluation, energy, and food prices in global market. The Pakistani rupee has experienced significant depreciation in recent years, influenced by various risk factors such as trade imbalances, external debt, political instability, and global economic conditions. The State Bank of Pakistan (SBP) is actively responding to increasing inflation by raising the policy rate. Moreover, the government is also focusing on taking effective policy, administrative and relief measures to control inflation and stabilize the economy.

A slow but steady recovery of the economy is expected. According to provisional estimates of Pakistan Bureau of Statistics, Pakistan's real GDP growth rate is 0.29 percent in FY2023. Over the medium-term, growth is expected to rise to the levels even higher than five years (FY2018-FY2022) average growth rate of 4.0 percent and eventually reach to 5.5 percent in FY2026. A gradual decrease in the inflation rate due to improvement in domestic and global factors and PKR stabilization are expected over the medium term.

Table 3: Medium-term Macroeconomic Projections (Percent)

Indicator	FY2022	FY2023	Projections		
			FY2024	FY2025	FY2026
Real GDP growth rate	6.1	0.29	3.5	5.0	5.5
CPI Inflation	12.2	29.2	21.0	7.5	6.5

Source: EA Wing's Medium-term Projections, based on available information

2.2 KEY MACROECONOMIC RISKS

The pace of economic activity during FY2023 has been significantly constrained due to several factors, such as demand compression measures, losses in agricultural production caused by floods, uncertainty regarding the resumption of the IMF program, a difficulty in meeting external financing needs and maintaining foreign exchange reserves.

The inflation outlook has deteriorated, and there is heightened risk to external stability. The uncertainty surrounding the future adjustment path in energy prices is the main upside risk to the inflation outlook. However, a potential moderation in international commodity prices may contribute to a reduction in inflation. Further, exchange rate adjustments, passing on the impact of energy price increases, and interest rates on higher side would enable the prices to decline over the medium term. Subsequently, it would follow the expansionary monetary policy and improvement in fiscal space in view of decline in mark-up payments. As such, the stabilization measures taken during the last one year can bring macroeconomic and fiscal benefits in the medium-term.

During the first half of the current fiscal year, there was a noticeable decline in average international oil prices, which is expected to continue soon amidst concerns of a global recession. The government has forecasted a reduction in the current account deficit to USD 3.7 billion in FY2023, which appears feasible. However, this projection is subject to certain risks. A more significant than expected slowdown in global demand could have a negative impact on Pakistan's export outlook and workers' remittances. Furthermore, global, and domestic uncertainty also pose a downside risk to this forecast. On the upside, a larger than anticipated slowdown in domestic demand or a relatively sharp fall in global commodity prices could improve the current account deficit and reduce fiscal risk.

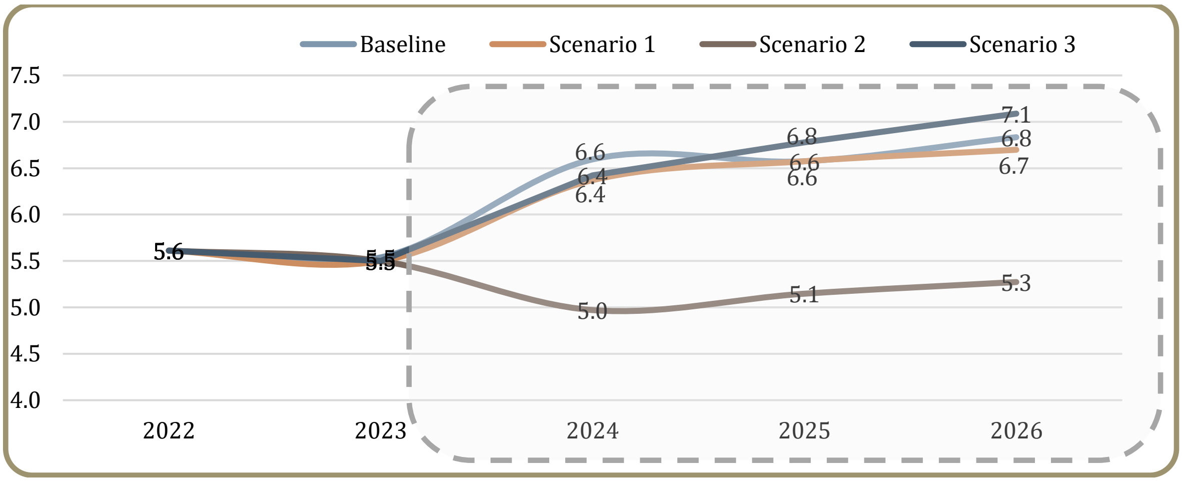
The government aims to reduce the fiscal deficit by implementing measures such as expanding the tax net, rationalizing subsidies, and promoting economic growth. However, the challenge of rising debt servicing could hinder the reduction of the fiscal deficit. Three scenarios (depicting macroeconomic risks) are simulated to analyze fiscal risks.

The scenario 1 projects/simulates the reactions of revenues, expenditures, and fiscal deficit in a situation where government can have access to low-cost availability of financing options (reduction of 2 percentage points of interest rate on external debt and 4 percentage points in domestic currency interest rate). It is expected that the net federal revenues will remain at 6.7 percent of GDP, federal expenditures will eventually reach 9.7 percent of GDP whereas federal fiscal deficit will touch 3.0 percent of GDP (Figure 1-3).

The scenario 2 elaborates the responses of revenues, expenditures, and fiscal deficit to reduction of 50 percent in non-tax revenues against baseline projections. The net federal revenues will decrease to 5.3 percent of GDP, federal expenditures will remain at 10.6 percent of GDP, and federal fiscal deficit will increase to 5.4 percent of GDP.

