State Bank of Pakistan

Half Year Report

2025-26

The State of Pakistan's Economy

The State of Pakistan's Economy 2025-26

May 12, 2026

State Bank of Pakistan

The State of Pakistan's Economy

Half Year Report, 2025-26
of the Board of Directors of State Bank of Pakistan

The analysis and projections presented in this report were prepared on data outturns for half year of fiscal year 2025-26 (July 2025 – December 2025). These were finalised by end-April 2026, using data and developments as of then.

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LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
May 12, 2026

Dear Mr. Chairman,

In terms of Section 39(2) of the State Bank of Pakistan Act, 1956, the Half Year Report of the Board of Directors of State Bank of Pakistan on the State of Pakistan's Economy for the year 2025-26 is hereby enclosed for submission to the Majlis-e-Shoora (Parliament).

With warm regards,

Yours sincerely,

(Jameel Ahmad)
Governor
Chairperson, Board of Directors

Syed Yousaf Raza Gilani
Chairman
Senate of Pakistan
Islamabad

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May 12, 2026

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With warm regards,

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Governor
Chairperson, Board of Directors

Sardar Ayaz Sadiq
Speaker
National Assembly of Pakistan
Islamabad

LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
May 12, 2026

Dear Finance Minister,

In terms of Section 39(2) of the State Bank of Pakistan Act, 1956, the Half Year Report of the Board of Directors of State Bank of Pakistan on the State of Pakistan's Economy for the year 2025-26 is hereby submitted.

With warm regards,

Yours sincerely,

(Jameel Ahmad)
Governor
Chairperson, Board of Directors

Mr. Muhammad Aurangzeb
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Economic Review

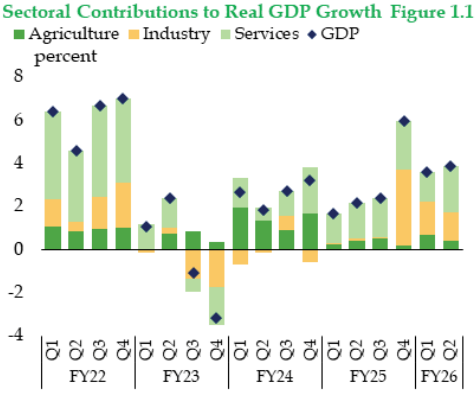
1 Economic Review

1.1 Overview

Macroeconomic stability strengthened further in H1-FY26, despite headwinds from global trade-related uncertainty and domestic floods. Since February 2026, however, the war in the Middle East has posed significant risks to macroeconomic outlook amid heightened uncertainty. The surge in international oil prices has prompted the government to implement austerity measures aimed at preserving macroeconomic stability. Going forward, the war-led supply chain disruptions may impact inflation trajectory, external trade and remittance flows, and economic activity in Pakistan.

In H1-FY26, economic outcomes had improved markedly. Real GDP growth gained momentum in H1-FY26, growing at twice the pace in the same period last year. This was led by a sharp increase in industrial output, followed by services and agriculture sectors **(Figure 1.1)**. Average National CPI (NCPI) inflation eased further, falling close to the lower bound of the medium-term target range, while SBP's FX purchases and net financial inflows shored up external buffers, despite a decline in exports (**Table 1.1**).

Sectoral Contributions to Real GDP Growth Figure 1.1



Source: PBS

Selected Economic Indicators **Table 1.1**

	FY25		FY26		
	H1	H2	Q1	Q2	H1
Growth rate (percent)					
Real GDP [a]	1.9	4.2	3.6	3.9	3.8
Agriculture sector	1.4	1.6	2.7	1.8	2.2
Services sector	2.6	3.5	2.4	3.7	3.1
Industrial sector	0.5	10.0	8.9	7.4	8.1
LSM	-1.8	0.3	3.9	5.7	4.8
National CPI [a]	7.2	1.9	4.3	6.0	5.2
Private sector credit, YoY [b]	22.8	11.9	13.9	0.9	0.9
Money supply, YoY [b]	10.2	12.9	12.0	18.8	18.8
Exports [b]	7.7	1.2	5.8	-13.9	-5.0
Imports [b]	9.8	12.6	8.7	16.3	12.4
Exchange rate – app (+)/dep (-) [b]	-0.1	-1.8	0.9	0.4	1.3
FBR tax revenue [c]	25.9	26.4	12.5	7.0	9.5
Policy rate (end period) [b]	13.0	11.0	11.0	10.5	10.5
billion US$					
Remittances [b]	17.8	20.4	9.5	10.2	19.7
FDI in Pakistan [b]	2.5	1.8	0.9	0.9	1.8
FX loans (net) [b]	-0.4	2.7	0.4	0.3	0.7
Current account balance [b]	0.9	0.9	-0.7	-0.6	-1.4
SBP's liquid FX reserves [b]	11.7	14.5	14.2	16.1	16.1
percent of GDP					
Fiscal balance [c]	-1.3	-4.1	1.6	-1.2	0.4
Primary balance [c]	3.2	-0.8	2.7	0.5	3.2

Sources: [a] PBS; [b] SBP; [c] MoF

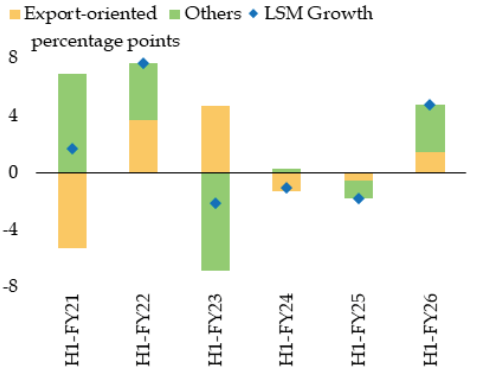
These outcomes were supported by prudent monetary and fiscal policies, and ongoing structural reforms – like deregulation, tariff rationalisation, power sector reforms, etc. Specifically, SBP continued a cautious monetary policy stance, maintaining an adequately positive real interest rate. Fiscal consolidation also remained on track with the fiscal balance posting a surplus – first since FY02, led primarily by a sharp reduction in interest payments. Favourable commodity prices and IMF program also supported the overall macroeconomic conditions. The macroeconomic stability, in turn, facilitated growth momentum.

The growth in industry was led by a rebound in large-scale manufacturing (LSM) output. Meanwhile value addition by construction and electricity, gas and water supply also edged up, whereas mining and quarrying saw a contraction. Construction activity mainly benefitted from a surge in development spending, easing input costs, and government's concessional housing scheme. The increase in value addition by electricity, gas, and water reflects higher government subsidies amid relatively subdued demand for grid power.

The LSM output increased by 4.8 percent in H1-FY26, after showing contraction for the last three years. The recovery in LSM was mainly driven by automobiles, textiles & wearing apparel, and coke & petroleum products (**Figure 1.2**). The robust performance of automobiles reflected the combined impact of stronger domestic demand, amid a fall in borrowing costs, relatively stable prices, promotional discounts, and launch of new variants, especially in the SUV segment. Growth in textiles and wearing apparel mainly benefited from higher exports amid relatively lower US tariffs. Cement and petroleum output increased in line with improved construction and transport activities in the country.

The growth in agriculture was primarily on the back of substantial increase in value addition by livestock, which more than offset the decline in output of crops. Within crops, the decline was largely due to cotton and maize which were most affected by floods. Meanwhile, production of sugarcane and rice increased over the last year. Sugarcane benefited from higher yield and increased area under cultivation in response to better returns compared to the competing crops. The increase in rice production was mainly on account of higher yield, as area under its cultivation decreased.

Contribution to LSM Growth **Figure 1.2**



Source: PBS

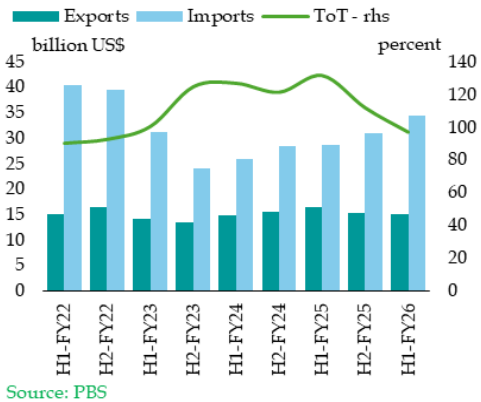
Moreover, the flood-related crop losses were somewhat contained relative to initial expectations, partly due to a coordinated flood response, with timely rescue and relief operations in affected districts. Reflecting the impact of better performance of commodity-producing sectors— industry and agriculture— the services sector growth edged up, mainly driven by wholesale & retail trade, transport & storage, and public admin & social security.

The momentum in economic activity translated into a volume-driven increase in imports in H1-FY26, amid relatively benign global commodity prices. Although lower energy and raw cotton prices helped contain the overall import bill, import volumes increased across almost all other

major categories. The composition of imports also saw signs of change during H1-FY26 owing to recent tariff rationalisation under the National Tariff Policy 2025-2030. The growth in imports was visibly stronger in groups where tariffs were reduced for a larger number of tariffs lines, such as machinery, metals and transport-related items.

Exports, on the other hand, declined despite an increase in global trade. The decline was led by significantly lower rice exports, while export of high value-added textiles remained relatively resilient. As a result of diverging trends in imports and exports, as well as deterioration in terms of trade (**Figure 1.3**), the trade deficit increased by nearly 36 percent in H1-FY26. The subdued export performance was largely attributable to a sharp decline in food exports – particularly rice. Lower global commodity prices, together with increased competition and closure of the western border, affected Pakistan's exports. Barring the impact of volatile commodity prices, Pakistan's exports performance has remained lacklustre as

Foreign Trade and Terms of Trade **Figure 1.3**



Source: PBS

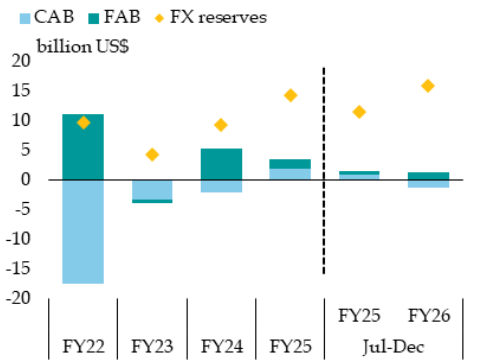
reflected by the falling export to GDP ratio over the last two decades. The downtrend in exports is due to a host of structural issues, including low productivity, policy inconsistencies, weak integration with the global value chains, and lack of products and market diversification. Together these make Pakistan's exports vulnerable to price and demand shocks.

Nonetheless, workers' remittances continue to comfortably finance the trade in goods and services deficit and a major part of the primary income deficit, helping to contain the current account deficit at moderate levels. A low kerb premium amid modest exchange rate appreciation, and favourable labour market conditions in the Gulf Cooperation Council (GCC) economies supported the surge in remittances. In addition, increased labour migration in recent years and measures taken by the government and SBP aimed at reducing transaction costs encouraged remittance inflows through formal channels.

A contained current account deficit, together with moderate private inflows, allowed SBP to continue building FX reserves and supported stability in FX market **(Figure 1.4)**. Moreover, official disbursements were higher compared to principal repayments in H1-FY26.

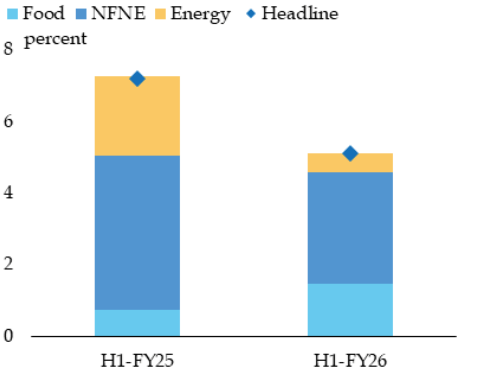
A prudent policy mix, resulting improved external account position and stability in exchange rate, softened international commodity prices and downward adjustments in administered electricity tariffs led to a moderation in inflation during H1-FY26. The NCPI inflation

Balance of Payments **Figure 1.4**



Source: SBP

Contribution to National CPI Inflation **Figure 1.5**



Source: PBS

averaged 5.2 percent in H1-FY26, about 2 percentage points lower compared to the average inflation in the same period last year **(Figure 1.5)**.

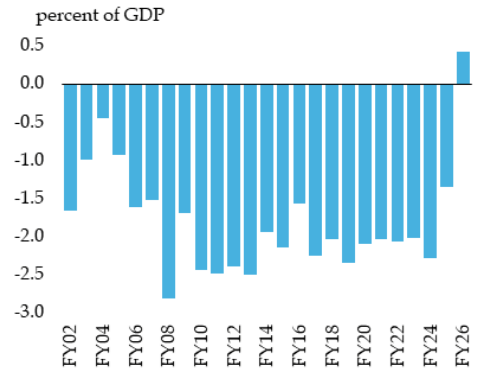
In terms of composition, lower energy and core inflation mainly explain the overall moderation in inflation, while price pressures in food group increased during H1-FY26. The increase in food inflation mainly reflected the impact of lower production of key food crops, especially wheat, flood-related supply disruptions, and imperfections in commodity markets. In this context, the ongoing wheat policy reform (**Box 3.3**) is expected to improve market efficiency and price discovery over the medium term.

Energy inflation declined to a multi-year low in H1-FY26, mainly on account of favourable pass-through of lower global energy prices and power sector reforms. However, higher levies pertaining to PDL and climate change, partially offset the impact of lower global oil prices on domestic fuel prices.

Although core (NFNE) inflation decelerated compared to the last year, it remained sticky at elevated levels. Persistent pressures stemmed mainly from house rents, gold prices, education fees, and minimum wage adjustments. Moreover, an increase in gross margins of the corporate sector also contributed to core inflation as firms in some sectors increased product prices despite falling input costs.

Owing to the persistence in core inflation, together with uncertainty arising from changing global trade dynamics, volatile global commodity prices, unanticipated energy price adjustments, flood-related supply-shock, and concerns about wheat supply, SBP continued to pursue a cautious monetary policy stance. The Monetary Policy Committee (MPC) kept the policy rate unchanged in its meetings held during July-October 2025. In December 2025, SBP reduced the policy rate by 50 basis points (bps) due to relatively benign impact of floods as compared to the initial assessment, taking

Fiscal Balance - H1 **Figure 1.6**



Source: MoF

the cumulative reduction to 1,150 bps since June 2024.

Substantial reduction in interest payments and fiscal consolidation significantly reduced the country's debt servicing burden. This, alongside steady non-tax revenue, SBP profit and PDL collection, turned the fiscal balance into a surplus in H1-FY26 **(Figure 1.6)**, while the primary surplus remained at last year's level. Lower mark-up payments helped increase development spending, subsidies and grants. This increase in social and development spending bodes well for sustaining economic growth momentum, as estimates show that development expenditure has a considerably higher fiscal multiplier than current expenditures (**Box 4.1**).

Sustained fiscal consolidation and a sharp decline in interest payments significantly slowed the pace of public debt accumulation. The gain from PKR appreciation against US dollar and lower accumulation of government deposits, also contributed to a slower pace of public debt accumulation. Moreover, to benefit from the declining interest rates, the government raised funding mostly through fixed-rate long-term instruments and retired short-term debt. This lengthened the maturity profile of public debt. The steep decline in interest payments, increase in revenue collection, higher remittances, and continuous build-up in foreign exchange reserves also improved the debt repayment capacity of the country.

The surge in the government's budgetary borrowing requirements from scheduled banks, particularly in Q2-FY26, and an increase in credit to non-government sector led to a sizeable expansion in net domestic assets (NDA) of the banking system during H1-FY26. This, together with the increase in NFA, underpinned acceleration in broad money (M2) growth during H1-FY26.

On the liability side, currency in circulation (CiC) increased in H1-FY26 amid higher remittances, rise in transaction demand, and withholding tax on cash withdrawals for non-filers. This, along with higher government borrowing from scheduled banks and expansion in credit to private sector strained interbank liquidity conditions. The resulting shortfall was actively met by SBP through open market operations (OMOs). Better liquidity management reduced volatility in weighted average overnight repo rate and strengthened monetary policy transmission.

Private sector credit (PSC) grew by 0.9 percent (YoY) as of end December 2025, compared to a 22.8 percent increase in the

same period last year. In absolute terms, PSC expanded by Rs 992.3 billion in H1-FY26 compared to Rs 1,978.9 billion in last year. The moderation in PSC was largely due to high base last year, when banks had scaled-up lending to the private sector to avoid advances to deposit ratio (ADR) - based tax. Traction in economic activity, lower input costs and easing financing conditions contributed to an uptick in private sector credit demand during H1-FY26. On the supply side, increased bank deposits enhanced availability of loanable funds.

While Pakistan's overall economic conditions improved, country's transition to a sustainable high-growth path, besides maintaining overall macroeconomic stability, would require deep-rooted economic reforms to address the chronic structural weaknesses. These include low savings and investment, weak competitiveness, falling exports in terms of GDP, subdued foreign direct investment, and the persistently low tax-to-GDP ratio. In this context, the report highlights several underlying issues that continue to hinder the economy's long-term growth potential.

Box 2.1, based on Household Integrated Economic Survey (HIES) data, shows increased disparities in household income and consumption, pointing to uneven distribution of economic gains. At the same time, productivity challenges in agriculture remain significant. In this context, innovative approaches, such as urban agriculture, can help enhance food availability in rapidly expanding cities while also improving climate resilience (**Box 2.2**). Similarly, improving access to agricultural credit can facilitate the adoption of climate-smart farming practices and modern technologies (**Box 3.1**).