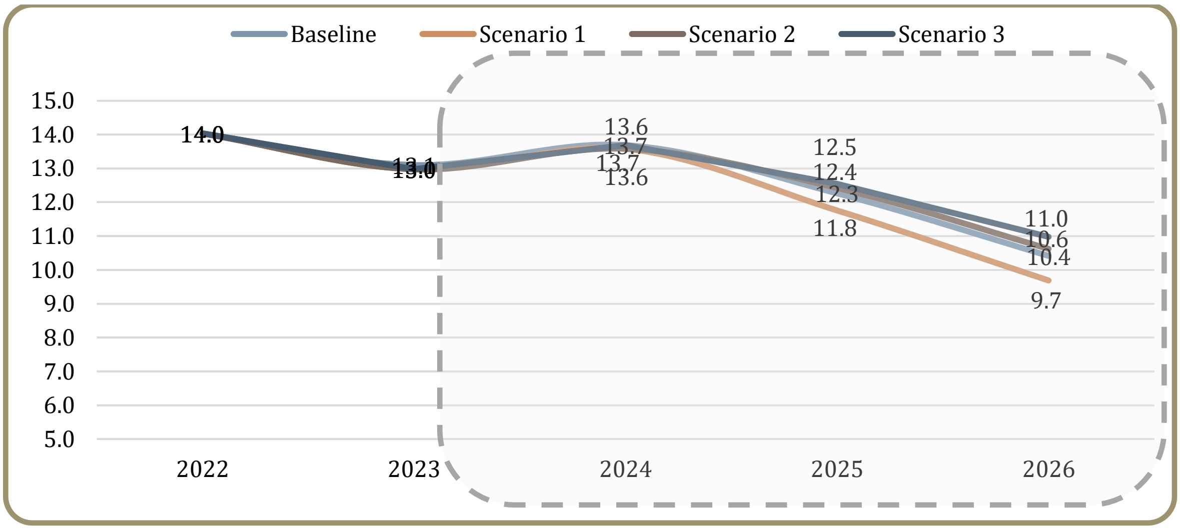
The scenario 3 highlights the reactions of revenues, expenditures, and federal fiscal deficit, if growth rate remains below the projected rate by 0.5 percent every year in the medium term. By FY2026, the net federal revenues, federal expenditures, and federal fiscal deficit will remain at 7.1 percent, 11.0 percent, and 3.9 percent respectively. Federal fiscal deficit is more sensitive to low non-tax revenue collections than decrease in interest payments or GDP.

Figure 1: Net Federal Revenue (Share of GDP, percent)



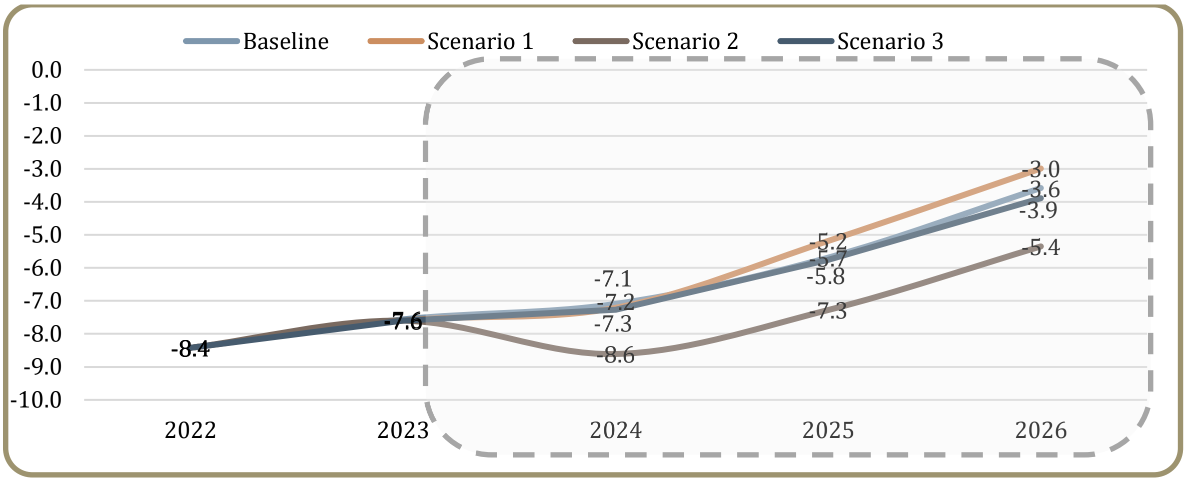
Source: EA Wing's Medium-term Projections and simulations, based on available information

Figure 2: Federal Expenditures (Share of GDP, percent)



Source: EA Wing's Medium-term Projections and simulations, based on available information

Figure 3: Federal Fiscal Deficit (Share of GDP, percent)



Source: EA Wing's Medium-term Projections and simulations using FSA Tool, based on available information

2.3 RISK MITIGATION

The Government of Pakistan has initiated several policy reforms to restore fiscal discipline and debt sustainability, safeguard monetary and financial stability, and maintain a market-determined exchange rate (to rebuild foreign currency reserves). Key initiatives to manage macroeconomic shocks include the following:

- Restrictive monetary policy through higher interest rates, both to reduce inflation and help address external imbalances – monetary tightening has resulted in 8.75 percent increase in the policy rate since April 2022
- Tighter fiscal policy (restricting current spending and mobilizing tax revenues) to create fiscal space for social protection and enhancing public debt sustainability
- Amendment to the FRDL (Amendment) Act (2022), that establishes the Debt Management Office (DMO) in the Ministry of Finance, to consolidate external and domestic borrowing
- Targeted transfer programs aimed at reducing poverty and protecting the most vulnerable
- The piloting of a Treasury Single Account (TSA), the first stage of the implementation of reforms to cash and debt management
- Close oversight of the banking system and decisive action to address undercapitalized financial institutions
- Continued commitment to a market-determined exchange rate, to absorb external shocks, maintain competitiveness, and rebuild international reserves.
- Improving the business environment, including by creating a fair-and-level playing field for businesses, investment, and trade

3. PUBLIC DEBT AND GUARANTEES

Total public debt (TPD) is a measure of government indebtedness. Under the FRDL Act, 2005, "Total Public Debt" means debt of the government (including the Federal Government and the Provincial Governments) serviced out of the consolidated fund and debt owed to the IMF.

Over the last five years, Total Public Debt of the Government has exceeded the prescribed limit of 60 percent of GDP under the FRDL Act. This is primarily due to consistent fiscal deficits, averaging 6 percent of GDP since 2010, which have led to a rapid build-up of debt. TPD can increase due to both budgetary and non-budgetary factors, such as unfavorable movements in interest and exchange rates and the realization of contingent liabilities.

Table 4: Pakistan's total public debt summary

	FY2018	FY2019	FY2020	FY2021	FY2022	March 2023
(Rs. in billion)						
Domestic Debt	16,416	20,732	23,283	26,265	31,085	35,076
External Debt	8,537	11,976	13,116	13,601	18,157	24,171
Total Public Debt	**24,953**	**32,708**	**36,399**	**39,866**	**49,242**	**59,247**
Total Debt of the Government[2]	23,024	29,521	33,235	35,669	44,361	54,392
(In percent of GDP)						
Domestic Debt	41.9	47.3	49.0	47.0	46.7	-
External Debt	21.8	27.3	27.6	24.4	27.3	-
Total Public Debt	**63.7**	**74.7**	**76.6**	**71.4**	**73.9**	**-**
Total Debt of the Government	58.7	67.4	69.9	63.9	66.6	-
(In percent of Total Public Debt)						
Domestic Debt	65.8	63.4	64.0	65.9	63.1	59.2
External Debt	34.2	36.6	36.0	34.1	36.9	40.8
Memo: (US$ in billion)						
External Debt & Liabilities	95.2	106.3	113.0	122.3	130.2	126.1
External Public Debt	70.2	73.4	78.0	86.5	88.8	85.2
Domestic Debt	135.1	127.1	138.4	167.0	152.1	123.6
Total Public Debt	205.3	200.6	216.4	253.4	240.9	208.8
Exchange Rate (Rs/US$,End of Period)	121.5	163.1	168.2	157.3	204.4	283.8
GDP (Rs. in billion)	39,190	43,798	47,540	55,836	66,624	84,658

Source: Debt Management Office, Finance Division

External debt constitutes 40.8 percent of total public debt, which may make the Government's fiscal position vulnerable in the face of high current account deficits, low foreign exchange reserves, and a weakening exchange rate. A lack of foreign exchange reserves coupled with large external payments has resulted in liquidity issues and destabilized the exchange rate and domestic interest rates, further increasing the burden of external loans that are measured in local currency.

Ongoing fiscal deficits require refinancing of the Government's maturing debt while raising additional debt to fulfill the fiscal shortfall. A high level of short-term debt creates potentially significant refinancing challenges during periods of slower economic growth, higher fiscal deficits, and/or lower investor confidence. To manage the refinancing risk, it is important for the government to achieve and maintain a longer average time to maturity (ATM) of its domestic as well as external debt. This means that the government should issue debt with

[2] Total Debt of the Government is total public debt less accumulated deposits of the Federal and Provincial Governments with the banking system

longer maturities, which will reduce the frequency of debt rollovers and decrease the refinancing risk, in line with the current Medium Term Debt Strategy.

The Finance Division sets the target for domestic debt at 4 years ATM and 7 years ATM for external debt with GFN/GDP at 27 percent in its Medium Term Debt Strategy 2019-2023. For FY2022, the ATM of Domestic Debt was reported at 3.6 years, falling short of the targeted ATM of 4 years. However, the government is determined to implement stronger fiscal discipline, decrease its fiscal deficit, reduce its borrowing requirements, and rely on longer-term instruments for domestic borrowing. These actions are expected to meet its targets.

In FY2022, the ATM of external debt was recorded at 6.2 years, below the target of 7 years. The government has borrowed significant amounts in recent years by utilizing commercial sources such as medium to long-term Eurobonds and short-term bank loans resulting in decline in ATM of external debt. Furthermore, the GFN/GDP for FY2022 stood at 26 percent of GDP, better than the targeted 27 percent.

Moving forward, the government plans to retain a reasonable proportion of commercial debt within the total external debt, for the purposes of diversification and maintaining a presence in international capital markets. Nonetheless, the government is committed to adhere to the targets by augmenting the percentage of longer-term external borrowings, such as bank loans, Eurobonds, and loans secured from bilateral or multilateral sources. Government is also committed to develop the domestic debt capital markets to ensure raising long-term domestic debt at competitive pricing.

Another source of fiscal risk is reflected in Pakistan's exposure to floating debt, making it vulnerable to increase in borrowing rates that may arise due to unfavorable economic conditions. Maintaining a significant proportion of fixed-rate debt within both domestic and external debt is crucial for managing interest rate risk, as it safeguards the borrower against sudden increases in borrowing rates in response to unfavorable economic circumstances.

The share of fixed rate in domestic debt was 26 percent and around 70 percent in external debt. The Finance Division is committed to work closely with the SBP and SECP to develop domestic debt capital markets and increase the participation of other entities such as insurance companies and pension funds. Moreover, steps will be taken to reduce the fiscal deficit and implement policies aimed at achieving price stability and reducing long-term inflation expectations. These initiatives will enhance the efficiency of financial markets in resource allocation, boost demand for long-term fixed-rate government securities, and enable the government to establish and achieve more ambitious targets for fixed-rate government securities.

3.1 Debt Sustainability Analysis

Prudent debt management is necessary to avoid negative effects on monetary and fiscal operations, as well as the external account. Ultimately, a balanced approach to debt management is necessary to ensure that Pakistan can continue to finance its development and growth objectives while maintaining financial stability.

To effectively manage domestic debt, it is necessary to bridge the gap between revenues and non-interest expenditures, and to reduce or generate a primary surplus. Since FY2018, higher primary and fiscal deficits along with lower revenue growth has resulted in higher TPD. The first three quarters of FY2023 has resulted in an overall primary surplus of PKR 504 billion, associated with the rolling back of some subsidies related to energy sector and petroleum products. Fiscal discipline is essential to maintain primary surplus. TPD/Revenue and Debt service/Revenue ratios remain high and need to be brought down to more sustainable levels.

Table 5: External account and Fiscal Operations

	FY2018	FY2019	FY2020	FY2021	FY2022	Jul-Mar FY2023
External Account						
(In US$ million)						
Current Account Balance	(19,195)	(13,434)	(4,449)	(2,820)	(17,481)	(3,189)
Foreign Exchange Earnings	55,145	55,791	54,254	65,119	73,196	48,886
Interest Payments	2,317	2,951	3,226	2,230	2,985	3,023
Amortization	5,178	8,638	11,349	11,193	12,115	12,639
Non-Interest CA Balance	(16,878)	(10,483)	(1,223)	(590)	(14,496)	(166)
External Debt & Liabilities	95,237	106,349	113,013	122,292	130,320	125,726
Fiscal Operations						
(In PKR billion)						
Budget Surplus/(Deficit)	-2,260	-3,445	-3,376	-3,403	-5,260	-3,079
Total Revenue	5,228	4,901	6,272	6,903	8,035	6,938
Current Expenditures	5,854	7,104	8,532	9,084	11,521	9,245
Interest Payments	1,500	2,091	2,620	2,750	3,182	3,582
Primary Balance	-760	-1,354	-757	-654	-2,077	504

Source: SBP Economic Data and Ministry of Finance Budgetary Operations

To ensure a decline in External Debt to Foreign Exchange Earnings (FEE) overtime, it is crucial to maintain a nil current account deficit before interest payment and have higher growth in FEE compared to the interest rate paid on External Debt. The current account deficit showed significant improvement in the first three quarters of FY2023, on the back of the Government's administrative measures to curtail imports; however, the amortization of external debt is increasing owing to repayments of short-term commercial debts.