In industry, policy initiatives promoting new energy vehicles represent an important step toward reducing emissions and reliance on oil imports, improving energy efficiency, and modernising the transport sector (**Box 2.3**). Further, literature suggests that implementation of first-generation reforms (governance improvement, business deregulation and trade liberalisation) can potentially add about 4 to 8 percent to output over a period of 2 to 4 years. Similarly, second-generation reforms (credit access and labour market reforms) can add another 3 percent (**Box 2.4)**. Expanding green financing can further help channel funds toward environmentally sustainable infrastructure and climate adaptation projects (**Box 3.2**).

Structural weaknesses are also evident in the export sectors. Pakistan's export base remains concentrated in a narrow set of products and markets, with limited technological upgradation. This is evident from only modest gains in textile exports despite favourable US tariffs, (**Box 5.1**), making the expansion of the textile value chain, particularly through circular and sustainable practices, crucial for maintaining market access (**Box 5.2**).

Thus, it has become imperative to move towards an export-oriented and investment-led growth model. Structural constraints, such as weak project

preparation, policy inconsistencies and governance gaps, financial sector weaknesses, and delayed project execution, keep investment, including FDI, concentrated in low-risk, market-seeking sectors like FMCGs, automobiles, power sector, etc. Addressing these issues can help attract investment into more productive and export-oriented activities, thereby supporting sustained and diversified economic growth. Building high-tech skills and digital capabilities, in particular, can further boost inflows from the IT and IT-enabled services sector (**Box 5.3**).

In addition to these structural issues, climate change has also started to emerge as the major challenge to Pakistan's economy. In this context, **Chapter 6** explores multiple dimensions of climate change and its impact on Pakistan's economy. Although Pakistan contributes only a small share to global greenhouse gas emissions, it ranks among the most climate-vulnerable countries in the world. Staff estimates show that recent climate events had significant impact on growth and inflation in Pakistan (**Box 6.1**). Further, the World Bank estimates suggest the impact on the country's GDP to intensify by 2050. At the same time, Pakistan's emissions intensity remains relatively high, reflecting structural inefficiencies and a carbon-intensive growth process, which poses challenges in the context of evolving global climate regulations and trade frameworks.

These vulnerabilities are compounded by the country's low level of preparedness to address climate change through mitigation and adaptation measures. Climate action continues to be constrained by weak policy coordination, implementation gaps in policy and institutional framework, limited technical capacity, human capital deficits, and inadequate social readiness. Moreover, the substantial investment required for climate mitigation and adaptation also remains largely unmet due to low international climate-related inflows, and challenges to domestic public and private sector financing.

1.2 Economic Outlook[1]

The macroeconomic outcomes and developments in H1-FY26 had improved the overall outlook for FY26 **(Table 1.2)**. However, the war in the Middle East poses significant risks to this outlook. Besides increases in energy prices, the supply chain disruptions, and increase in freight charges and insurance premium could significantly weigh on the country's macroeconomic outlook. The surge in international energy prices was immediately transmitted to domestic inflation despite government's decision to initially absorb the major chunk of the increase. However, its impact on overall economic activity is not expected to be significant in FY26.

The latest data on high-frequency indicators, including Purchasing Managers' Index (PMI) **(Figure 1.7),** suggest industrial output, particularly LSM and construction, has maintained the momentum observed in the first two

[1] The macroeconomic outlook in this section is based on data and developments as of April 30, 2026.

Macroeconomic Targets and SBP Projections for FY26 **Table 1.2**

	Target	SBP Projections
Growth rate (percent)		
Real GDP [a]	4.2	3.75 – 4.75
CPI (average)[a]	7.5	5.0 - 7.0
billion US$		
Remittances [a]	39.4	41.0 – 42.0
Exports (fob) [a]	35.3	29.5 – 30.5
Imports (fob)[a]	65.2	63.5 - 64.5
percent of GDP		
Fiscal deficit [b]	3.9	3.5 - 4.5
Current a/c deficit [a]	0.5	0 - 1.0

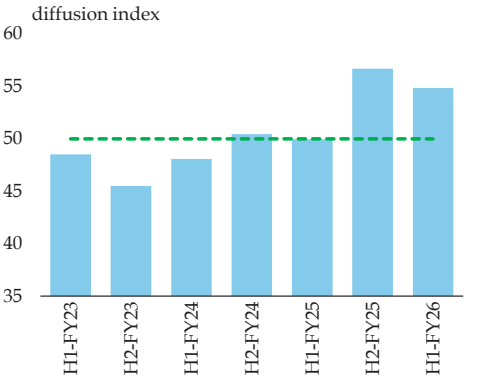
Sources: [a] Annual Plan 2025-26; [b] Federal Budget 2025-26

quarters till February 2026. However, the war is expected to weigh on output towards the end of FY26.

The latest information on wheat points to better harvest compared to last year, albeit slightly lower than the target for FY26. This, together with less than anticipated impact of floods on major kharif crops like sugarcane and rice, is expected to help agriculture to perform relatively better in FY26. The performance of agriculture and industry will have positive spillovers on the services sector. Therefore, real GDP growth is now expected to remain close to the lower bound of the projected range of 3.75 to 4.75 percent.

Increase in production of food crops and limited export opportunities due to regional conflicts are expected to moderate food inflation, which may partly offset by increase in transportation costs in H2-FY26. Energy inflation is set to increase after the government passed on the surge in international oil prices following the outbreak of the war. Oil price shocks also pose significant upside risks to core inflation via increased cost pressures,

Purchasing Managers' Index **Figure 1.7**



Source: SBP

second-round effects and inflation expectations. These developments suggest that the national CPI inflation (YoY) is likely to remain above the upper bound of the medium-term target range of 5 to 7 percent in the remaining months of FY26 and in FY27.

The spike in energy prices and increased insurance and freight charges are also expected to inflate Pakistan's import bill and freight service payments. However, the government's decision to pass on the impact of an increase in oil prices to domestic energy prices alongside the implementation of energy conservation measures is likely to help contain domestic demand and thus reduce energy import volumes. In addition, decline in LNG imports may further reduce energy imports.

On the other hand, exports are expected to remain weak due to the possibility of slower global economic growth; multi-year low rice prices; closure of Pakistan's western border; and realignment of global trade flows due to ongoing tariff

adjustments. Workers' remittances may also be impacted in Q4-FY26, considering that remittances from the GCC countries contributed around 55 percent of total remittances between FY21-FY25. However, on a full-year basis, remittances are expected to remain strong in FY26, which would partially offset the widening in the trade deficit. Consequently, the current account deficit in FY26 is projected to remain close to the lower bound of the of the range of 0 to 1.0 percent of GDP.

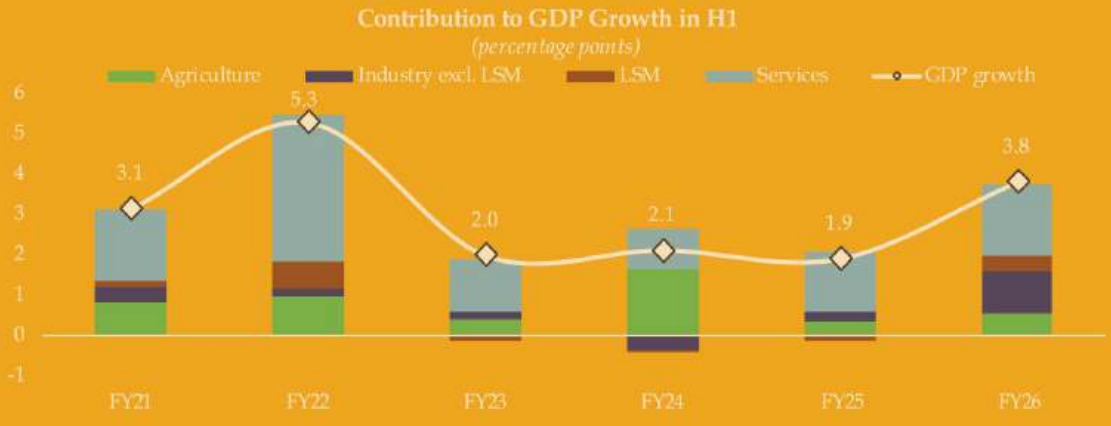
The war and surge in energy prices have implications for tax and non-tax revenue, and government's discretionary spending. In particular, the adjustment in domestic fuel prices vis-à-vis a surge in global oil prices is likely to increase energy subsidies. Moreover, the PDL collection may also be impacted due to reduced POL sales (volume effect) following the increase in POL prices and implementation of energy conservation measures. However, the government's decision to reduce the development budget could somewhat cushion the impact. On balance, SBP envisages the fiscal deficit within the range of 3.5 to 4.5 percent of GDP. While the near-term outlook remains broadly stable, lingering impacts of war on supply chain resumption and global economic activity could pose significant challenges to macroeconomic stability over the medium-term. First, slower economic activity, amid an uncertain situation in the Gulf economies, may impact remittance inflows, which has been instrumental in financing trade deficit and supporting stability in the foreign exchange market. Second, supply chain disruptions, especially the import of critical raw materials and machinery could affect industrial production as well as exports. Similarly, fertilizer shortages may impact crop yields.

Third, the slowdown in economic activity is likely to have implications for revenue generation. On the other hand, the need for discretionary expenditure may also necessitate additional revenue measures, which may have inflationary consequences. Lastly, these developments and outcomes may also stoke inflation expectations, which have remained well anchored so far. However, SBP will continue to take appropriate actions to preserve macroeconomic stability, particularly to keep inflation in check and maintain external buffers to support economic activity.

2

Economic Growth

Economic activity gained momentum with real GDP growth picking up pace in H1-FY26 compared to the first half of last year. The expansion was broad-based, with industry recording the highest growth, followed by services and agriculture sectors. The impetus to industry came from manufacturing – especially a rebound in large-scale manufacturing output, construction and electricity, gas & water supply. Growth in agriculture, notwithstanding flood-related crop losses, ticked up on the back of substantial increase in value addition by livestock. Growth in services sector, in line with better performance of industry and agriculture, also edged up. The improved economic activity started favourably reflecting on employment conditions. The recent information on online and newspaper job postings and SBP-IBA business confidence survey points to increased hiring.



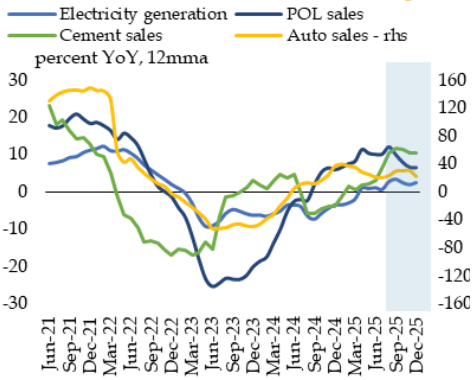
2 Economic Growth

2.1 GDP Growth

Real GDP grew by 3.8 percent in H1-FY26, up from 1.9 percent in H1-FY25. The growth was broad-based, with the major impetus coming from industry, followed by services and agriculture sectors (**Table 2.1**). The upturn reflected positive spillovers from macroeconomic stability, particularly lower interest rates, stable exchange rate, increased fiscal space for development spending, improved business and consumer confidence, and pick-up in domestic demand. Meanwhile, benign global commodity prices helped in reducing input costs.

Industry recorded the highest growth since FY18, with expansion in all its major components, except for *mining and quarrying*. The major contribution came from *manufacturing*, especially a rebound in large-scale manufacturing (LSM) in H1-FY26, after showing contraction in the comparable period of last three years. The LSM benefited from increased domestic demand – as reflected in rising sales of cement, automobiles, and POL products (**Figure 2.1**) – amid lower inflation and interest rates. Besides strong recovery in LSM, value addition of *electricity, gas and water supply* and *construction also* considerably increased.

Growth in Demand Indicators — Figure 2.1



Sources: NEPRA; APCMA; OCAC; PAMA

Growth in agriculture was primarily due to a substantial increase in value addition by livestock, which more than offset the decline in output of *Kharif* crops, except sugarcane and rice, due to floods. Sugarcane benefited from both increased area under cultivation and improved yield, while higher rice output was because of yield only. Moreover, the crop losses were contained relative to initial expectations,[1]

GDP Growth — Table 2.1

growth in percent; contribution in percentage points

	FY25						FY26			Contribution	
	Q1	Q2	H1*	Q3	Q4	H2*	Q1	Q2	H1*	H1-FY25	H1-FY26
GDP	**1.7**	**2.2**	**1.9**	**2.4**	**6.0**	**4.2**	**3.6**	**3.9**	**3.8**	**1.9**	**3.8**
Agriculture	1.1	1.7	1.4	2.4	0.9	1.6	2.7	1.8	2.2	0.3	0.5
Important crops	-12.7	-12.8	-12.8	-9.6	-17.9	-13.6	-1.1	-1.9	-1.6	-0.7	-0.1
Industry	0.2	0.8	0.5	0.3	20.3	10.0	8.9	7.4	8.1	0.1	1.4
Large scale manufacturing	-0.9	-2.6	-1.8	-2.0	3.0	0.3	3.9	5.7	4.8	-0.1	0.4
Services	2.4	2.8	2.6	3.1	3.8	3.5	2.4	3.7	3.1	1.5	1.8

* H1 GVA = Q1 GVA + Q2 GVA; H2 GVA = Q3 GVA + Q4 GVA

Source: PBS

[1] As mentioned in the NDMA Post-Monsoon Review 2025, initial post-flood assessments indicated potential losses in *Kharif* crops. However, the realized outcomes were better than expected, with rice and sugarcane output clocked at 10.0 and 89.4 million tons, compared to post-flood expectations of 8.3–8.9 and 77.0–79.0 million tons, respectively.

partly due to timely recovery and support measures in the flood-affected areas. Reflecting the impact of better performance of commodity producing sectors, industry and agriculture, the growth in services sector also ticked up, with all segments, but *information & communication services,* recording increase in value addition in H1-FY26.

With the real GDP growth picking up pace, the employment situation also started to improve. While industrial employment in Punjab declined slightly, online and newspaper job postings increased in recent months. Moreover, SBP-IBA business confidence survey also showed optimism for employment generation over the next six months.

These developments are encouraging for a meaningful transition to more inclusive economic outcomes. However, sustained high growth is imperative for increasing employment generation and poverty alleviation. In this context, the focus on reforms aimed at increasing investment and productivity holds the key.

The distribution aspect of growth is evidenced in the Household Integrated Economic Survey (HIES) 2024-25 that reports nominal gain in household income and consumption. The gains are much smaller for lower quantiles that are also associated with lower productivity. The survey also indicates increasing contribution of non-labour income, particularly remittances and transfers, consistent with emigration trends (**Box 2.1**).

2.2 Agriculture

Higher agriculture growth in H1-FY26 was primarily on the back of a significant contribution of livestock. This more than offset the negative impact of crop losses due to floods **(Table 2.2)**.[2] The improved performance of livestock is mainly

Agriculture Growth **Table 2.2**

growth in percent; contribution in percentage points

	FY25						FY26			Contribution	
	Q1	Q2	H1*	Q3	Q4	H2*	Q1	Q2	H1*	H1-FY25	H1-FY26
Agriculture	**1.1**	**1.7**	**1.4**	**2.4**	**0.9**	**1.6**	**2.7**	1.8	2.2	**1.4**	**2.2**
Crops	-0.4	-3.0	-1.8	1.8	-2.0	-0.1	-4.1	-3.3	-3.7	-0.7	-1.4
Important crops	-12.7	-12.8	-12.8	-9.6	-17.9	-13.6	-1.1	-1.9	-1.6	-3.1	-0.3
Other crops	19.7	19.1	19.4	19.3	20.2	19.8	-6.9	-5.7	-6.3	2.5	-1.0
Cotton ginning	-3.0	-20.2	-12.0	-26.6	-24.4	-25.5	-11.9	-1.0	-6.7	-0.2	-0.1
Livestock	1.9	5.6	3.6	2.6	2.2	2.4	6.2	5.6	5.9	2.1	3.5
Forestry	0.1	2.6	1.3	4.1	4.7	4.4	4.3	3.8	4.0	0.0	0.1
Fishing	-0.1	1.9	1.2	0.5	2.2	1.7	0.9	0.8	0.8	0.0	0.0

* H1 GVA = Q1 GVA + Q2 GVA; H2 GVA = Q3 GVA + Q4 GVA

Source: PBS

[2] Flooding and waterlogging affected key agricultural districts in Punjab (Multan, Muzaffargarh, Lodhran, Bahawalpur, and Vehari) and parts of Sindh (including Kashmore, Shikarpur, Ghotki and Khairpur) with reported damages to standing *Kharif* crops. Source: NDMA, *Post Monsoon Report 2025.*

attributed to lower intermediate consumption, i.e. fodder.[3]

However, the flood-related damages to major *Kharif* crops were relatively limited compared to the initial assessment.[4] The latest estimates show that production of some of the important *Kharif* crops, sugarcane and rice, has surpassed last year's levels. The better-coordinated flood response, with timely rescue and relief operations in affected districts helped limit crop losses and relocate livestock.[5] Moreover, improved credit availability also cushioned the flood impact.