3.2 Size and Composition of Guarantee Portfolio

The stock of guarantees stood at 4.5 percent of GDP in FY2022. Guarantees issued against commodity operations are not included in the estimated stock now in annual limits imposed on new issuances, on the basis that the loans are secured against the underlying commodity and are essentially self-liquidating. These guarantees are issued against the commodity financing operations undertaken by TCP, PASSCO, and provincial governments. The outstanding stock of commodity operations was Rs 1,134 billion at end June 2022. A fiscal risk arises from the fact that a significant part of commodity operations lacks underlying collateral due to issues like theft of commodities, unpaid subsidies, and wastage during storage.

Table 6: Government's guarantee portfolio

	FY2018	FY2019	FY2020	FY2021	FY2022	March 2023
Domestic	1,189	1,464	1,631	1,564	1,533	1,579
External	289	505	713	843	1,451	1,881
Total	**1,478**	**1,969**	**2,344**	**2,407**	**2,983**	**3,460**
Memorandum Items						
External (US$ in Million)	2,375	3,157	4,243	5,351	7,083	6,629
Exchange Rate	121.5	160.1	168.1	157.5	204.6	283.8
Government Guarantees Stock - Sector Wise						
Total Outstanding Stock	**1,478**	**1,969**	**2,344**	**2,407**	**2,983**	**3,460**
Power Sector	1,125	1,562	1,961	1,999	2,238	2,541
Aviation	156	212	204	210	241	244
Manufacturing	51	51	45	45	99	66
Financial	66	66	66	66	110	46
Oil & Gas	78	75	60	50	52	35
Others	2	3	8	37	243	528

3.3 Strategies to Mitigate Guarantee Risks

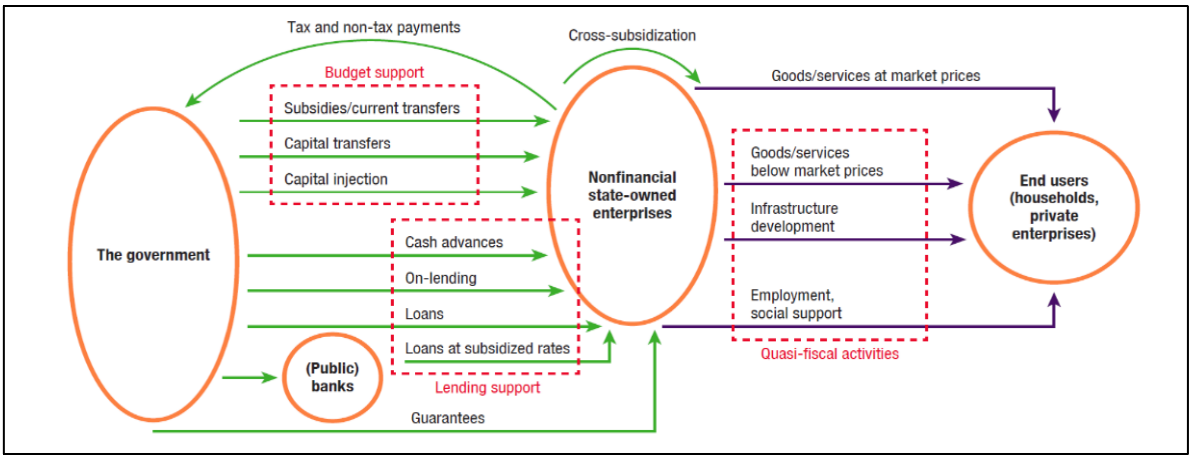
The FRDL Act 2022 imposes a limit on the issuance of new government guarantees, including rollovers of existing guarantees, to 2 percent of GDP per annum and 10 percent of GDP limit on guarantees stock.

In addition to the exclusion of certain contingent liabilities from the stock limit, oversight and active management of guarantee and other contingent liability flows is embryonic – while the need for management of potential fiscal risks related to PPP contracts, subnational governments, and government contracts has been recognized, governance and capacity to do so effectively is in development.

4. STATE OWNED ENTERPRISES RISKS

Pakistan's state-owned enterprises (SOEs) provide a wide range of essential goods and services, and thus play a critical role in Pakistan's socio-economic development. Given multivariate financial flows between the Government of Pakistan and its SOEs, as demonstrated in Figure 4 below, their ongoing financial and operational performance is a considerable source of fiscal risk.

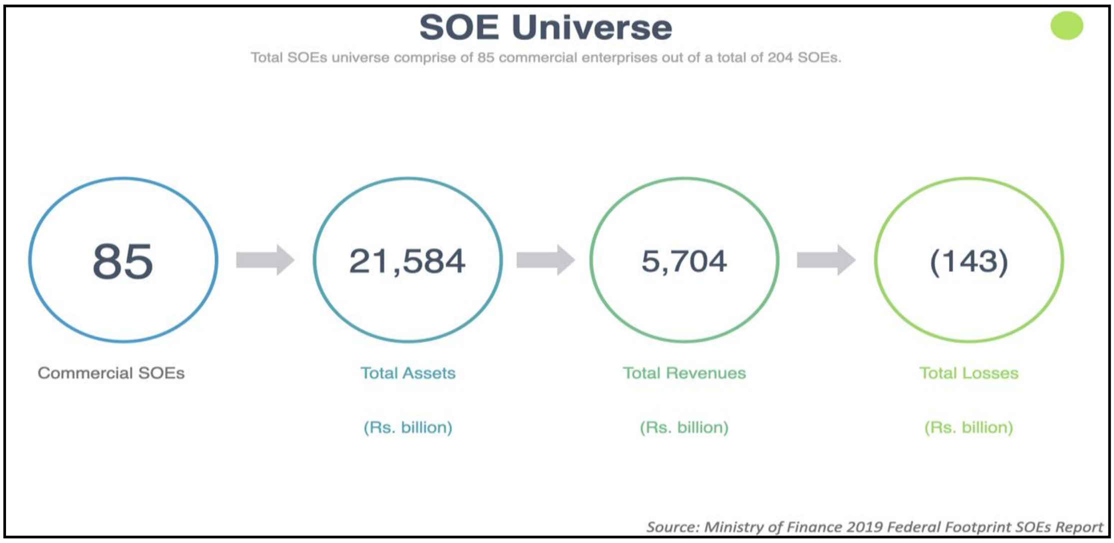
Figure 4: Government and SOE's fiscal relationship



4.1 Size and Composition of the Sector

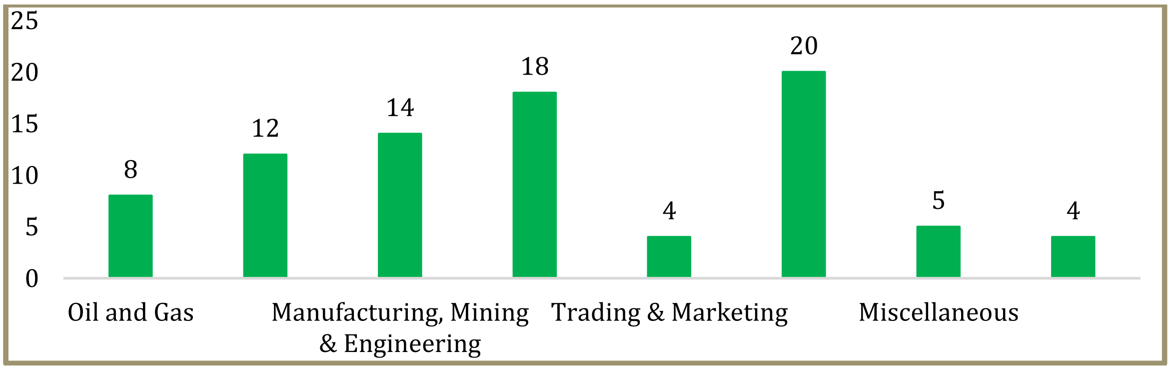
Pakistan's SOE universe comprises a total of 204 SOEs, of which 85 are categorized as commercial enterprises. Overall, SOE revenues in FY2019 were approximately PKR 4 trillion, while their book value of assets was PKR 19 trillion.

Figure 5: SOEs universe



These SOEs provided employment to more than 415,270 people, accounting for around 0.8 percent of the total workforce. The 85 Commercial SOEs mainly operate in seven sectors, including Power; Oil and Gas; Infrastructure Transport and Communication; Manufacturing, Mining, and Engineering, Finance, Industrial Estate Development and Management, and Wholesale, Retail, and Marketing.

Figure 6: Commercial SOEs portfolio



Source: Finance Division 2021: State-Owned Enterprises (SOEs)Triage: Reforms and Way Forward

4.2 Key Portfolio Fiscal Risk Indicators

Government guarantees to SOEs have increased by FY2021 relative to FY2016. While commercial SOEs are expected to be a source of revenue for the Federal Government, in the form of taxes and dividend payments (commensurate with the level of Government equity invested), net inflows have been negative.

One of the key drivers of SOE fiscal risk arises from the absence of a clear and comprehensive framework for public sector obligations (PSOs), which would allow SOEs to be properly compensated for undertaking quasi-fiscal activities. The erosion of the SOE's profitability, capacity to invest and financial viability arising from such activities may not become fully apparent for years. Overall, SOEs provide essential services in several sectors to many vulnerable consumers, making the complete elimination of quasi-fiscal burdens on SOEs politically and economically infeasible. Moreover, SOEs may be the most effective means of investing in social infrastructure in remote rural areas, such as energy, water, and sanitation and thus, their overall presence is economically viable with net economic benefits to general population.

Nonetheless, the fiscal risks arising from non-commercial activities of SOEs would most effectively be managed by the creation of a comprehensive and transparent PSO framework, that provides clear guidelines on how to measure these burdens and ensure timely and commensurate compensation through regular and transparent budgetary transfers. The Government through State-Owned Enterprises (Governance and Operations) Act, 2023 has already embarked upon formulation of a PSO management framework, which would provide clear guidelines in this regard.

A second, key driver of SOEs fiscal risk arises from SOEs inefficiencies. The reasons for such losses differ across SOEs, but typically relate to physical system losses, expenditures not approved by the regulator, slow progress in necessary restructuring, and unresolved corporate governance issues. In terms of SOE inefficiencies, a critical area of reform is system losses in electricity and gas sectors.

4.3 Mitigating and Managing Fiscal Risks from SOEs

Fiscal risks are generated both by i) quasi-fiscal activities and unfunded PSOs and ii) SOE inefficiencies. These sources of risk have different targeted solutions which the GOP is in the process of undertaking. For the latter, the Government has enacted State-Owned Enterprises (Governance and Operations) Act, 2023 which includes a comprehensive SOE reform agenda culminating in SOE transformation, privatization, or divestment. This Act is founded on the principles of operational efficiency and accountability and its hallmarks include implementing an SOE policy (including identification, quantification, and funding of all PSO's), setting up and empowering a Central Monitoring Unit (CMU) within Ministry of Finance, and establishing Cabinet Committees to oversee and push the reform program at the highest level.

For the risks generated by quasi-fiscal activities and PSOs, the result is actual liabilities for the Government which could culminate into unfunded debt obligations. A comprehensive debt management strategy and PSO framework (also part of the SOE Law) are therefore key to managing the flow of fiscal risk.

5. CLIMATE AND NATURAL DISASTER RISKS

Pakistan's 2021 Nationally Determined Contributions (NDC) has set a conditional target of an overall 50 percent reduction of emissions between 2015 and 2030 relative to business-as-usual scenario, with a 15 percent reduction using the country's own resources, and an additional 35 percent subject to international financial support[3]. Furthermore, quantitative

[3] Pakistan Updated NDCs, 2021 (link)

targets are set for energy (by 2030, 60 percent of all energy will be from renewable resources including hydropower) and transport (by 2030, 30 percent of all new vehicles sold will be electric vehicles)[4]. The Government has also placed a moratorium on new coal plants and no generation of power through imported coal will be allowed. Similarly, Pakistan also has announced the National Adaptation Plan in 2022, which is expected to be released later this year, for mainstreaming medium and long-term climate change concerns into national policies, strategies, and programs.