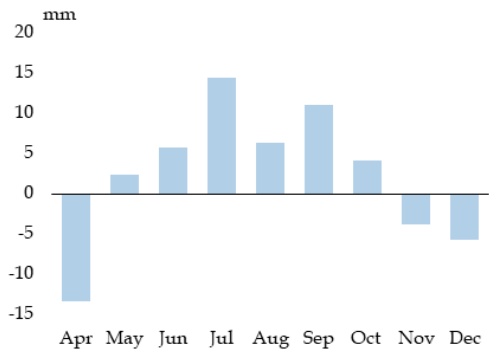
Climatic Conditions

Climatic conditions remained challenging during H1-FY26, with considerable variability in rainfall and above-normal temperature during much of the *Kharif* season. These conditions created a difficult environment for crop growth and increased the risk of weather-related disruptions to agricultural output.

Rainfall remained uneven during *Kharif* FY26 **(Figure 2.2a)**. After a dry April, the monsoon picked up during Jul–Sep 2025. In September, a deep depression triggered heavy downpour, especially in Punjab and Sindh, which caused flash floods and river flooding in several areas.[6] The post-monsoon months of November and December, however, remained relatively dry.

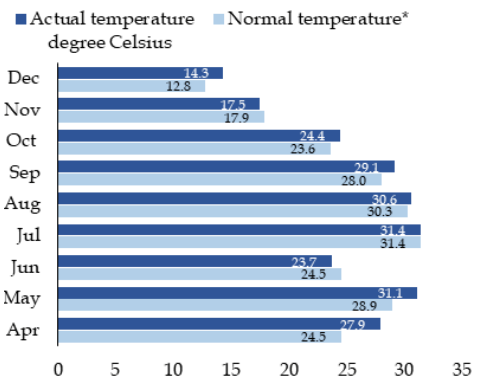
Temperature stayed above normal levels during most months of the *Kharif* season **(Figure 2.2b)**. Elevated temperatures in the peak summer months, together with high humidity following heavy rainfall, added to heat stress on crops and impacted growth conditions in several areas.[7]

Rainfall Deviation from Normal* - FY26 Figure 2.2a



* Normal levels of respective months of 1961-1999 Avg.
Source: PMD

Temperature - FY26 Figure 2.2b



[3] The intermediate consumption of dry and green fodder is linked to the production of crops, while livestock heads grow at a fixed rate (based on intergeneration census of 2006 and 1996). Source: PBS
[4] Source: Press Information Department (PID), Press Release 30750. https://pid.gov.pk/site/press_detail/30750
[5] Source: National Disaster Management Authority (NDMA), Government of Pakistan, *Post Monsoon Review 2025*.
[6] ibid
[7] Source: National Disaster Management Authority (NDMA), Pakistan: *Monsoon Daily Situation Report (September 2025)*

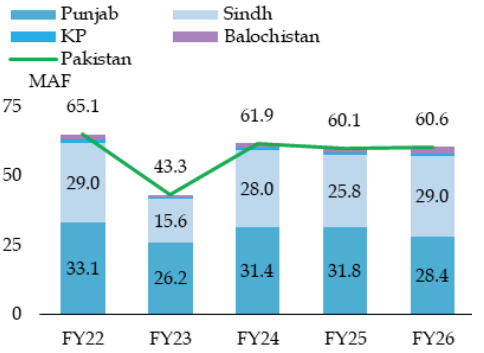
These changing climatic conditions are not only putting pressure on agriculture but also affecting the urban centres via urban heat island effect.[8] To this end, urban agriculture offers a workable solution to climate change through urban greening and localised food production **(Box 2.2).**

Inputs

Water: Irrigation water availability remained largely adequate during *Kharif* FY26. Canal water use stayed broadly in line with last year, though with some provincial variations. Heavy rains during Jul–Sep FY26 reduced the need for canal water in parts of Punjab, while the use in Sindh remained comparatively higher (**Figure 2.3**). Water & Power Development Authority (WAPDA) and Indus River System Authority (IRSA) managed reservoir operations by storing excess inflows during the heavy monsoon period and releasing subsequently in a controlled manner.[9] This helped ease flood pressure downstream and ensured sufficient water was available for canals afterwards.

Seed: Availability of certified seed for major crops fell short of requirements in FY26 **(Table 2.3)**. This suggests that farmers relied on non-certified seeds for cultivation, which has negative implications for crop yields.[10] While availability of certified seed for wheat and cotton improved over the last season, it declined sharply in the case of maize. Meanwhile, certified seed availability for

Irrigation Water Releases during *Kharif* (Apr - Sep) Figure 2.3



Source: IRSA

paddy, which had historically remained above requirements, fell marginally short in FY26.

Fertilizer: Fertilizer offtake increased during *Kharif* FY26, reflecting a recovery in demand. The increase was mainly on account of strong growth in urea sale amid fall in its price. Moreover, DAP sale also edged up despite rising prices (**Figure 2.4**). The improved fertilizer offtake in H1-FY26 was facilitated by input-financing schemes, such as the Kissan Card. Moreover, availability of fertilizer for *Kharif* FY26

Certified Seeds Table 2.3

	FY25		FY26	
	Availability (MT)	% of Req.	Availability (MT)	% of Req.
Cotton	16,717	27.1	20,871	46.7
Paddy	68,319	114.2	44,613	99.1
Maize	29,420	78.8	17,649	47.3
Wheat	569,761	46.3	551,467	49.0

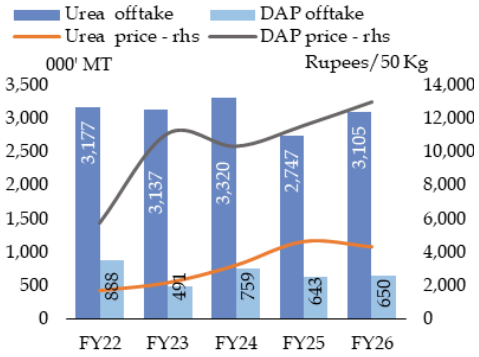
Source: FCA

[8] US Environmental Protection Agency defines urban heat island effect as the condition under which urbanized areas experience higher temperatures than surrounding rural areas, primarily because buildings, roads, and other infrastructure absorb and re-emit more heat than natural landscapes.

[9] Source: NDMA, Government of Pakistan, *Post Monsoon Report 2025*.

[10] The limited availability of certified seed in Pakistan increases reliance on non-certified seed - such as farm-saved seeds, farmer-to-farmer exchange, and non-certified brown-bag sales. (SBP, 2022; PIDE, 2024).

Fertilizer Offtake and Prices during *Kharif* (Apr - Sep) **Figure 2.4**



Sources: NFDC; PBS

remained sufficient with higher carryover stock. The availability for Rabi season is also expected to remain adequate.[11]

Agriculture credit: Agriculture credit continued to rise steadily, supporting both input use and farm investment (**Table 2.4**). Overall credit disbursements rose by 11.4 percent in H1-FY26, with production loans increasing sharply to meet seasonal working-capital needs. Credit for farm-sector development also increased by 9.7 percent, driven mainly by higher financing for tractors and other farm investments.

Several initiatives underpinned the rising trend in agriculture credit. These included: (i) SBP's endorsement of digital land verification as an alternative to traditional Khasra Girdawari helped reduce processing frictions for farmers; (ii) Zarkhez-e (Asaan Digital Zarai Qarza) framework developed under the National

Agriculture Credit Disbursement - H1 **Table 2.4**

billion Rupees

	FY24	FY25	FY26
Farm Sector (Production)			
All crops	246.5	265.0	361.6
Corporate farming	78.7	84.4	33.3
Others	218.4	274.4	309.1
Subtotal	**543.6**	**623.8**	**703.9**
Farm Sector (Development)			
Tractor	27.8	9.1	28.8
Others	33.3	75.5	64.0
Subtotal	**61.1**	**84.6**	**92.8**
Non-Farm Sector (Working Capital)			
Livestock/Dairy	251.8	290.3	307.9
Poultry	162.1	163.6	151.6
Others	51.9	58.1	115.0
Subtotal	**465.8**	**512.0**	**574.5**
Non-Farm Sector (Fixed Investment)			
Livestock/Dairy	18.7	32.5	21.5
Poultry	11.4	10.1	11.9
Others	5.2	3.7	7.0
Subtotal	**35.4**	**46.3**	**40.4**
Grand Total	**1,105.8**	**1,266.7**	**1,411.6**

Source: SBP

Subsistence Farmers Support Initiative that strengthened the digital channel for small borrowers, with inherent risk-sharing features and a standardised operating structure; (iii) Punjab government's Kissan and Livestock Cards, continued to facilitate farmers to get financing for inputs and livestock, helping them to better manage seasonal cash flow needs;[12] and (iv) provincial government's mechanisation initiatives.[13]

Outputs

Cotton: Cotton production fell for another year in FY26, mainly due to a decline in area under cultivation (**Table 2.5**). The

[11] Source: Federal Committee on Agriculture (FCA), *Working Paper on Rabi Season FY26*.
[12] In H1-FY26, Rs 68.7 billion were disbursed to 696,996 outstanding borrowers under the Kissan Card, while Rs 3.0 billion was disbursed to 27,730 outstanding borrowers under the Livestock Card Scheme. Source: The Bank of Punjab.
[13] Provincial farm mechanisation initiatives included CM Punjab's Green Tractor Scheme and the High-Tech Farm Mechanisation Finance Program.

Major *Kharif* Crops **Table 2.5**

production in 000 tons; area in 000 ha; yield in kg/ha.

	Production			Area			Yield			Change FY26		
	FY24	FY25	FY26	FY24	FY25	FY26	FY24	FY25	FY26	Prod.	Area	Yield
Cotton*	10,223	7,084	7,052	2,424	2,043	2,012	717	589	595	-0.5	-1.5	1.0
Rice	9,859	9,724	9,998	3,637	3,899	3,758	2,711	2,494	2,660	2.8	-3.6	6.7
Maize	9,740	9,037	8,446	1,641	1,588	1,603	5,935	5,691	5,269	-6.5	0.9	-7.4
Sugarcane	87,638	84,239	89,429	1,180	1,193	1,221	74,270	70,605	73,243	6.2	2.3	3.7

* Production in thousand bales

Sources: PBS; FCA

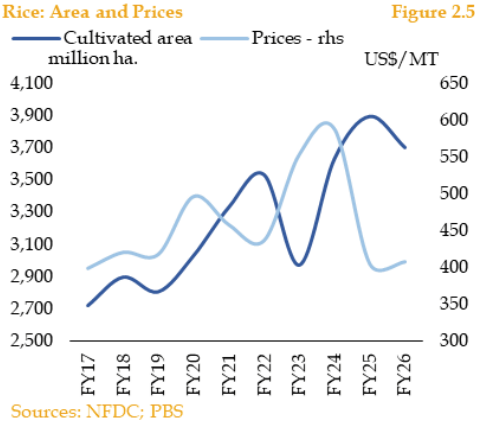
reduction in area reflects farmers' cautious sowing decisions amid weak returns, as shift to competing *Kharif* crops continued in FY26 as well. [14] Yield, however, marginally improved compared to last year, possibly due to better input use, especially fertilizer, facilitated by Punjab's Kisan Card scheme.

Rice: Rice production increased in FY26, as higher yield more than offset the decrease in area under cultivation (**Table 2.5**). Better water availability in rice-growing belts likely helped improve rice yield. Although monsoon floods initially raised concerns about rice production, later assessments suggested that the damages remained limited, with some areas benefiting from better water availability.[15] Concerning the decline in area under rice, the unfavourable export environment, especially fall in prices following India's resumption of rice exports, may have discouraged planting of rice (**Figure 2.5**).

Maize: Maize output declined in FY26 due to fall in yield, despite a slight increase in area (**Table 2.5**). The decline in yield largely reflected adverse effects of floods, which led to lower overall production. At the same time, it is important to highlight that the use of maize as direct food crop is declining, while demand from the poultry and feed sector has increased. As a result, maize sowing decisions have become more responsive to feed sector offtake and price signals.

Sugarcane: Sugarcane performed better than the other major *Kharif* crops in FY26, supported by an expansion in area under cultivation and an increase in yield (**Table 2.5)**. This is primarily on the back of better

Rice: Area and Prices **Figure 2.5**



Sources: NFDC; PBS

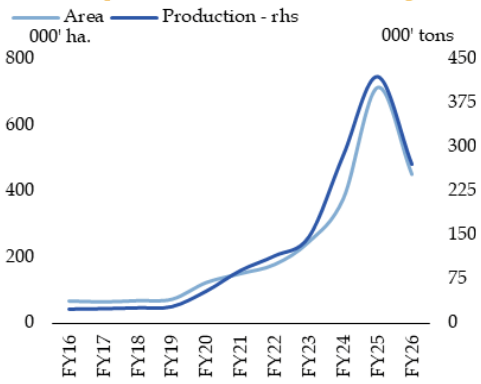
[14] SUPARCO, PAK-SCMS Bulletin (Aug 2025) notes factors such as shifting toward alternatives like sugarcane, weather volatility, pest infestation, declining yields, and low economic returns, affected cotton production.

[15] USDA Foreign Agricultural Service (FAS), *Grain and Feed Update – Pakistan*, Islamabad, December 2025 (GAIN Report No. PK2025-0020).

expected returns compared to the competing crops like cotton and maize, which encouraged farmers to increase sugarcane planting. Yield improved during the season, likely supported by better water availability.

Wheat: Sowing of wheat in current *Rabi* season progressed smoothly, with the Punjab and Sindh slightly exceeding their combined target. New wheat policy and input conditions were broadly supportive at the start of the season. Availability of certified seed and fertilizer improved, and IRSA anticipated no irrigation shortfall for Punjab and Sindh during *Rabi*.[16] These developments, along with post-flood soil enrichment, suggest that wheat production is expected to remain higher than last year's level, though it may fall marginally short of the 29.7 million tons target set by the Federal Committee on Agriculture (FCA).

Sesame Crop — Figure 2.6



Sources: MNFSR; PBS

Under the National Wheat Policy, the government has set an indicative price of Rs 3,500 per 40kg to guide farmers' decisions and market expectations. Moreover, the policy involves private sector to procure wheat at the indicative price and manage stocks, with government intervention focused on maintaining strategic reserves and stabilizing the market. The policy may lead the wheat prices becoming more predictable and help reduce the fiscal burden (**Box 3.1**).

Other Crops

Production of other *Kharif* crops fell sharply in FY26, compared to strong growth in last year. The decline was primarily driven by a significant fall in green fodder, one of the largest components of other crops. According to the PBS estimates, output of green fodder declined by 14.3 percent, reflecting widespread damages to standing fodder crops from rains and floods.[17]

In addition, production of sesame, which expanded rapidly in recent years driven by export demand, also declined in FY26 (**Figure 2.6**). Besides flood-related losses, lower exports, mainly to China, reduced demand and thus incentives for cultivation of sesame.[18] Moreover, *Kharif* pulses also showed a mixed trend. Specifically, production of the mung increased while that of mash declined. Further, production plan of other *Rabi* crops for FY26 shows

[16] Source: Press Information Department (PID), Press Release 30750. https://pid.gov.pk/site/press_detail/30750
[17] Source: PBS, *QNA Release 2025–26.*
[18] Sesame seed exports declined, led by a drop in shipments to China amid the return of Ethiopian and Sudanese supplies. Exports to Vietnam, Saudi Arabia, and Egypt also declined. Source: *The State of Pakistan's Economy: Annual Report 2024–25*

Other Crops – *Rabi* Production Plan **Table 2.6**

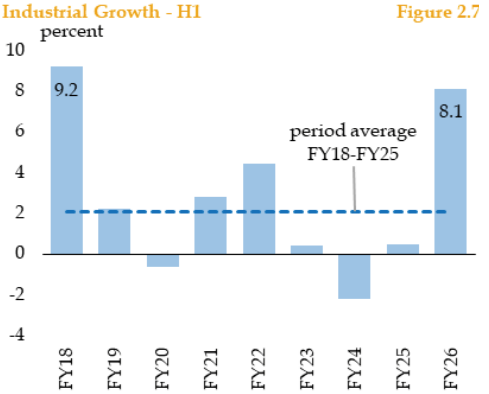
area in 000 ha; production in 000 tons; change in percent

	Area		Production		Change	
	FY25	FY26[T]	FY25	FY26[T]	Area	Prod.
Gram	707.1	806.0	172.0	536.1	14.0	211.7
Lentil	6.4	7.5	4.4	9.2	17.2	109.1
Potato	378.1	268.4	9,880.3	7,174.6	-29.0	-27.4
Onion	166.4	119.0	2,747.1	2,788.5	-28.5	1.5
Tomato	47.9	43.2	630.7	690.9	-9.8	9.5
Canola	68.7	73.5	103.9	111.0	7.0	6.8
Sunflower	60.4	70.5	96.1	113.5	16.7	18.1
Mustard	425.1	520.9	435.0	532.7	22.5	22.5

Source: FCA

increase in production targets, except for potato **(Table 2.6)**.