5.1 Pakistan's Vulnerability to Climate and Natural Disasters

Pakistan is among the top 10 countries most vulnerable to the impacts of climate change, as highlighted by the Global Climate Risk Index 2021, published by the German watch[5]. With the number of days per year with a heat index greater than 35°C projected to rise significantly, Pakistan will be exposed to a more severe, frequent, and longer droughts, while the melting of the Himalayan glaciers will pose a major threat. The Ministry of Climate Change has already identified 33 glacial lakes prone to hazardous glacial lake outburst flooding (GLOF), which could put millions of people at risk[6]. Moreover, Pakistan ranks 12th in the world in terms of climate vulnerability, as per the Climate Vulnerability Monitor, highlighting the need for an urgent action. Between 1992 and 2021, climate and weather-related disasters in Pakistan has resulted in a staggering US$29.3 billion in economic losses, according to EM-DAT. Pakistan's high vulnerability score and low readiness score also places it in the upper-left quadrant of the ND-GAIN Matrix, reflecting its significant vulnerability to climate change and relatively low readiness to adapt to its impacts[7]. For a resilient recovery, the Government has worked on a comprehensive 4RF strategy (Resilient Recovery, Rehabilitation and Reconstruction Framework), aiming to reduce the adverse impacts of climate change and natural hazards for Pakistan's economy, particularly the agriculture sector, and its population.

5.2 Past Natural Disasters and Their Impacts

Table 7: Past natural disasters and their impacts

Disaster	Year	IMPACT
Flood	2022	One-third area came under water with 1,700 deaths and 8 million displaced; Damage & loss of $14.9 billion, and $15.2 billion respectively, with $16.3 billion rebuild cost.
Bushfires	2022	$41 million worth pine nuts lost; $18.6 million worth loss in year to come due to burnt trees
Smog	2016	Increased health costs with millions of people suffered respiratory and eye infections due to bad air quality
Heatwave	2015	Increased health costs and loss of lives; 1,200 died due to heatstroke and suffocation and more than 80,000 people were brought to the nearby hospitals for treatment or first aid.
Flood	2010	Over 1,800 people died; 20 million people affected (loss & damage) and displaced; Resulted in 5 percent loss of GDP
Earthquake	2005	Fiscal costs of relief and rehabilitation of over $5.2 billion[8]; over 80,000 casualties; 4 million people affected approximately; Loss to buildings, bridges, and other infrastructure
Source: EM-DAT, The International Disaster Database		

[4] National Electric Vehicle Policy, 2019 (link)
[5] Global Climate Risk Index, Germanwatch 2021 (link)
[6] Scaling-up of Glacial Lake Outburst Flood (GLOF) risk reduction in Northern Pakistan, Ministry of Climate Change, Government of Pakistan, 2022 (link)
[7] Notre Dame-Global Adaptation Initiative (ND-GAIN) Matrix, 2020 (link)
[8] Preliminary Damage and Needs Assessment, GOP 2005

5.3 Climate Impacts on the Fiscal Risk Position of the Government

Climate and natural hazard events pose two significant risks to the Government's fiscal position, namely physical risks, and transition risks. In Pakistan's context, physical risks refer to the adverse impacts of climate change and natural disaster events that directly affect people and ecosystems through floods, droughts, heatwaves, and hurricanes, which in turn, strain Government's fiscal position. For example, 2018 drought in Balochistan resulted in crop losses of up to 80 percent, leading to widespread food insecurity and migration. Similarly, the 2021 drought in Sindh affected over 5 million people and caused losses of over PKR 100 billion[9]. The melting of glaciers has led to flash floods, which has caused significant damages to infrastructure and homes.

Due to such events, Pakistan has consistently faced public finances and debt sustainability exposures, including both macroeconomic risks and contingent liabilities. For instance, because of 2022 floods, Pakistan experienced disruption of economic activity, infrastructure damages and loss of crops, which adversely affected its tax income, stagnated public revenues and increased social transfer payments. With agriculture being the worst affected sector, the country experienced changes to commodity supply cuts, mainly in wheat and cereals, with additional pressures on imports while incurring increased spending around direct food subsidies. This influenced inflation and interest rates through supply and demand shocks, eventually leading to exchange rate effects.

Contingent liabilities have also explicitly or implicitly exposed the Government to fiscal risks. With earthquakes and floods, natural disasters in Pakistan have damaged and destroyed physical government assets as well as public infrastructure, requiring significant expenditure on social protection programs and consequent liabilities to damage repair and reconstruction. Natural disasters have also affected the operations of SOEs. Pakistan Railways, for instance, closed the main line for 35 days during the last floods, resulting in loss in both passenger and freight revenues, whereas the National Highway Authority (NHA) experienced an almost 25 percent decline in its revenues year on year (YoY) due to its inability of commuters to use physical assets[10].

Overall, such crisis response measures have been expensive and have a significant impact on public spending. Moreover, fiscal shocks from extreme climate events, although may seemingly come across as short term in nature, have lasting impacts on growth and public finances. Besides physical risks, there are transition risks that have also affected the Government's fiscal position. These risks arise from the need to reduce greenhouse gas emissions, which could result in stranded assets, reduced demand for carbon-intensive products, and increased costs associated with the transition.

5.4 Strategies to Mitigate Climate and Disaster Risk

The cost arising from both physical and transition risk needs to be managed in a fiscally responsible manner. To alleviate the risk arising from climate and natural hazards, the Government has taken several measures as part of its fiscal risk mitigation strategy.

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[9] Pakistan: Drought in Baluchistan and Sindh, WHO Situation Report, 2019 (link)

[10] Resilient recovery, rehabilitation, and recovery framework Pakistan, 2022 Ministry of Planning, Development and Special Initiatives, GoP

First, the Government now has a comprehensive climate change policy, which provides an overarching framework for climate action across different sectors. For instance, in the energy sector, the policy emphasizes the assessment of the impact of hydropower projects on the environment and local communities, futuristic building designs with solar panels, exploration of clean coal technologies, the introduction of carbon taxes, gradual introduction of Green Fiscal Reforms, incentivization of energy audits, and enactment of energy conservation legislation. By having a policy framework, the Government can now lead the way by investing in climate-resilient infrastructure and technology, thereby reducing the likelihood of damage and losses from climate-related disasters.