Industrial Growth - H1 **Figure 2.7**



Source: PBS

2.3 Industry

Industry grew sharply by 8.1 percent in H1-FY26, reaching close to the growth in H1-FY18 (**Figure 2.7**). The growth of industry was led by a broad-based increase in *manufacturing*, followed by *construction* and *electricity, gas and water supply*, while *mining and quarrying* saw contraction – a trend observed since FY22 (**Table 2.7**).[19]

Construction activity picked up pace, supported by various favourable developments. First, Public Sector Development Program (PSDP) spending grew by 41.8 percent in H1-FY26 compared to a decline of 1.1 percent in the corresponding period of last year (**Figure 2.8a**).[20] Second, the construction material prices considerably eased, while wage growth steadied (**Figure 2.8b**). Third, Wazir-e-Azam Apna Ghar Program - Ghar Ho Tu Apna launched in September 2025 created demand for housing.[21]

The strong growth in value addition by electricity, gas and water supply in H1-FY26 was largely driven by higher power subsidies, as power generation saw a meagre 1.1 percent increase during the period under review. The demand for grid power remained relatively subdued despite introduction of power package for industry and levies on gas and furnace oil to encourage a shift away from captive power generation. As a result, capacity utilisation of independent power producers (IPPs) stayed less than 50 percent, contributing to higher grid costs.

[19] As per PBS, the value addition of mining and quarrying contracted amid decline in production of gas, crude oil and limestone.

[20] Infrastructure sector utilized the highest expenditure of Rs 117 billion (55.7 percent) by end-December 2025, on projects related to transport and communication, energy, water, physical planning and housing. Source: MoPD&SI

[21] The scheme offers subsidized financing at the fixed rate of 5 percent, with the markup subsidy paid by GOP. For details, see
https://www.sbp.org.pk/smefd/circulars/2026/CL1.htm,
https://www.sbp.org.pk/smefd/circulars/2026/CL2.htm.

Industry Growth Table 2.7

growth in percent; contribution in percentage points

	FY25						FY26			Contribution	
	Q1	Q2	H1*	Q3	Q4	H2*	Q1	Q2	H1*	H1-FY25	H1-FY26
Industry	**0.2**	**0.8**	**0.5**	**0.3**	**20.3**	**10.0**	**8.9**	7.4	8.1	**0.5**	**8.1**
Mining & quarrying	-5.8	-3.2	-4.5	-3.4	-2.2	-2.8	-5.5	-2.5	-4.0	-0.4	-0.3
Manufacturing	1.8	0.5	1.1	1.0	4.8	2.8	5.7	6.8	6.2	0.7	4.2
Large scale	-0.9	-2.6	-1.8	-2.0	3.0	0.3	3.9	5.7	4.8	-0.8	2.2
Small scale	8.6	8.6	8.6	8.9	9.5	9.2	10.2	10.0	10.1	1.1	1.4
Slaughtering	6.2	6.2	6.2	6.4	6.9	6.7	7.5	7.4	7.4	0.5	0.6
Electricity, gas and water supply	-0.1	3.2	1.4	-11.3	125.0	56.9	24.5	15.1	20.3	0.2	2.4
Construction	-3.3	3.0	0.0	10.7	17.6	14.0	19.2	10.5	14.6	0.0	1.9

* H1 GVA = Q1 GVA + Q2 GVA; H2 GVA = Q3 GVA + Q4 GVA

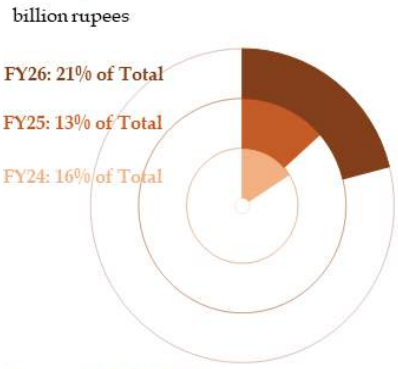
Source: PBS

At the same time, rising solar power continues to pose a significant challenge in terms of demand for national grid as well as integration of solar power into national grid. In this context, the government has recently made changes in tariffs for prosumers. However, further measures, such as investment in transmission and distribution network and developing an appropriate regulatory framework, are required to strengthen integration of solar generation with national grid. These could help encourage greater reliance on the grid, enhance system efficiency, and gradually lower overall energy costs while supporting industrial competitiveness.

Large-Scale Manufacturing (LSM)

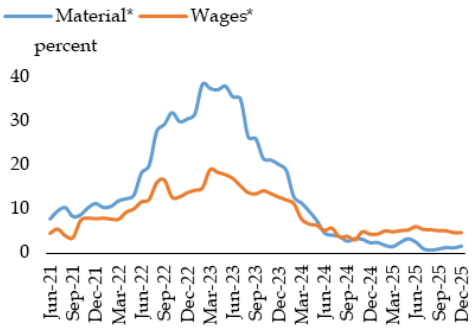
The LSM output grew by 4.8 percent in H1-FY26, against a contraction of 1.8 percent in the same period last year (**Table 2.8**). The growth was also broad-based. The number of industry-groups showing increase in production (14 out of 22) reached close to the high-growth period of H1-FY22, reflecting the underlying momentum in industrial activity (**Figure 2.9**).

PSDP Expenditure - H1 Figure 2.8a



Sources: MoPD&SI; PBS

Construction Inputs - YoY Growth Figure 2.8b



* Material include price of cement, bricks, blocks, sand etc.; wages are of plumber, mason, painter etc.

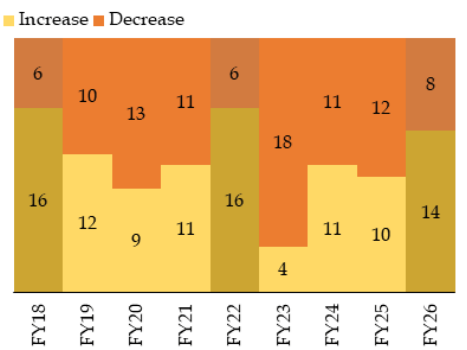
Large Scale Manufacturing - H1 **Table 2.8**

growth in percent; contribution in percentage points

Sector	Weight	Growth			Contribution		
		FY24	FY25	FY26	FY24	FY25	FY26
LSM	78.4	**-1.0**	**-1.8**	**4.8**	**-1.0**	**-1.8**	**4.8**
of which							
Food	10.7	4.9	-0.3	0.6	0.7	-0.1	0.1
Beverages	3.8	0.1	0.2	5.1	0.0	0.0	0.2
Tobacco	2.1	-36.7	19.2	8.7	-0.7	0.2	0.1
Textile	18.2	-11.0	2.1	1.5	-2.1	0.4	0.3
Wearing apparel	6.1	-0.8	9.5	7.5	-0.1	1.4	1.2
Leather products	1.2	3.4	0.7	-0.7	0.0	0.0	0.0
Wood products	0.2	9.2	-2.0	-0.9	0.0	0.0	0.0
Paper & board	1.6	-5.0	2.3	-3.1	-0.1	0.1	-0.1
Coke & petroleum	6.7	8.4	-0.1	13.5	0.5	0.0	1.0
Chemicals	6.5	4.2	-2.0	-1.9	0.3	-0.2	-0.2
Pharmaceuticals	5.2	31.9	1.8	-5.3	1.4	0.1	-0.3
Rubber	0.2	0.6	-1.2	10.1	0.0	0.0	0.0
Non-metallic mineral	5.0	1.8	-13.3	10.5	0.1	-0.9	0.7
Iron & steel	3.4	-1.4	-12.0	-4.5	-0.1	-0.6	-0.2
Fabricated metal	0.4	-2.2	-21.8	8.8	0.0	-0.1	0.0
Computer, electronics, optical	0.0	-21.1	0.8	1.7	0.0	0.0	0.0
Electrical equipment	2.0	-10.9	-19.0	8.7	-0.4	-0.6	0.2
Machinery and equipment	0.4	70.7	-27.9	-18.7	0.2	-0.1	-0.1
Automobiles	3.1	-52.9	49.7	67.3	-1.7	0.8	1.6
Other transport equipment	0.7	-14.5	31.9	41.4	-0.1	0.1	0.2
Furniture	0.5	31.1	-61.1	-5.7	0.9	-2.3	-0.1
Other manufacturing	0.3	-3.4	-10.7	19.9	0.0	0.0	0.1

Source: PBS

Number of LSM Groups Showing Increase and Decrease in Production - H1 **Figure 2.9**

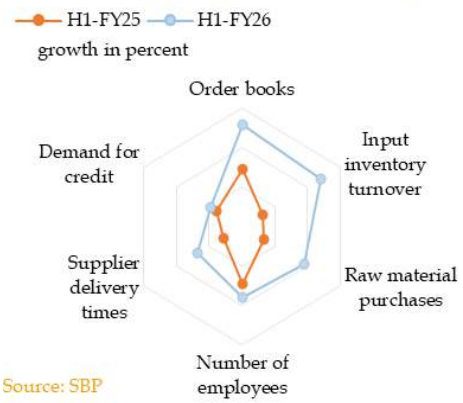


Source: PBS

The LSM output recorded a sustained increase throughout the first half. The recovery in LSM was supported by ease in financial conditions, reduced tariffs on intermediate and raw materials, stable exchange rate, and improved business & consumer confidence (**Figure 2.10**).

The major LSM groups showing increase in production included *automobiles* and related industries (*rubber*, *tyre* and *transport equipment*), *textiles* and *wearing apparel*, *coke and petroleum*, *non-metallic minerals*, *food and beverages*, and *electrical equipment*, while production of *pharmaceuticals*, *chemicals*,

Other Factors Supporting LSM Growth Figure 2.10



Source: SBP

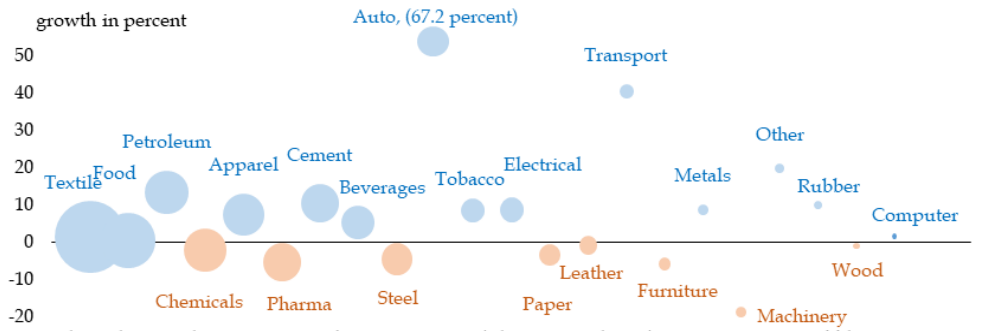
and *iron & steel* declined (**Figure 2.11**). Importantly, export-oriented industries with a contribution of 1.5 percentage points, were the second major contributor to LSM growth in H1-FY26 after automobiles (**Figure 2.12)**.[22]

Automobiles

Production of automobiles was broad-based, with all vehicle categories, except for tractors, registering growth. The momentum in automobile production can be attributed to stronger domestic demand amid decline in borrowing cost, relatively stable prices, promotional discounts, and launch of new variants, especially in SUV segment.[23]

Importantly, most of the newly launched vehicles, aligned with changing consumer preferences, are fuel-efficient and environment-friendly vehicles. Accordingly, local assembling of e-vehicles is also gaining traction (**Table 2.9**). In this regard, government launched new energy vehicle (NEV) policy 2025-30, which is a welcome step to boost nascent industry. However, there is a need to address certain risks and challenges to support EVs in the country (**Box 2.3**).

Sectoral Performance (H1-FY26) Figure 2.11



Note: Blue colour implies sectors recording expansion, while orange colour shows contraction. Bubble size represents sector's weight in LSM

Source: PBS

[22] Export-oriented industries include textile, wearing apparel, furniture, football and leather products with a weight of approximately 26 percent.

[23] Most of the automobile assemblers have been offering discounts, extended after-sales service, as well as zero markup instalment plans to capture higher market share amid intense competition.

Production and Sales of Automobiles **Table 2.9**

production and sales in numbers; growth in percent

	Production		Sales		Growth	
	H1-FY25	H1-FY26	H1-FY25	H1-FY26	Production	Sales
Cars	47,880	74,782	46,398	65,771	56.2	41.8
1300cc and above	21,172	36,716	20,491	35,404	73.4	72.8
1000cc	2,437	2,205	2,289	2,521	-9.5	10.1
< 1000cc	24,271	35,861	23,618	27,846	47.8	17.9
Electric cars	110	137	104	139	24.5	33.7
Jeeps and pickups	15,623	21,386	14,174	22,412	36.9	58.1
Trucks and buses	2,036	3,856	1,798	3,532	89.4	96.4
Tractors	16,621	13,366	17,397	12,929	-19.6	-25.7
Two and three wheelers	698,446	928,521	696,455	921,566	32.9	32.3

Source: PAMA

These developments have also helped in uplifting the production of automobile-allied industries such as rubber and tyres. Meanwhile, decline in tractor sales and production can be attributed to subdued performance of crops and decline in its exports to Afghanistan – a key destination.[24] Nevertheless, domestic sales have picked up in Q2-FY26, showing the impact of Phase-II of Punjab Green Tractor Scheme.[25]

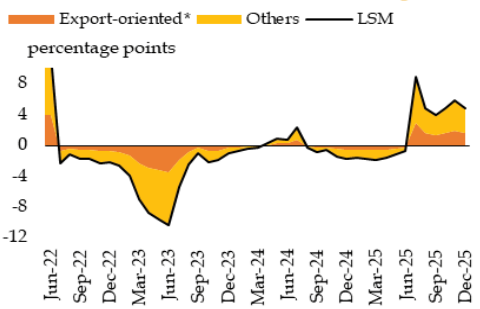
Textile and Wearing Apparel

Output of *textile and wearing* apparel grew at a slightly slower pace in H1-FY26 compared to the last year. Nonetheless, the growth was broad-based compared to the last year, when it was mostly due to garments and yarn (**Figure 2.13**). The trend is in line with the moderation in growth of export volumes, particularly of readymade garments.

Food and Beverages

Output of food and beverages increased on account of higher wheat and rice milling and increase in production of cooking oil and sugary drinks (**Figure 2.14**). The expansion in milling activity was mainly on the back of a 60 percent increase in wheat stocks with the private sector encouraged by collapse in prices at the

Contribution to Cumulative LSM Growth **Figure 2.12**



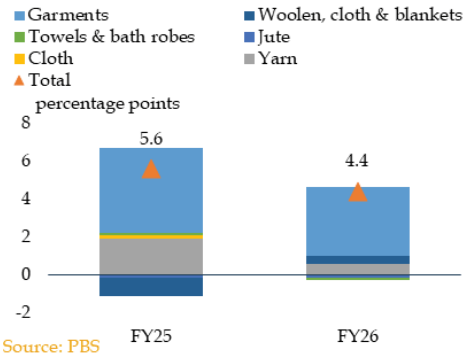
* These include textile, wearing apparel, furniture, football and leather products with a combined weight of approximately 26 percent in LSM.

Source: PBS

[24] As per SBP data, Afghanistan accounted for more than 40 percent of total tractor exports during FY25.

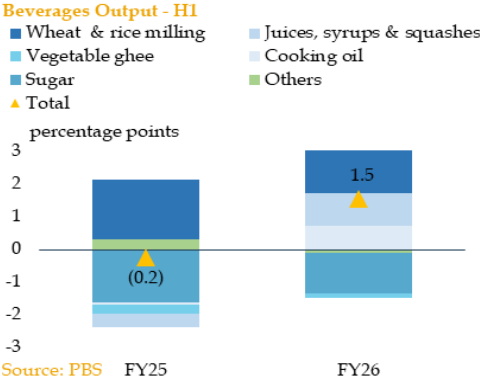
[25] Punjab's Chief Minister launched Phase-II of Green Tractor Program in July 2025. Around 734,000 farmers applied under this scheme; 282,000 farmers were declared eligible for the draw and 9,500 have been declared successful in the ballot of high-power tractors in Punjab. https://agripunjab.gov.pk/green-tractor-scheme

Contribution to Growth in Textile and Wearing Apparel Output - H1 Figure 2.13



Source: PBS

Contribution to Growth in Food and Beverages Output - H1 Figure 2.14



Source: PBS

start of FY26.[26, 27].

The marginal increase in production of cooking oil can be linked to steady increase in demand for healthier oil varieties compared to ghee. Leading brands are increasingly providing fortified products, with more enriched ingredients.[28] In beverages, improved product mix of flavoured drinks, along with the commencement of local flavouring production by a big company, resulted in higher production of juices, syrups and squashes.[29]

Petroleum Products

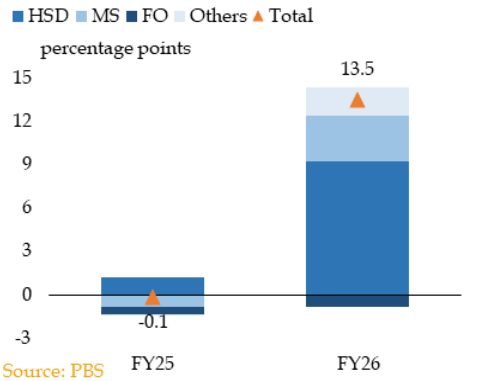
Output of petroleum products increased in line with the recovery in economic activity (**Figure 2.15**). This is also reflected in higher domestic sales of petroleum products, excluding FO that is being exported.[30]

Cement and Steel

Cement production increased by 11.6 percent in H1-FY26 compared to the decline of 9.0 percent in the same period last year. This is attributed to higher domestic sales with the recovery in construction activity in the country (**Figure 2.16**), and improved margins amid decline in financial cost and international coal prices.[31] However, exports declined by 3.8 percent in H1-FY26 due to the closure of western border.