Second, the Government has undertaken broad based efforts for climate-proofing of existing infrastructure assets. Infrastructure, such as roads, buildings, and dams, is critical for economic development, but it is also vulnerable to the adverse impacts of climate change. Therefore, the Government has initiated several projects aimed at strengthening infrastructure resilience to climate change. For example, the NHA has initiated the "Climate Change Vulnerability Assessment of National Highways" project, which aims to identify the potential risks posed by climate change to the national highways and develop measures to mitigate these risks. In addition, the Government in partnership with development partners has planned investments to climate proofs and modernize vital irrigation assets. For instance, ADB is helping Punjab province to improve water resource management and increase agricultural productivity to enhance food security and build resilience against climate risks. The upgraded Trimmu and Panjnad barrages are now equipped with modern technology and have expanded capacity to regulate the flow of water and protect vast farmlands from flooding. Also, as part of the CPEC, China's Lanzhou University has helped set up a state-of-the-art weather monitoring station at Pakistan's Peshawar University[11].

Third, the Government has implemented Disaster Risk Reduction (DRR) measures. The Government through the National Disaster Management Authority (NDMA) has developed a National Disaster Risk Management Framework to guide the development of disaster risk reduction strategies and policies[12]. The framework includes measures to improve early warning systems, enhance disaster preparedness, and improve response and recovery. In addition, since agriculture is a devolved subject, the provincial governments continue to provide subsidies for climate-smart agriculture investments[13].

Fourth, the Government is making efforts to align DRR projects on science-based principles, which will be necessary to mitigate impacts due to floods, droughts, earthquakes, and cyclones. The lead agency in this regard has been the National Disaster Risk Management Fund (NDRMF), which was established in 2016 to finance DRR and preparedness projects in Pakistan. NDRMF has been working on various projects, including the construction of disaster-resilient schools, hospitals, and emergency operation centers in disaster-prone areas, installation of early warning systems, and capacity building of local communities to better prepare for natural disasters. For flood protection, NDRMF has invested in embankments, spurs, and other flood protection structures and has provided funding for the construction of

[11] China Is Climate-Proofing The Belt And Road, Starting With Pakistan, Ruqiya Anwer, UNDRR 2022 (link)
[12] National Disaster Risk Management Framework, NDMA, GoP 2007 (link)
[13] PM Agriculture Emergency Program, 2021 (link)

a flood protection structure in the district of Shangla, Khyber Pakhtunkhwa, which has reduced the risk of flooding for over 1,600 households. NDRMF has also invested in earthquake resilience projects, such as retrofitting of school buildings and hospitals to make them more earthquake resistant. Last, it has supported community-based disaster risk management (CBDRM) initiatives in Pakistan.

As an extension around its science-based DRR efforts, the Government is also in the process of developing a first of its kind National Catastrophe (Nat-Cat) model. The Nat-Cat model is a joint initiative of the NDRMF and the Space and Upper Atmosphere Research Commission (SUPARCO) of Pakistan. It is aimed at developing a comprehensive modeling tool for natural disaster risk assessment and management in the country around four critical areas: floods, earthquakes, droughts, and cyclones[14]. The Nat-Cat model incorporates a range of factors such as geographic information, climatic and environmental data, and historical disaster records to predict the likelihood and impact of future natural disasters in Pakistan. The model is intended to help policymakers identify areas of high risk and prioritize resources for disaster preparedness and mitigation.

Fifth, the Government has implemented several community-based approaches to tackle climate change at the grassroots level. One such initiative has been large afforestation project that involves local communities in planting and nurturing trees, providing them with employment opportunities and environmental benefits. Another example is the Clean Green Pakistan campaign, which is a nationwide initiative to address environmental challenges and promote sustainable development[15]. The Government has also been working with UNDP Adaptation Fund to provide financial assistance to communities for the development of climate-resilient infrastructure and projects[16]. Additionally, the government has established Community-Based Disaster Risk Management (CBDRM) committees in vulnerable communities to enhance their resilience to climate change-induced disasters.

Last, the Government has initiated efforts to improve access to international climate finance funds, such as the Green Climate Fund (GCF) to expand its fiscal space for climate resilient projects. For instance, as part of 2021 NDC mitigation actions, several urban transportation projects have been introduced in the cities of Karachi, Islamabad, Lahore, Peshawar, and Multan. Work on the Green Line BRT in Karachi is ongoing with the support of $583.5 million from the GCF and other multilateral donors. The Asian Development Bank (ADB), the Asian Infrastructure Investment Bank (AIIB), the Agence Française de Development (AFD) and the Green Climate Fund (GCF) are supporting the Karachi Bus Rapid Transit Red Line Project[17]. In Karachi, the Federal Government has approved a public-private-partnership (PPP) structure for the revival of the Karachi Circular Railway (KCR) to help reduce GHG emissions, for which a financing structure worth PKR 201 billion is already approved[18].

More recently, the government has initiated green-budget tagging that is a step towards identifying budgetary allocations which are ‘climate sensitive’, thereby allowing

[14] National Catastrophe Model, NDRMF (link)
[15] Pakistan’s First Biennial Update Report (BUR-I), UNFCCC 2022
[16] Reducing Risks and Vulnerabilities from Glacier Lake Outburst Floods in Northern Pakistan, Adaptation Fund (link)
[17] Pakistan’s First Biennial Update Report (BUR-I), UNFCCC 2022
[18] CPEC Authority, Ministry of Planning, Development & Special Initiatives (link)

policymakers to have better visibility of expenditures directed towards climate change mitigation.

6. PUBLIC PRIVATE PARTNERSHIP RISKS

To institutionalize PPPs in Pakistan, the Government established the Public Private Partnership Authority (P3A) through the PPPA Act of 2017 (amended 2022). The Authority operates under the supervision of the Ministry of Planning, Development and Special Initiatives and has mandates, including regulating PPP transactions, helping federal implementing agencies in developing and procuring infrastructure projects through private sector investment, and approving PPP transactions that offer funding solutions to the public sector.

The P3A is responsible for ensuring that "qualified projects" are aligned with national and sectoral strategies, conducting value-for-money analysis for qualified projects, appraising and assessing project risks, evaluating funding requirements, advising and supporting implementing agencies at all stages of the project cycle, standardizing contractual provisions, developing sector-specific provisions and templates, analyzing and assessing financial models, and collaborating with international agencies.

The Public Private Partnership Working Party (P3WP) has responsibilities such as approving project concept proposals and project qualification proposals submitted by the implementing agencies to P3A. The Act also outlines the necessary approvals for qualified projects, which must be obtained before the PPP agreement is executed by the implementing agency and the concessionaire. These approvals include those from the P3WP for the project qualification proposal, the RMU for fiscal analysis, the Board of the Authority for the project proposal, and the Executive Committee of the National Economic Council for projects meeting certain criteria, in addition to any other prescribed approvals.