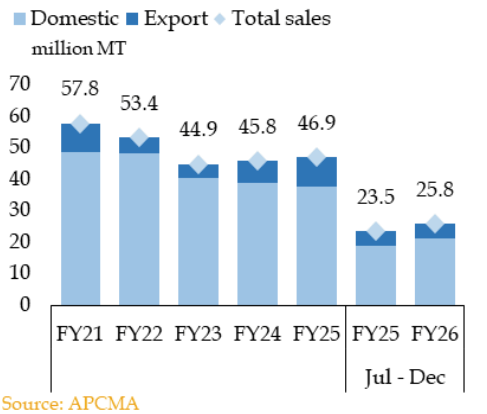
[26] As per the compilation of Ministry of National Food Security and Research (MNFSR).
[27] In the absence of minimum support price, the wheat prices plummeted from Rs 2,900 – Rs3,700 per 40kg last season to Rs 2,200 – Rs 2,390 in Punjab and Sindh, and up to Rs 2,450 in KP and Balochistan.
[28] Pakistan Cooking and Edible Oils Market 2025-2030 available at https://strategyh.com/report/cooking-and-edible-oils-market-in-pakistan/
[29] In mid-2025, a leading beverage company in Pakistan introduced a sparkling fruit drink, tapping into growing demand for flavoured carbonated options. As regards to the localisation, another company has commenced local flavouring production in Pakistan since February 2025 as part of efforts to enhance supply chain self-sufficiency.
[30] FO sales declined by more than 50 percent in H1-FY26 as the recently imposed levy made it unaffordable for consumers and exporting the same has also been challenging. Amidst weak domestic demand, the pile up of inventory forced the refineries to export FO in bulk in Q2-FY26.
[31] Australian coal prices dropped by 21.6 percent in H1-FY26 over the same period last year. Source: World Bank

Contribution to Growth in Petroleum Products Output - H1 Figure 2.15



Source: PBS

Cement Dispatches Figure 2.16



Source: APCMA

On the other hand, production of iron and steel declined for the fourth consecutive year. Despite strong construction activity, domestic steel output was constrained by rising international prices of key inputs such as iron ore and scrap.[32] Given the industry's reliance on imported raw materials, higher global prices significantly increased production costs. Moreover, capacity constraints and energy-related challenges further weighed on domestic production. Therefore, domestic demand is being increasingly met through imports at relatively competitive prices, a trend reinforced by tariff rationalisation under the National Tariff Policy 2025–30.[33]

Electrical Equipment

Production of electrical equipment rose by 8.7 percent in H1-FY26, compared to a decline of 19.0 percent in the same period last year. The expansion was driven by consumer durable segment, as production of refrigerators, deep freezers and electric fans rebounded. This is also evident from rising consumer finance for durables.[34]

Paper and Board

Output of paper and board contracted by 3.3 percent in H1-FY26, compared to an increase of 2.3 percent last year. Despite high anti-dumping duty on coated paperboard, domestic firms faced intense competition from imported products from China. The resulting lower margins have discouraged domestic production.[35]

Chemicals

The production of chemicals maintained the falling trend, registering a decline of 1.9 percent in H1-FY26. This was due to: (i) weaker furniture production amid decline

[32] The price of iron ore increased by 1.2 percent in H1-FY26 over the same period last year. Source: World Bank
[33] https://www.commerce.gov.pk/wp-content/uploads/2025/07/National-Tariff-Policy-2025-30.pdf
[34] Consumer finance for the purchase of durables grew by 4.2 percent in H1-FY26, with outstanding stock increasing from Rs 8.6 billion at end-June 2025 to around Rs 9.0 billion as of end-December 2025.
[35] National Tariff Commission imposed anti-dumping duty of 29 percent on coated paperboard for five years in 2017, which was further extended for another five years in 2022. Market analysts report that imports undercut domestic pricing which has lowered margins for domestic producers.

in exports reduced the utilisation of downstream chemicals such as polishes and varnishes; (ii) persistent global oversupply exerted downward pressure on PVC and ethylene prices, compressing margins and dampening production incentives;[36] and, (iii) moderating demand as firms increasingly attempt to incorporate the aspects of circular economy.

Pharmaceuticals

The output of pharmaceuticals contracted by 5.3 percent, compared to an expansion of 1.8 percent in the same period last year. This largely reflected decline in exports, particularly to Afghanistan.[37] Moreover, the deregulation that provided some pricing flexibility and supported margins last year, was somewhat offset by increased competition, which squeezed margins of big firms.[38]

In sum, output of most LSM groups has rebounded in H1-FY26. However, the sustainability and breadth of this recovery would depend on the underlying business environment. In this regard, a detailed analysis of Pakistan's performance, using World Bank's Business Ready (B-READY) 2025 framework, is presented in **Box 2.4**. The analysis shows that first-generation reforms (governance improvement, business deregulation and trade liberalisation) can potentially increase the output by 4 – 8 percent. Similarly, second-generation reforms pertaining to credit access and labour market can increase production by another 3 percent.

2.4 Services

Growth in services saw a slight uptick in H1-FY26, mainly supported by *wholesale and retail trade*; *transport and storage*; *general government services*; *real estate activities* and *other private services*. Meanwhile, *information and communication* services recorded a sharp decline (**Table 2.10**).

Wholesale and retail trade (WRT) rebounded on the back of recovery in industrial output and higher import volumes.[39] This is also corroborated by increase in private sector credit to WRT.[40] Similarly, the improved economic activity supported growth in *transport and storage*. This was also reflected by: (i) substantial increase in production and sales of automobiles; (ii) higher POL sales to the transport sector, especially road transport;[41] and (iii) increased credit to transport and storage.

Meanwhile, higher growth in *finance and insurance* was on the back of increased financial intermediation amid fall in borrowing cost and recovery in production of the large industries. Besides higher financial intermediation (quantum effect), the interest rate spread – the difference between interest earned and interest expense on advances and deposits – also

[36] Petrochemicals and Polymers: Quarter Three Performance – Q3 2025 available at https://www.nexanteca.com/blog/petrochemicals-and-polymers-quarter-three-performance-q3-2025
[37] As per PBS, export volumes of pharmaceutical products have declined by 31 percent during H1-FY26.
[38] As per the latest financials of top 10 firms in calendar year 2025.
[39] Imports rose to US$ 31.4 billion in H1-FY26 compared to US$ 27.9 billion in the corresponding period of last year.
[40] The credit to WRT was Rs 155.7 billion in H1-FY26 against Rs 91.7 billion in the first half of FY25.
[41] The POL sales to road transport increased from 7.0 trillion tons in H1-FY25 to 7.3 trillion tons in H1-FY26.

Services Growth **Table 2.10**

growth in percent; contribution in percentage points

	FY25						FY26			Contribution	
	Q1	Q2	H1*	Q3	Q4	H2*	Q1	Q2	H1*	H1-FY25	H1-FY26
Services	**2.4**	**2.8**	**2.6**	**3.1**	**3.8**	**3.5**	**2.4**	3.7	3.1	**2.6**	**3.1**
Wholesale & retail trade	0.5	-1.0	-0.3	-0.3	2.5	1.1	3.1	4.5	3.8	-0.1	1.2
Transport & storage	2.3	2.7	2.5	1.9	4.0	3.0	2.6	2.8	2.7	0.5	0.5
Accommodation & food services	3.9	4.0	4.0	4.1	4.3	4.2	4.6	4.5	4.6	0.1	0.1
Information & communication	6.3	10.4	8.4	10.2	1.6	5.7	-29.7	-6.0	-17.6	0.4	-0.9
Finance & insurance activities	-3.7	11.1	3.4	9.6	8.7	9.1	10.2	4.5	7.3	0.1	0.2
Real estate activities (OD)	3.6	3.7	3.6	3.8	4.0	3.9	4.3	4.2	4.2	0.4	0.4
Public admin and social security	3.3	7.8	5.5	12.2	11.7	11.9	10.6	8.7	9.7	0.4	0.7
Education	3.7	3.5	3.6	3.2	2.9	3.0	5.9	4.9	5.4	0.2	0.3
Human health and social work	3.8	4.2	4.0	3.2	2.3	2.8	7.2	5.7	6.4	0.1	0.2
Other private services	3.8	3.7	3.8	3.5	3.1	3.3	2.9	2.8	2.8	0.6	0.4

* H1 GVA = Q1 GVA + Q2 GVA; H2 GVA = Q3 GVA + Q4 GVA

Source: PBS

increased.[42] In addition, deflator and low base last year also accounted for higher growth.

The *general government* services picked up on the back of increased government spending on public administration and social security; health and education; as well as running of the civil government. As regards to the *real estate activities* and *other private services*, higher construction activity and credit offtake, along with lower deflators, explain the increase in value addition of these services.[43, 44]

On the other hand, the contraction in *information and communication services* is primarily attributed to a fall in revenue of cellular companies,[45] as ICT services exports maintained upward trajectory.[46] The downturn in this sector is also corroborated by a sharp decline in credit offtake in *information and communication*, especially telecom, from Rs 115.1 billion during H1-FY25 to Rs 47.7 billion in H1-FY26.

2.5 Labour Market

The Labour Force Survey (LFS) 2024-25 shows that unemployment increased to 7.1 percent in FY25 compared to 6.3 percent in

[42] In H1-FY26, the difference between interest earned and interest expense of the financial sector, including banks, DFIs, and MFBs, increased to Rs 4.1 trillion from Rs 3.5 trillion during H1-FY25. Moreover, the non-interest earning of the financial sector increased to Rs 1.0 trillion from Rs 978.3 billion in H1-FY25, indicating increased financial intermediation.

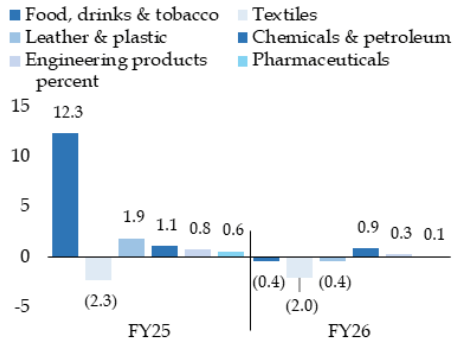
[43] There was addition of Rs 1.4 billion in credit to real estate activities during H1-FY26 compared to a net retirement of Rs 372.4 million during H1-FY25.

[44] The credit to *other private services* increased from Rs 14.8 billion during H1-FY25 to Rs 36.5 billion in H1-FY26.

[45] The decline in revenues owes to increased operational costs and government taxes. Source: PBS.

[46] QNA estimates exclude ICT exports, growth of which remained robust in H1-FY26. The annual estimates, however, include these with a weightage of around 30 percent. Source: PBS.

Growth in Industrial Employment in Punjab - H1 **Figure 2.17**



Source: BOS, Punjab

FY21 (**Table 2.11**), the highest since FY04.[47] The period from FY21 to FY25 witnessed a confluence of events and policies that affected employment generation, including COVID-19 pandemic, floods, and weak economic growth. The LFS also reveals a notable decline in employment share of agriculture as labour shifted mainly to services. An important development is rise

Employment Indicators **Table 2.11**

percent of labour force

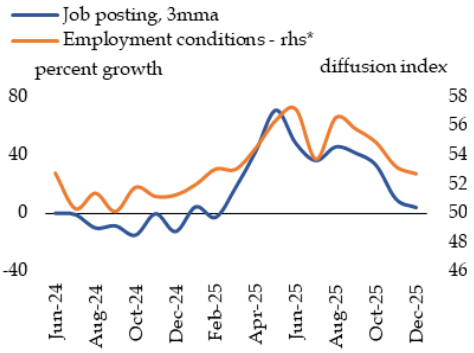
Indicators	FY19	FY21	FY25
Unemployment rate			
Pakistan	6.9	6.3	7.1
Male	5.9	5.5	6.0
Female	10.0	8.9	10.5
Employment by Sector			
Agriculture	39.2	37.4	33.1
Industry	24.0	25.4	25.7
Services	36.8	37.2	41.2

Source: Labour Force Surveys, PBS

of gig economy, measured first time in Pakistan, as 2.9 percent of employed labour force identified it as a main work.[48]

The latest labour market indicators show a mixed picture. The Punjab industrial employment contracted slightly compared to an uptick in the last year. The employment in sectors such as chemicals & petroleum; engineering products; and pharmaceuticals exhibited slight increase, in line with increase in the production of

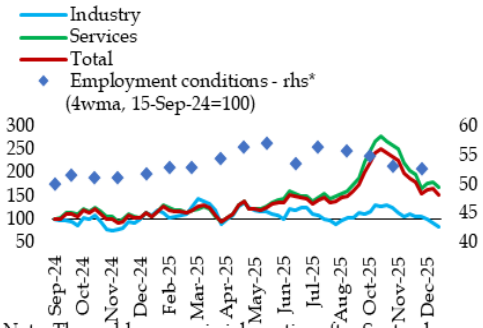
Newspaper Job Postings & Employment Conditions Index **Figure 2.18a**



* Diffusion index as reported in SBP BCS

Source: SBP

Online Job Postings **Figure 2.18b**



Note: The sudden surge in job posting after September 2025 was due to introduction of a new category.

* Diffusion index as reported in SBP BCS

Source: SBP

[47] In FY04, the unemployment rate was 7.7 percent according to LFS.

[48] Digital platform workers/employment, known as gig workers, refer to individuals who engage in short-term, flexible and often freelance work arrangements through online platforms, mobile apps, or websites. These platforms connect workers with customers or clients who need specific tasks or services." Source: LFS 2024-25.

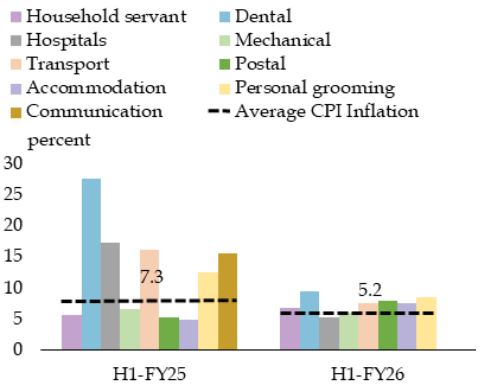
these sectors, except pharma (**Figure 2.17**). In recent past, LSM output and employment have comoved, reflecting the usual link between industrial activity and hiring. However, this relationship somewhat weakened in H1-FY26. This may be due to relative change in the composition of LSM growth, which is mainly driven by capital intensive sectors like automobiles, chemicals, pharma, beverages and minerals.[49]

Meanwhile, newspaper & online job posting indicated increase in employment opportunities during H1-FY26 compared to H1-FY25. SBP-IBA Business Confidence Survey (BCS) also points to improved employment sentiments in the country (**Figure 2.18a and 2.18b**).

Wage Growth

The wage growth in services sector slowed during the first half of FY26 compared to the same period last year amidst lower average inflation (**Figure 2.19**). Like H1-FY25, most of the increase was seen in dental, personal grooming and transport services. Nonetheless, wages of household servants and rents increased during H1-FY26.

Average Wage Growth in Services Sector Figure 2.19



Source: SBP Staff Calculations

[49] Capital-intensive sectors contributed 3.2 percentage points in overall LSM growth of 4.8 percent in H1-FY26. Meanwhile, the labour-intensive sectors having almost same weight, contributed around half (*1.6 percentage point*s) of the contribution by capital-intensive sectors. The classification of capital vs labour-intensive is done using UNCTAD, Trade and Development Report 1996.

Box 2.1: Household Income and Consumption Dynamics in Pakistan: Key Take Aways from Household Integrated Economic Survey (HIES)[50] FY25

The HIES FY25 reveals that income levels have risen in nominal terms in the last 6 years, alongside some improvement in the country's demographics. However, the socio-economic gaps have increased across income groups, and provinces.

Demographic trends show a modest decline in average household size, while employment mix shifted towards paid work. The share of employees increased while the share of contributing family workers decreased, suggesting some movement toward more monetised labour. At the same time, the gap between rural and urban incomes has widened in FY25 relative to FY19 (**Table 2.1.1**).

The consumption pattern highlights reduced household welfare, especially in lower income quintiles. This is reflected in rising share of housing and utilities, prompting the households to reduce expenditure on education, which is essential for human capital development. Although the share of food expenditure slightly declined, this is also accompanied by lower consumption of key staples and nutrients (**Figure 2.1.1**).