6.1 Size and Composition of the Sector

Over the course of the last three decades, Pakistan has executed over 100 PPP projects. The bulk of these projects have been in the energy sector, accounting for around 90 percent of the total transactions, while the rest have been in ports, information, and communication technology (ICT), airports, roads and expressways and waste disposal sectors. The energy sector concessions are operated through an institutional framework, led by the Private Power and Infrastructure Board (PPIB) and Alternate Energy Development Board (AEDB). All PPP projects other than the energy sector projects now come under the P3A. Overall, the Government has attracted a total exceeding $28 billion of private investments in various PPP projects.

P3A project pipeline mainly comprises of the federal infrastructure projects proposed to be implemented in PPP mode. Besides, the projects pipeline may also include some provincial infrastructure projects where P3A is engaged by the respective provincial government/ agencies to provide them necessary support in developing those projects in PPP mode. Besides, P3A Board's regulatory role of approving qualified projects, P3A is also active in providing necessary funding support to the implementing agencies to help implementing agencies in meeting costs for hiring quality Transaction Advisors and prepare bankable transactions for offering to the private sector for investment.

The latest amendment introduced in the P3A law has also enabled P3A to provide transaction management services to the implementing agencies and P3A has signed its first advisory mandate with the Federal Board of Revenue while it expects to close advisory leads with other implementing agencies as well including with the Government of Balochistan and Government of Gilgit-Baltistan.

The P3A projects pipeline is now mainly sourced from the implementing agencies (IA) of the Government, which aims to attract private sector investment in developing and managing public infrastructure. To date investment value of high-impact infrastructure projects approved by the P3A Board touches almost US$ 3 billion. Out of the 4 high-impact approved transactions, two have already achieved commercial close while the third is pending award of the contract. Among the active and advanced PPP projects under P3A, GOP's viability gap funding (VGF) obligations from Sialkot Kharian Motorway (SKM), Sukkur Hyderabad Motorway (M6) and Kharian Rawalpindi Motorway (KRM) are PKR 10.94 billion, PKR 9.50 billion and PKR 16.22 billion respectively. Similarly, the estimated project cost for SKM, M6 and KRM are PKR 27 billion, PKR 307 billion and PKR 86 billion respectively. The GOP obligations for these approved projects (both direct and contingent liabilities) appear to be manageable and are within the fiscal ceiling of 2 percent of the GDP. Similarly, the GOP guarantee amount envisaged to be issued against these projects are to the tune of PKR 36.66 billion (SKM: PKR 10.94 billion, M6: PKR 9.5 billion, KRM: PKR 16.22 billion) against total project outlay of PKR 420 billion.

6.2 Key PPP Portfolio Fiscal Risks

By their nature, PPPs have characteristics that can obscure management and mitigation of fiscal costs and risk. PPPs are prone to "fiscal illusion". While cash accounting, which is the only accounting system that exist in Pakistan, provides a temporary benefit, over the project cycle the impact on GoP accounts could worsen. For instance, the GoP may be required to provide various forms of support, such as Cash Development Loans (CDLs), loan guarantees or tax incentives, to encourage private investment in PPPs. These forms of support may not be included in the budget directly, but they still represent a cost to taxpayers and households. Contingent liabilities can arise if the private partner or the GoP fails to meet its obligations under the contract, either through a default on debt or its inability to operate an infrastructure asset.

The GoP is also wary of fiscal risks that may arise in PPP transactions from Minimum Revenue Guarantees (MRG) in future PPP contracts. This is because the MRG tend to act as contingent subsidies, meaning that they come into effect if the private partner does not generate the minimum revenues or demand specified in the contract. Lastly, there could be fiscal risk from frequent re-negotiation or termination of PPP contracts. Frequent renegotiations can lead to delays in project implementation and uncertainty for private investors, reducing their willingness to invest in future PPP projects.

There are several reasons why termination liabilities can pose a fiscal risk to the GoP. First, termination liabilities can be difficult to predict and budget for, particularly if they occur early in the contract period. Second, the cost of compensation may not be known until after the termination has occurred, making it difficult for the Government stakeholders to plan and allocate resources to cover the costs. Third, termination liabilities can place a strain on the GoP's finances, particularly if they occur at a time when the Government is facing other fiscal challenges, such as a natural disaster. Last, termination liabilities can damage the GoP's reputation and credibility, making it hard to rebuild lost investor confidence.

6.3 Strategies to Mitigate PPP Risks

There are several strategies that the Government is aiming to put in place to ensure that PPP fiscal costs are contained. First, when selecting projects for PPPs, the GoP will prioritize project's potential macro-fiscal implications at the time of the feasibility study. This implies that the P3A will prioritize PPP projects that are financially sustainable and have a low risk of causing fiscal stress. This means that the project's expected financial benefits shall exceed its costs, and the Finance Division will have a clear plan to fund the project over its life cycle. By carefully selecting PPP projects based on its revenue profile, the Government will ensure that the project has a realistic chance of generating sufficient revenues to be profitable and repay financiers. This will reduce the likelihood of upfront VGF, capital subsidies, termination, default, or other government support, thereby containing fiscal risks from PPP transactions.

Second, the GoP intends to have a strong gatekeeper in the Finance Division to identify, control, budget and monitor fiscal commitments. The responsibility of the Risk Management Unit (RMU) is assigned to the Director General, Debt Policy Coordination Office (DPCO), Finance Division. The P3A Act (Amended), Section 12A, outlines that the RMU shall be responsible for fiscal oversight and for evaluation of fiscal and contingent liability exposure for all qualified projects.

Third, the Government is preparing fiscal commitments and contingent liability (FCCL) guidelines for PPP projects. The objective of the guidelines will be to outline a framework for managing fiscal commitments and contingent liabilities from PPPs at the federal level in a practical, responsible, and resilient manner. The FCCL guidelines through its proceedings and tools aim to guide and support the relevant line agencies, P3A, RMU and Budget Wing of the Finance Division in meeting their responsibilities for ensuring a successful and fiscally sustainable PPP program by laying out a step-by-step approach to the analysis, control, budgeting, and reporting of fiscal exposure from PPPs.

Last, the Government is aiming to have an internally guidance tool to estimate the impacts of fiscal costs in an analytical way, such as the use of the World Bank tool Public-Private Partnerships Fiscal Risks Assessment Model (PFRAM). The Government aims to use such an analytical tool to estimate the potential macro-fiscal impacts of PPPs, which can be used in conjunction with a strong gatekeeper and FCCL framework.