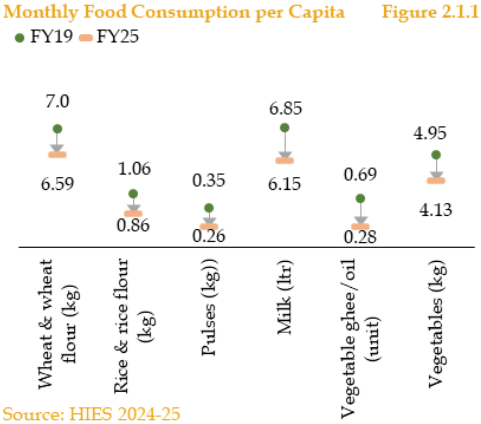
One of the main factors underpinning this development is constrained household income. The

Major Indicators of HIES — Table 2.1.1

Indicators	FY19	FY25
Household Demographics		
Average household size	6.24	5.98
Average earners per household	1.86	1.72
Income Indicators (Monthly, Rs)		
Average household income	41,545	82,179
Urban household income	53,010	96,767
Rural household income	34,520	72,157
Income by Quintile (Monthly, Rs)		
Bottom 20 percent	23,192	41,851
Top 20 percent	63,544	139,317
Consumption Indicators (Monthly, Rs.)		
Average household consumption	37,159	79,150
Per-capita consumption	5,959	13,240
Sources of Household Income (Percent Share)		
Wages & salaries	41.7	42.0
Crop production	8.2	6.9
Foreign remittances	5.0	7.8
Household Consumption Pattern (Percent Share)		
Food and beverages	37.1	36.7
Housing, utilities and fuel	23.8	25.7
Health	3.2	3.3
Education	4.0	2.5

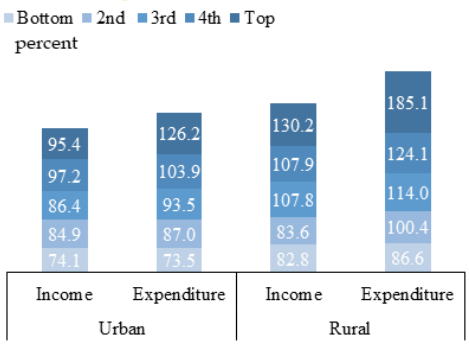
Source: PBS

Monthly Food Consumption per Capita — Figure 2.1.1



Source: HIES 2024-25

Growth in Income and Expenditure: by Quintile & Region — Figure 2.1.2



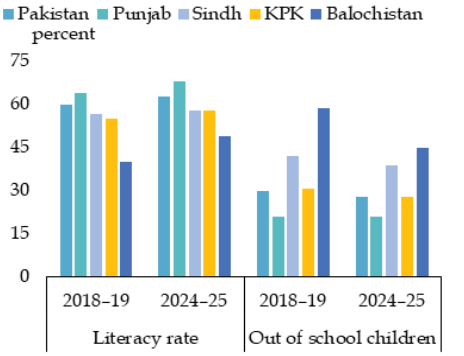
Source: HIES 2024-25

[50] HIES is a nationally representative survey that provides key information on household income, consumption, and living standards in Pakistan.

average number of earners per household declined, indicating households' weaker earning capacity. At the same time, the survey points to higher contribution of non-labour income, including increased shares of remittances and transfers. While these help smooth consumption during periods of stress, they also imply greater exposure to external and domestic shocks.

Moreover, increase in income and expenditure was more pronounced for the top quintile, which recorded much larger absolute gain (119 percent) than the bottom quintile (80 percent) (**Figure 2.1.2**). As a result, the gap between rich and poor households widened. Spatial disparities also became evident with urban households reporting higher average income and consumption than rural households, despite a higher growth in rural income. These disparities were not only limited to income and consumption. They were also reflected in broader social indicators, pointing to uneven access to opportunities and basic services across regions. Provincial differences remained visible, especially in literacy and out-of-school-children indicators **(Figure 2.1.3)**.

Literacy Rate and Out of School Children by Province **Figure 2.1.3**



Source: HIES 2024-25

Contribution of Ravi Kumar and Saad Ali is acknowledged in writing this box.

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Box 2.2: Greening Cities and Securing Food: Integrating Urban Agriculture into Urban Planning of Pakistan

Rapid urbanisation and increasing heat stress in Pakistan demand innovative approaches to urban planning. Moreover, shrinking arable land due to increasing urbanising needs amid rising population is also leading to risk of food insecurity. Urban Agriculture (UA) offers solutions to these challenges by enhancing resource recycling, improving urban environment through waste reduction using localised and circular food systems (Hernandez and Manu, 2018), and by diversifying food production. Beyond its role in food supply, UA also contributes to environmental sustainability by reducing food miles,[51] improving microclimates (urban heat island effect) and creating green employment opportunities.

Several countries have successfully mainstreamed UA. The country experiences show that the success of UA rests on three common factors: policy continuity, institutional coordination, and community engagement. For instance, Cuba created urban agriculture departments (1994) for provision of urban food supplies; allowed decentralised management through land in usufruct (use without ownership) empowering individuals/cooperatives; and integrated UA with national food security policies. This, in turn, reduced imports, promoted organic farming and created a strong tradition of UA, especially

[51] Food mile is a distance over which a food item is transported during the journey from producer to consumer.

Forms of Urban Farming — Table 2.2.1

	Purpose of Adoption	Example(s)	Feasibility in Pakistan
Mushroom cultivation (MC)[52] and Mycoremediation (MM)[53]	Health benefits; medicinal purposes; to clean environment	China leading exporter; research in China, South Africa, US, Japan, etc. to use MM to remove pollutants; Pakistan: recirculation of forest waste	**Highly feasible:** requires minimal land & capital such as small rooms/basements; low initial infrastructure cost; less energy intensive; low impact on environment; short growth cycle
Organopónic[54]	Food security & safety, sustainable urban development, reducing carbon emissions	Largely associated with Cuba, adopted by Venezuela	**Highly feasible**: Needs basic infrastructure such containers, raised beds, water source and drainage & organic inputs; low initial infrastructure cost; less energy intensive, need adequate sunlight
Street/Edible Landscaping[55]	Sustainable urban development, climate change adaptation and mitigation, reduce carbon emissions, place branding	Spain, Italy, and Portugal: edible plants in public parks and streets, such as citrus trees; Taiwan: place branding	**Feasible:** Needs proper site assessment and planning regarding sun exposure; water access and drainage; selection, design and layout of plants/trees; Less energy intensive; needs proper
Community Gardens[56]	Food safety, sustainable urban development, climate change adaptation and mitigation, reduce carbon emissions, community engagements	UK, Australia, Canada, US, Brazil, Bhutan, Burkina Faso, Indonesia, Nepal, Philippines, South Korea, China; Islamabad: small initiatives by local groups	**Feasible:** Needs vacant space with secure lease; water accessibility; tools; good soil quality, sunlight & community engagement; low initial infrastructure cost, comparatively high maintenance
Urban Forest Gardens[57]	Food security & safety, sustainable urban development, climate change adaptation and mitigation, reduce carbon emissions, research, Aesthetics	UK: established forest gardens focusing on edible forest gardens & research on their effectiveness, particularly in agroforestry and permaculture	**Feasible:** Secure land lease & legal requirements; needs water accessibility & storage facility, good soil quality, sunlight & community engagement; low initial infrastructure cost; comparatively high maintenance

Source: Based on various studies

Organoponic.[58] Similarly, Ghana benefitted from strong community ownership, market linkages, and recognition of UA as a legitimate urban land use.[59] In Kenya, regulatory reforms and technical training have enabled UA to become one of the leading sources of self-employment.[60] These examples suggest that

[52] Mushroom cultivation aims to grow edible or medicinal mushrooms for human consumption. It involves growing mushrooms on waste materials such as coffee grounds or agricultural waste.
[53] Mycoremediation is increasingly recognized as a cost-effective and environmentally friendly way to address pollution. Fungi like white-rot fungi are being studied for their ability to degrade pollutants in soil and water.
[54] Uses organic substrate, obtained from crop residues, household wastes and animal manure, from other intensive, high yielding horticulture production systems.
[55] Street landscaping refers to planting trees, plants, and other greenery within and along streets, to enhance appearance, functionality, and overall quality of life in urban areas. Edible landscaping incorporates edible plants.
[56] Shared piece of land where people cultivate plants & vegetables and is often managed by a local community.
[57] Edible forest gardens have edible trees and plants or useful in other ways.
[58] As a result of these measures, Cuba has around one million registered urban gardens and city farms (Harrison, 2019). In Havana, around 90 percent of the annual consumption of fruits and vegetables is produced by these gardens and farms (Incredible Edible, 2024).
[59] Urban farmers produce most vegetables such as lettuce and spring onions, and supply them to urban markets (Azunre et al., 2019).
[60] Around 60 percent of the leafy vegetables and 70 percent of milk and poultry products consumed in Nairobi comes from UA (Ruhweza. A, 2020). Source: University of Nairobi

UA flourishes when it is institutionally embedded, supported by local governance mechanisms, and aligned with urban planning frameworks.

Pakistan has also taken a few initiatives, such as Miyawaki forests (urban forests), mushroom cultivation, rooftop gardens and community gardens. Pakistan's cities hold significant potential for UA. In densely populated cities like Karachi, Lahore and Faisalabad where concrete structures increase temperatures, encouraging farming on rooftops, in backyards, and in containers could provide affordable and effective solutions for enhancing climate adaptation and food security. Moreover, Pakistan needs to explore various forms of urban farming. Some of these are identified in **Table 2.2.1**.
Further, UA can be integrated into urban spaces by renting unutilised public spaces to individuals/cooperatives; reinforcing fencing with Green Walls and installing Green Walls monuments on the roadsides and roundabouts; introducing fruit trees and pollutant clearing plants in public spaces. Moreover, to promote UA on a larger scale, there is a need to provide extension services; [61] collaboration between urban planners, agricultural experts, and communities; and public awareness campaigns at mass media level.

However, several factors have impeded a wide-scale adoption of UA in Pakistan. For example, according to Waseem (2025), while provincial Urban Forest Policy in Punjab and KP exist, they are not fully implemented. This underlines the need for policy coherence and adaptive management rather than isolated pilot projects. While having favourable prospects, UA also has its own limitations, such as the availability of land for commercial operations given the expansion of cities (FAO, 2011). To address this issue, new techniques are being utilised, such as vertical gardens, hydroponics, and aquaponics.

* *Contribution of Almas Karim is acknowledged in writing this box.*

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Box 2.3: Pakistan's NEV Policy 2025–30 through the Lens of Policy Goals and Global Experiences

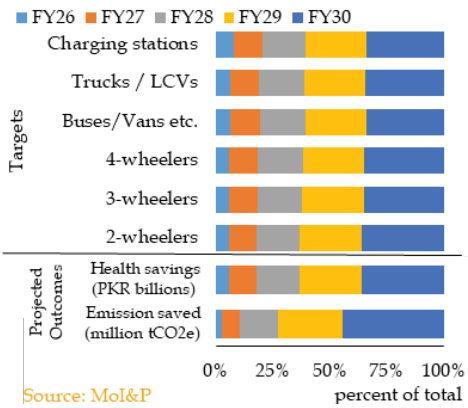
As part of Pakistan's commitment to transition towards cleaner transport, the government has announced New Energy Vehicles (NEV) Policy 2025–30, outlining a framework to accelerate the adoption of electric vehicles (EVs) across two- and three-wheelers, passenger cars, light commercial vehicles, buses, and trucks. Motivated by the challenges of reducing greenhouse gas emissions[62] and managing a high oil import bill,[63] the policy envisions a vibrant local EV industry, especially for two and three wheelers. In

[61] Extension services may include providing ready to grow and improved cluster of vegetable & fertilizers at a subsidized rate and providing trainings.
[62] As reported by UNCTAD, transport sector emissions account for approximately 10 percent of national carbon output.
[63] As per PBS data, petroleum group imports averaged US$ 15.8 billion per annum during FY20–25.

this context, this box examines the goals, design and implementation framework of the new policy based on the lessons from selected peer economies.

The NEV policy 2025-30 follows country's first EV policy launched in 2019, which faced implementation challenges amid COVID-19 disruptions. The current policy builds on the lessons learned and extensive stakeholder consultations, emphasizing supply-side support for local manufacturing, demand-side incentives, charging infrastructure development, and a robust regulatory framework for vehicles safety and environmental safeguards.[64] Major targets and outcomes point towards a gradual approach to NEV adoption (**Figure 2.3.1)**. The policy incorporates a multi-pronged strategy across four areas: (a) affordability, (b) charging infrastructure, (c) demand incentives, and (d) institutional framework (**Figure 2.3.2**).

NEV Adoption: Targets and Outcomes **Figure 2.3.1**



Source: MoI&P

Although the policy is comprehensive, domestic dynamics and global experiences suggest a few implementation challenges, such as:

i. The policy's Rs 122 billion feebate funding relies on sustained demand for conventional vehicles and efficient revenue collection; any shortfall could affect the continuity of incentives and infrastructure funding.[65] In this context, international experience, particularly in India and Malaysia, suggests aggressive upfront support instead of feebate or levies.[66]

ii. Large-scale rollout of charging infrastructure remains uncertain considering a low commercial return due to lower EV adoption.[67] Moreover, multi-agency coordination including residential, commercial, and public deployment may add governance complexity. International experience from Indonesia and Brazil suggest that state-led charger deployment in targeted urban areas promoted infrastructure development and facilitated private sector participation.

iii. The policy proposes extensive National Energy Vehicles Centre (NEVC) coordination with different institutions (EDB, CCP, SBP etc.) that may face mandate challenges. In this regard, Mexico's case offers a pragmatic model for multi-agency alignment. Mexico developed sectoral regulations to accelerate electromobility, focusing on nationwide coordination and public-private collaboration.

iv. Pakistan's manufacturing localisation plan currently focuses mainly on two- and three-wheelers, as this is where its manufacturing strength is concentrated. However, China's experience suggests that Pakistan may start developing phased coverage of heavy vehicles for broader environmental impact and meaningful reduction in emissions.

[64] https://pid.gov.pk/site/press_detail/29435

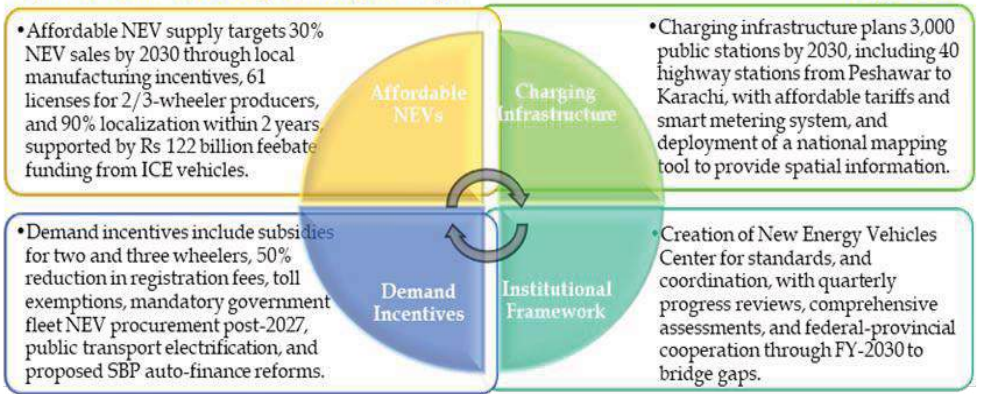
[65] The subsidies and viability gap funding are to be provided through varying rates of levies (1 - 3 percent) applied on the invoice price of an ICE vehicle.

[66] For instance, India provides upfront subsidy in reducing the cost of acquiring an EV (ranging from 20 – 40 percent of ex-factory price) and Malaysia provides tax rebates of up to RM 2,400 to individuals.

[67] World Bank in its report "Pakistan Energy Efficiency: Industrial Energy Efficiency and Decarbonisation (EE&D)" mentions that Pakistan's energy intensity — the amount of energy needed to produce US$ 1 of GDP — was 4.2 megajoules (million joules, MJ) per USD compared to 1.9 MJ/USD in Bangladesh and just 1.7 MJ/USD in Sri Lanka.

Key Interventions for meeting NEV Adoption Targets

Figure 2.3.2



Source: Author's compilation from source document

Addressing these challenges can strengthen policy impact while supporting energy efficiency and industrial competitiveness. More importantly, the recent Middle East conflict highlights an additional consideration for oil-importing countries like Pakistan. Greater EV adoption will cushion the economy against such shocks by reducing dependence on imported oil in the medium to long-run.

** Contribution of Ravi Kumar is acknowledged in writing this box.*

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ii. Kohli, S. (2024). Electric vehicle demand incentives in India - The FAME II scheme and considerations for a potential next phase. International Council on Clean Transportation, Washington DC
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Box 2.4: Assessing Pakistan's Business Readiness for Sustainable Industrial Growth

Pakistan's industrial output has though recovered in FY26, sustaining the higher growth requires a host of structural and policy reforms. In this regard, the World Bank's recently released Business Ready (B-READY)[68] 2025 framework offers useful insights for Pakistan. On overall basis, Pakistan's performance is

[68] B-READY assesses business environments by evaluating three pillars (regulatory framework, public services, and operational efficiency) across the lifecycle of a business (i.e. entry, operation, and exit).

mixed, with notable variation across various pillars and topics. This box looks at major structural challenges identified by B-READY.

Among the ten topics spread across three pillars, Pakistan demonstrates relative strength in two compared to the selected peer economies (**Table 2.4.1**). For example, the relative strength in *Business Entry* that cut across the regulatory framework reflects a regulatory environment that facilitates firm formalisation through streamlined registration processes, reducing the administrative burden on new entrants. *Utility Services* – an area that is relevant to public services, also suggest some improvement in access to reliable infrastructure (particularly electricity and water), which directly affect firms' operational continuity. Reliable utilities reduce downtime and allow businesses to allocate resources more efficiently toward investment and expansion.

B-READY Performance 2025, by pillar **Table 2.4.1**

Economy	Code	Pillar 1 Regulatory Framework	Pillar 2 Public Services	Pillar 3 Operational Efficiency
Rwanda	RWA	72.54	59.81	71.47
Ghana	GHA	68.88	49.99	51.73
Vietnam	VNM	67.03	53.93	70.44
Türkiye	TUR	66.81	73.43	62.91
Indonesia	IDN	65.61	62.00	59.01
Malaysia	MYS	65.61	63.41	67.99
Cambodia	KHM	63.06	43.14	56.17
Pakistan	**PAK**	**62.31**	**54.58**	**59.64**
Nepal	NPL	61.46	42.04	56.15
Bangladesh	BGD	53.01	45.14	57.77

Note: Cell colour represents the quintile an economy is in for each of the three pillars. (high score = 100; low score = 0)

Top Quintile	Second Quintile	Third Quintile	Fourth Quintile	Bottom Quintile

Source: WB

In the remaining eight areas, however, the country's performance remains subpar. These are briefly discussed as follows:

Weak implementation of laws and policies: The *Regulatory Framework* pillar outperformed both the pillars named *Public Services* and *Operational Efficiency*, which points to a familiar pattern across emerging economies: rules exist but they lack implementation and ease of compliance. A regulatory framework that is not matched by effective public service delivery or efficient operational processes can raise compliance costs, discourage formalisation, and constrain private investment.

Trade and market entry barriers: Pakistan faces significant constraints in *international trade* and *domestic competition*. Customs clearance procedures involve multiple documentary requirements and coordination between agencies, increasing the processing time that affects export delivery schedule and import supply chains. Domestically, new entrants encounter procedural requirements, information asymmetries, limited transparency in public procurement that influence market access, while established firms operate within existing regulatory parameters. These factors collectively affect transaction costs and limit Pakistan's participation in global value chains.

Efficiency gaps in institutional processes: The *taxation*, *dispute resolution* mechanisms, and *insolvency framework* represent institutional arrangements that influence business operations. The tax regime involves multiple compliance requirements and administrative processes (that demand firm resources), with lengthy refund mechanisms that affect working capital needs. Commercial courts take time in processing the caseloads affecting the dispute resolution timelines. The insolvency framework is still evolving with the capacity building of practitioners.

Labour, land, and credit market frictions: *Labour regulations*, *property registration* systems, and *financial services* frameworks shape how firms access productive inputs. In the labour market, compliance requirements are burdensome, particularly for smaller firms, while mismatches between worker skills and industry needs constrain productivity. For small and medium enterprises, access to credit is limited

by stringent collateral requirements and underdeveloped alternative lending products, while credit information systems experience lack of data collection from non-bank institutions or utility companies. These operational frictions raise costs, create uncertainty, and hinder firms from efficiently utilizing the inputs for production and growth.

Evidence from 125 emerging markets and developing economies suggests that reforms aimed at addressing the aforementioned areas, if sequenced appropriately, can help sustain industrial growth (Budina et al., 2023). The estimates show that *first-generation reforms* such as governance improvements and business deregulation, along with tariff reduction and eliminating non-tariff barriers, can raise the level of output by 4 percent within two years and 8 percent over four years. Similarly, *second-generation reforms* such as expansion in credit access and market-driven wage structure, can yield an additional 3 percent.

** Contribution of Ravi Kumar is acknowledged in writing this box.*

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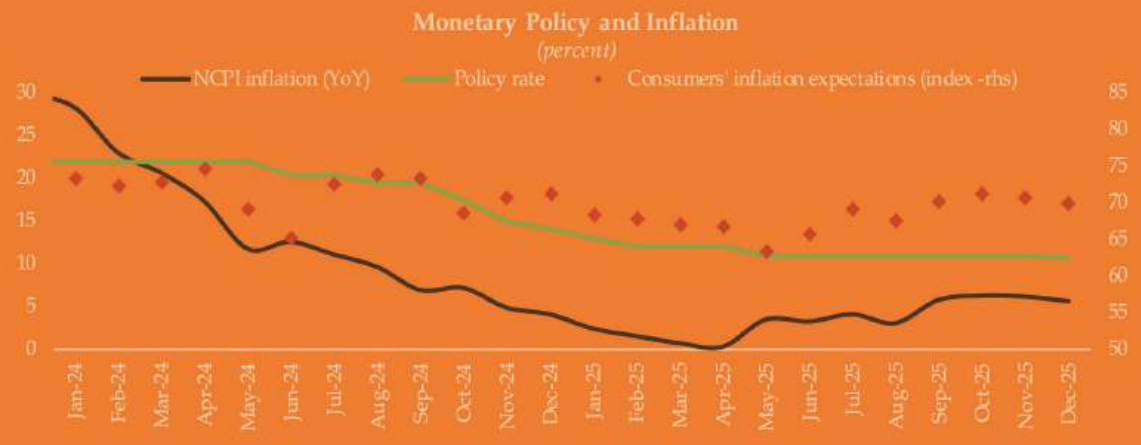
3

Monetary Policy and Inflation

Average NCPI inflation eased to 5.2 percent in H1-FY26 compared to 7.2 percent in the same period last year, while the year-on-year inflation stabilized within the target range of 5.0 – 7.0 percent. Continued prudent monetary and fiscal policy mix that kept domestic demand in check, softened global commodity prices, improved external account and favourable adjustments in electricity prices underpinned this improvement. Energy inflation fell to historically low levels, while core inflation also declined, though it remained persistent at elevated levels. Nevertheless, risks to inflation outlook from floods, uncertainty related to global trade environment and volatility in global commodity prices, and persistence in core inflation led the MPC to keep the policy rate unchanged during H1-FY26, except for December 2025. In tandem with the lower financing cost and a gradual momentum in economic activity, private sector credit also increased. This, together with higher government's budgetary borrowing from scheduled banks, uptick in commodity operations financing and credit to PSEs, drove increase in net domestic assets of the banking system. In addition, continued expansion in net foreign assets of the banking system, led to higher growth in money supply in H1-FY26.



3.1 Policy Review

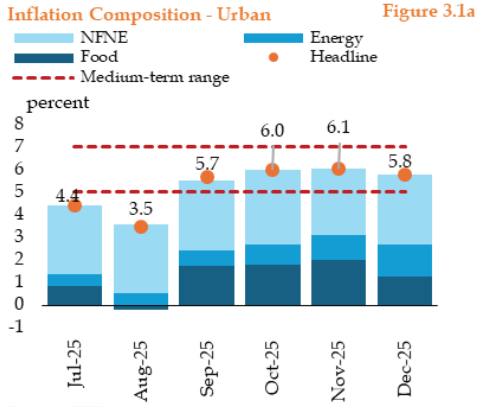
The Monetary Policy Committee (MPC) adopted a cautious stance amid lingering uncertainty surrounding the near-term inflation outlook and kept the policy rate unchanged in all its meetings during H1-FY26, except in December 2025, when the Committee reduced the rate by 50 basis points (bps). The average national CPI (NCPI) inflation eased to 5.2 percent in H1-FY26, close to the lower bound of the medium-term target range of 5.0 – 7.0 percent. On a year-on-year basis, inflation remained below the target band during the first two months of H1-FY26, before stabilising within the target range (**Figure 3.1a and 3.1b**). The moderation in inflation reflected the impact of prudent monetary stance, continued fiscal consolidation, stable exchange rate, and subdued global commodity prices.

Accounting for these trends, the MPC projected the average NCPI inflation to remain within the 5.0 – 7.0 percent range in FY26 in its July 2025 meeting, with some temporary deviations expected in a few months. However, this projection was susceptible to various risks. Specifically, uncertainties stemming from unanticipated energy price adjustments, inflationary impact of the flood-induced supply shock, volatile global commodity prices, evolving global trade dynamics, and wheat supply situation posed risks to inflation outlook during most part of H1-FY26.

Based on the gradual momentum in economic activity and expected recovery in agriculture, assuming limited flood-related disruptions, the MPC expected real GDP growth to be in the range of 3.25 - 4.25 percent in FY26, compared to a growth of 3.1 percent in FY25.[1] The expansion in economic activity was expected to drive a corresponding increase in imports. However, sluggish global demand and subdued outlook for export prices were likely to restrain exports, leading to a widening of trade deficit in FY26. Nevertheless, in view of a favourable outlook of workers' remittances, the MPC projected the current account deficit to

Inflation Composition - Urban

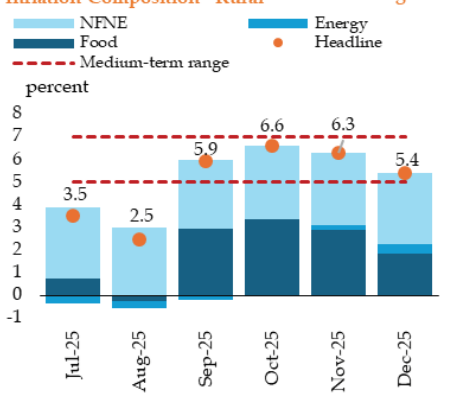
Figure 3.1a



Source: PBS

Inflation Composition - Rural

Figure 3.1b



[1] At the time of MPC meeting in July 2025, the provisional estimate for real GDP growth in FY25 was 2.7 percent.

remain in the range of 0 – 1.0 percent of GDP in FY26.

As anticipated, after remaining subdued in July and August, inflation increased to 5.8 percent in September 2025. In addition to the flood-related increase in prices of both perishable and non-perishable food commodities, this also reflected the impact of upward adjustment in energy prices and persistence in core inflation.

Moreover, high-frequency indicators, including automobile sales, fertilizer offtake, private sector credit, imports of intermediate goods and machinery, and the Purchasing Managers' Index,[2] pointed towards a robust expansion in economic activity in Q1-FY26. In line with these trends, LSM also saw a notable increase in Q1-FY26, against a contraction in the same period last year. In addition, Pakistan reached a staff-level agreement with the IMF on the Extended Fund Facility (EFF) and Resilience and Sustainability Facility (RSF) reviews, reflecting positively on the external account.

Based on these developments, the MPC, in its October 2025 meeting, noted further strengthening of growth outlook and assessed real GDP growth in FY26 to be in the upper half of the previously projected range of 3.25 – 4.25 percent. Moreover, accounting for the unfolding impact of a cumulative 1,100 bps reduction in the policy rate between June 2024 and May 2025, the uncertainties surrounding the inflation outlook, and the potential domestic supply pressures emanating from market frictions, the MPC decided to keep the policy rate unchanged in its meetings held in July, September and October 2025.

In its December 2025 meeting, the Committee reduced the policy rate by 50 basis points. The decision was supported by benign trends in inflation, as NCPI inflation had remained within the target range and food, energy, and core inflation were broadly in line with the earlier expectations. The MPC noted that the real policy rate remained adequately positive to stabilise inflation within the medium-term target range.

Looking ahead, the Committee expected inflation to rise above the target range towards the end of FY26 and in FY27.[3] Moreover, easing financial conditions and an overall improvement in business environment aided expansion in economic activity in H1-FY26. The MPC also underscored the need for initiating required structural reforms and continued coordination between monetary and fiscal policies to achieve a high economic growth trajectory on a sustained basis.

3.2 Monetary Aggregates

The broad money (M2) growth accelerated to 18.8 percent (YoY) at end-December 2025, compared to 10.2 percent in the corresponding period of last year (**Table 3.1**). Moreover, the composition of M2 growth somewhat changed as increase in net foreign assets (NFA) moderated, while expansion in net domestic assets (NDA) of

[2] The Purchasing Manager's Index increased to 56.81 in Q1-FY26 as compared to 50.25 in Q1-FY25.
[3] The ongoing Middle East war poses significant upside risks to inflation outlook.

Monetary Aggregates **Table 3.1**

stocks and changes in stock in billion Rupees; growth in percent

	Stocks end-period		Change in stock		Growth (YoY)	
	Dec-2024	Dec-2025	H1-FY25	H1-FY26	Dec-2024	Dec-2025
Broad money (M2)	35,614.4	42,302.2	-267.4	1,795.9	10.2	18.8
NFA	-470.6	854.2	667.3	389.4		
NDA	36,085.0	41,448.0	-934.7	1,406.5	7.7	14.9
Budgetary borrowing	27,508.6	33,731.4	-2,215.4	-347.0	13.1	22.6
SBP	3,639.2	2,355.6	-888.5	-1,480.6	4.1	-35.3
Scheduled banks	23,869.4	31,375.7	-1,326.8	1,133.6	14.6	31.4
Commodity operations	1,162.2	1,086.1	-216.1	19.5	-7.5	-6.6
Credit to private sector	10,845.7	10,941.0	1,978.9	992.3	22.8	0.9
Credit to PSEs	2,267.4	2,201.0	75.9	96.6	1.4	-2.9
Other items net	-7,704.0	-7,326.3	-2,101.6	763.2		
Currency in circulation	9,115.9	10,872.6	-37.2	238.1	7.9	19.3
Deposits	29,822.9	36,632.7	-358.8	2042.3	10.5	22.8
Reserve money	11,579.0	13,447.9	-33.9	477.3	9.1	16.1

Source: SBP

the banking system doubled in H1-FY26 compared to the same period last year.

Increased government borrowing from scheduled banks, in conjunction with a sustained increase in credit to non-government sector drove the expansion in NDA of the banking system in H1-FY26. Additionally, commodity operations financing and credit to Public Sector Enterprises (PSEs) also ticked up during H1-FY26.

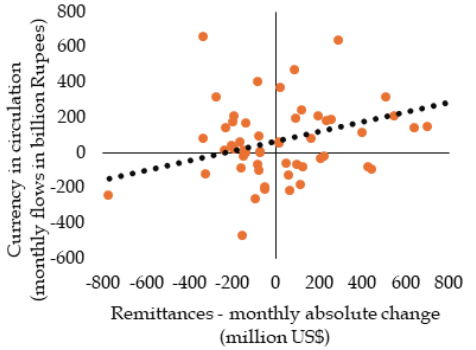
On the other hand, greater external inflows and valuation gains on gold holdings amid higher international prices supported an increase in SBP's net foreign assets. However, a contraction in scheduled bank's NFA contained the overall expansion in NFA of the banking system.

On the liability side, against a slight contraction during H1-FY25, currency in circulation (CiC) rose by Rs 238 billion during H1-FY26 (**Table 3.1**). The increase in CiC reflected the impact of at least three factors. First, in July 2025, the government raised withholding tax on cash withdrawals for non-filers from 0.6 percent to 0.8 percent, which may have discouraged transactions through formal banking channels.[4,5] Second, a sizeable increase in workers' remittances, especially during Q2-FY26, also added to CiC (**Figure 3.2**). Lastly, growing momentum of domestic economic activity bolstered

[4] Source: Finance act (2025). MoF.

[5] SBP (2017) found positive relationship between WHT and CiC. SBP (2017). Special section: Impact analysis of withholding tax on cash withdrawal and banking transactions. The State of Pakistan's Economy Annual Report 2016-17. SBP.

Remittances and Currency in Circulation **Figure 3.2**

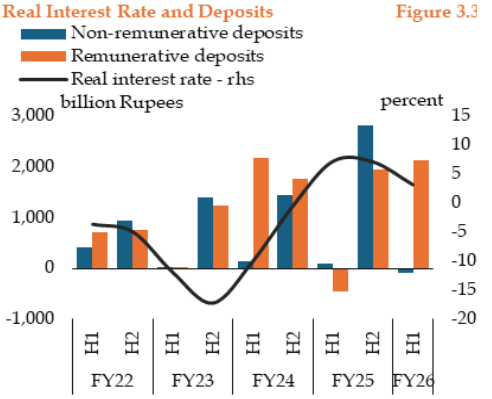


Note: Data covers the period Jul 2006 to Dec 2025.
Source: SBP

transaction demand for money and hence CiC.[6]

Meanwhile, bank deposits also increased by Rs 2,042 billion during H1-FY26, against a withdrawal of Rs 359 billion in the same period last year. The substantial increase in deposits during H1-FY26 could be attributed to a significant positive real interest rate (**Figure 3.3**). This is also evident from a slight drop in non-remunerative deposits, as depositors shifted funds out of zero-return current accounts to remunerative deposits and equity market. Moreover, part of the increase in deposits also appears to reflect the seasonal pattern. In contrast, during H1-FY25, banks had introduced service charges on deposits above certain amount to meet advances-to- deposit ratio (ADR)

Real Interest Rate and Deposits **Figure 3.3**



Source: SBP

requirement, which discouraged deposits mobilisation.

Credit to PSEs

Credit to PSEs expanded by Rs 97 billion during H1-FY26, compared to an increase of Rs 76 billion in the same period last year (**Table 3.1**). The bulk of increase was concentrated in a few large enterprises, namely National Power Parks Management Company Limited (NPPMCL) and Pak-Arab Refinery Limited (PARCO), mainly to meet working capital requirements.

Circular debt-related receivables necessitated higher borrowing for NPPMCL,[7] while PARCO's borrowing requirements largely emanated from dividend payments in Q1-FY26, which created a liquidity gap.[8]

[6] Empirical literature identifies remittances as a major factor influencing currency in circulation in Pakistan, due to its positive impact on income and hence transaction demand for currency. Ejaz et al. (2019). The conundrum of rising demand for currency in Pakistan. SBP staff notes 1/20. SBP.
Khaskheli et al. (2013). The behavior and determinants of the currency deposit ratio in Pakistan. SBP research bulletin Vol 9. SBP.
Ghumro and Karim (2017). The role of remittances in the stability of money demand in Pakistan: A cointegration analysis. Economic Annals, Vol. 62, No. 213.
[7] NPPMCL (2025). Statement of Corporate Intent. National Power Parks Management Company Limited.
[8] PACRA (2025), Pak Arab Refinery Ltd. Credit Rating Report, The Pakistan Credit Rating Agency Limited.

Commodity Operations Financing

Commodity operations financing recorded a net increase of Rs 19.5 billion during H1-FY26, in contrast to a net retirement of Rs 216 billion in the same period last year (**Table 3.1**). The increase was primarily on account of borrowing by the Trading Corporation of Pakistan (TCP) for sugar imports to stabilise domestic prices. In addition, Pakistan Agricultural Storage and Services Corporation Limited (PASSCO) borrowed to fund carrying costs of existing commodity stocks in warehouses.

Budgetary Borrowings

Government's budgetary borrowings from the banking system saw a net retirement of Rs 347 billion in H1-FY26, substantially lower compared to Rs 2,215 billion in the same period last year (**Table 3.1**). While the government continued to retire the outstanding debt owed to SBP, it increased borrowing from scheduled banks in H1-FY26.

To benefit from the declining interest rates, and its strategy to lengthen the maturity profile, (**Table 3.2**) the government set auction targets below or close to maturities for Treasury Bills (T-bills) resulting in a net retirement in this category (**Figure 3.4**).[9] At the same time, the government allocated higher targets for PIBs. In line with its objective to reduce exposure to interest rate risk, the government mobilised bulk of

Auction Summary -H1-FY26 **Table 3.2**

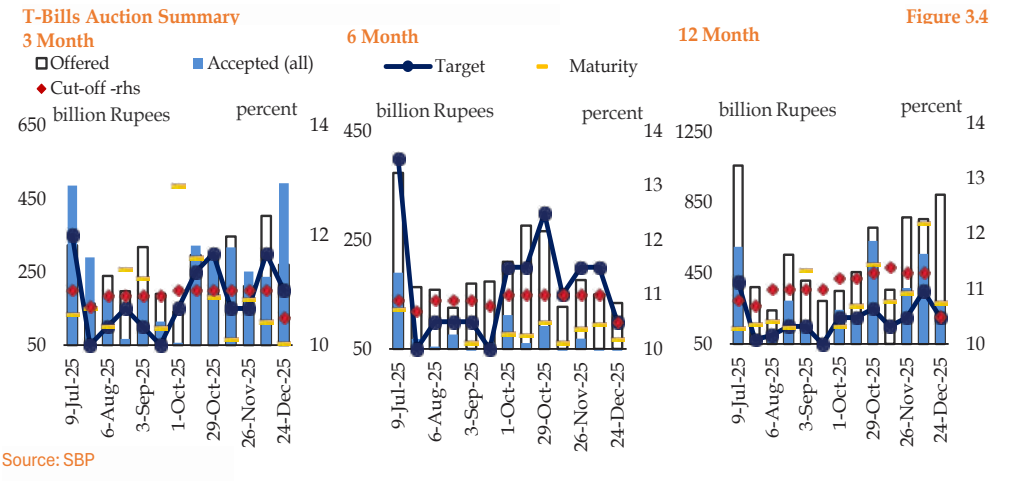
billion Rupees; ratio

	Target	Acceptance	Acceptance (net of maturity)	Offer-to-Target	Target-to-Maturity	Acceptance-to-Maturity
			Treasury Bills			
22-Day			-915.6			
1-Month	1,300.0	1,571.8	-22.1	6.7	0.8	1.0
3-Month	2,300.0	3,279.6	928.0	1.5	1.0	1.4
6-Month	2,150.0	913.5	48.5	1.2	2.5	1.1
12-Month	2,475.0	3,560.6	-117.6	2.9	0.7	1.0*
Total	**8,225.0**	**9,325.4**	**-78.8**	**2.7**	**0.9**	**1.0**
			Pakistan Investment Bonds			
Fixed Rate						
2Y	525	308.8	308.8	2.7	-	-
3Y	400	339.8	-245.1	3.6	0.7	0.6
5Y	475	627.0	-24.6	3.1	0.7	1.0
10Y	550	1,023.0	1,023.0	4.1	-	-
15Y	300	1,081.3	1,081.3	13.0	-	-
Total	**2,250**	**3,379.9**	**2,143.4**	**4.7**	**1.8**	**2.7**
Floating Rate						
Semi-Annual						
10Y	1,850	1,556.7	1,556.7	4.7	-	-
Total	**1,850**	**1,556.7**	**3,276.8**	**4.7**	**1.6**	**1.4**

* Rounded to one decimal place; the actual value is 0.96;

Source: SBP

T-Bills Auction Summary **Figure 3.4**



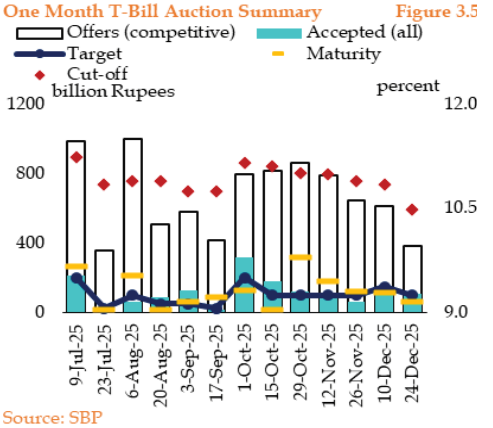
Source: SBP

financing from Pakistan Investment Bonds (PIBs) - Fixed, followed by PIBs – Floating (PFLs) Semi Annual Coupon.

Within T-bills, market appetite remained strong for the 12-month bill, indicating a preference for longer-tenor instruments driven by anticipation of further decrease in interest rates. In Q2-FY26, market increased offers for 12-month papers when increased government borrowing requirements pushed the cut-off rates higher **(Figure 3.4)**. On the other hand, offers for 1-month T-bill declined throughout Q2-FY26 as the market moved to extend its portfolio duration (**Figure 3.5**).

The PIB auctions also saw strong market participation despite shifting market expectations regarding the interest rates (**Figure 3.6**).[10] At the same time, the government deliberately restrained the issuance of PFLs by assigning targets for only 10Y bond, which nonetheless attracted offers that exceeded the target by more than four times. To further contain floating rate debt, the government conducted buyback auctions for both 5Y and 10Y semi-annual coupons in November, buying back a total of Rs 122.1 billion.

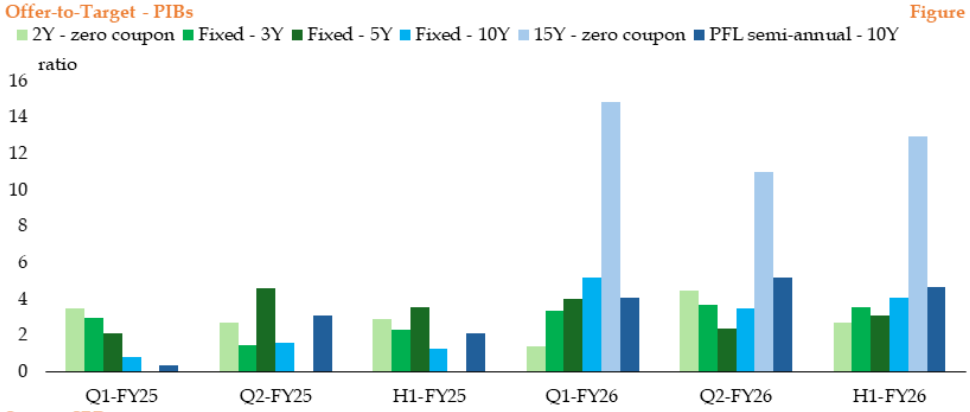
One Month T-Bill Auction Summary **Figure 3.5**



Source: SBP

[10] Market's expectations regarding the future path of interest rates varied in H1-FY26, largely influenced by inflation trends. Slightly higher inflation in September and October led to expectations of a possible policy rate hike, while ease in inflation in December 2025 supported expectations of a rate cut.

Offer-to-Target - PIBs Figure 3.6

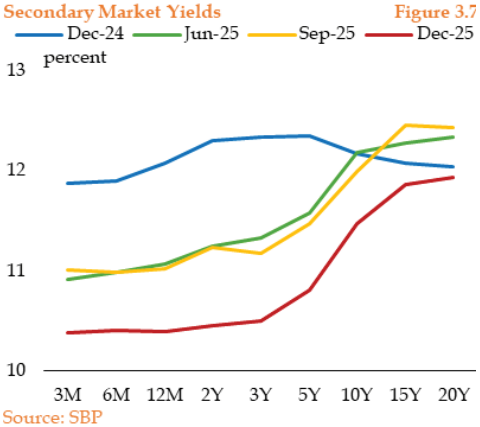


Source: SBP

The government increasingly relied on fixed-rate PIBs to raise financing to lock in lower borrowing costs, in a declining interest rate environment, and reduce repricing risks, as reflected from acceptances exceeding maturity by around three times. As a result, the share of PIBs-Fixed reached 83 percent of the overall mobilisation through auctions in H1-FY26. Likewise, the market's interest in longer-tenor instruments was significantly high, as the 15Y zero coupon was persistently oversubscribed.

Reflecting optimism about economic growth and expectations regarding inflation trajectory, the secondary market yield curve remained positively sloped during H1-FY26.[11] The yields for shorter-tenor securities continued to decline, which along with the policy rate cut, flattened the shorter-end of the yield curve in December 2025 (**Figure 3.7**).[12] This can be attributed to market's pronounced interest in longer-tenor securities (5Y, 10Y and 15Y), which kept the secondary market yields for these securities elevated while moderating the yields for shorter tenors.

Secondary Market Yields Figure 3.7



Source: SBP

[11] A positive yield spread between the 10Y and 3-month U.S. T-bill is a valuable indicator of economic activity and short-term interest rate expectations for two to six quarters ahead. Estrella & Mishkin (1996). The Yield Curve as a Predictor of U.S. Recession. Federal Reserve Bank of New York. Current Issues in Economics and Finance. Volume 2 Number 7.

[12] Empirical findings for Pakistan show that an increase in the yield spread is a strong predictor of output growth. Hussain, F. & Mahmood, A. (2017). Predicting Inflation and Output in Pakistan: The Role of Yield Spread, SBP Working Paper Series, No.93

Overall, the ongoing fiscal consolidation efforts have supported smooth pass-through of changes in the policy rate to short-term rates. During the monetary tightening phase that began in September 2021, elevated domestic financing needs, in conjunction with high inflation expectations pushed cut-off rates above the policy rate (**Figure 3.8**).

In contrast, during the easing cycle, lower domestic borrowing requirements amid fiscal consolidation reduced pressure on cut-off rates, allowing them to align more closely with the policy rate.

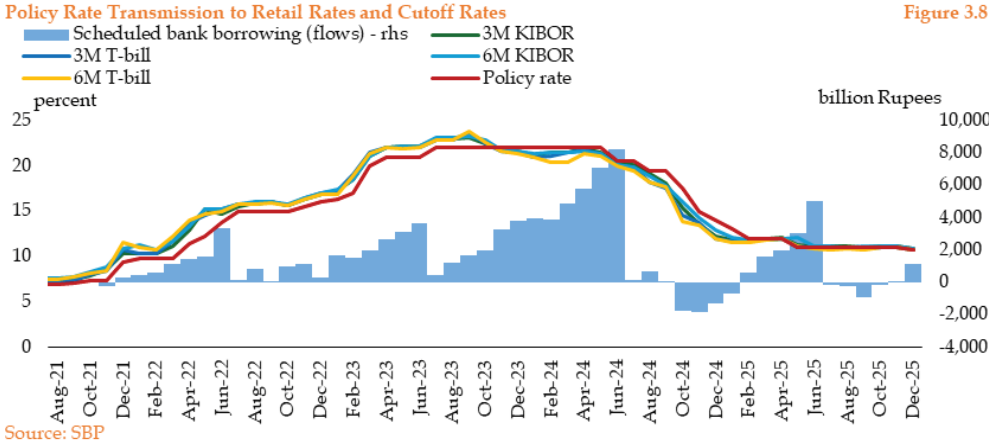
Interbank Liquidity

Higher government borrowing from the scheduled banks, continued expansion in private sector credit, and a rise in CiC kept interbank liquidity conditions under stress in H1-FY26, compared to the same period last year. Although SBP's net FX purchases and higher deposit mobilisation cushioned liquidity, these factors only partially offset the underlying pressures.

SBP met the additional liquidity requirements of the market through OMO injections on net basis. As a result, the average outstanding OMO stock rose to Rs 12.8 trillion in H1-FY26 from Rs 10.8 trillion in H1-FY25. The effective liquidity management contained volatility in Weighted Average Overnight Rate (WAONR), reducing its deviations from the policy (target) rate to an average 11.4 bps in H1-FY26 from 19.6 bps in H1-FY25 (**Figure 3.9 & 3.10**).[13]

In H1-FY26, the market also reduced its reliance on the SBP's corridor facilities, indicating that liquidity support through OMOs was sufficient in meeting the

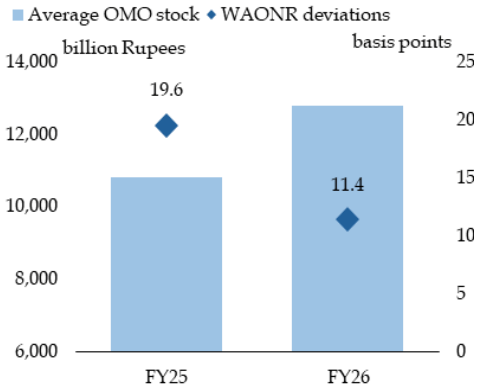
Policy Rate Transmission to Retail Rates and Cutoff Rates — Figure 3.8



Source: SBP

[13] The central bank's ability to align WAONR with the policy rate depends on liquidity forecasts, particularly the anticipation about autonomous factors affecting liquidity. If an inappropriate amount of liquidity is supplied through OMOs, this can result in higher interest rate volatility. Disyatat, P. (2008). Monetary Policy Implementation: Misconceptions and their consequences. *BIS Working Papers No 269.*

Interbank Liquidity Indicators - H1 Figure 3.9

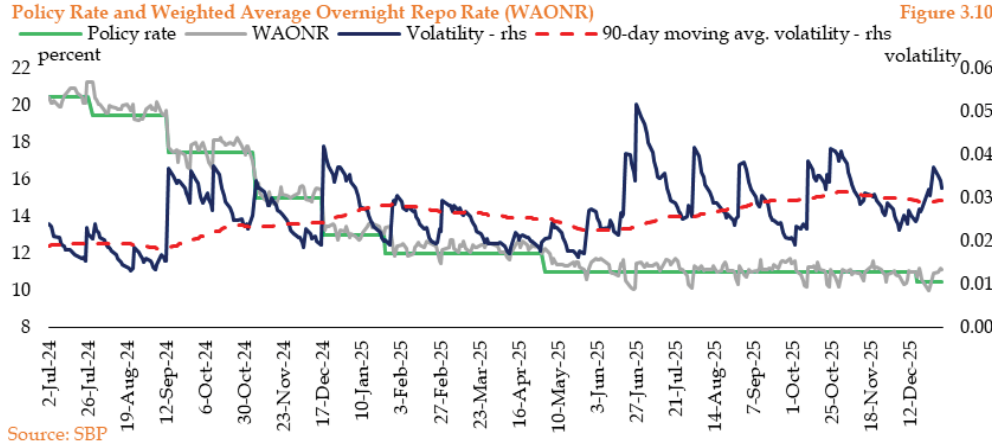


Source: SBP

market's requirements.[14] SBP predominantly injected liquidity through 7-day and 14-day OMO injections, in view of the market's anticipation of future rate cuts during H1-FY26.[15] In addition, SBP also strengthened risk management measures for its monetary policy lending operations, by introducing haircuts on government securities as collateral, effective from July 2025.[16,17]

In parallel with developments in the conventional interbank market, the liquidity needs of Islamic Banking Institutions (IBIs) also increased in H1-FY26 as evidenced by higher frequency and overall volume of injections, which nearly doubled in comparison to H1-FY25. As a result, the average outstanding stock of Shariah-compliant OMOs more than doubled to Rs 324.7 billion compared to Rs 147.3 billion.

Policy Rate and Weighted Average Overnight Repo Rate (WAONR) Figure 3.10



Source: SBP

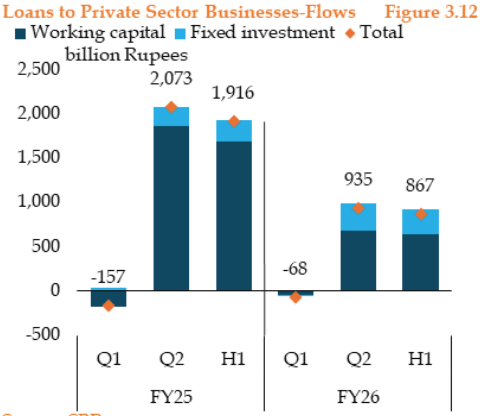
[14] Use of the SBP's interest rate corridor declined sharply relative to H1-FY25 in terms of both the frequency and volume, with lower placements at the floor facility and reduced recourse to the ceiling facility as well.
[15] In H1-FY25 liquidity was injected through the 7-day and 28-day tenor.
[16] Collateral haircuts refer to a reduction applied to the market value of securities pledged as collateral for loans, to act as a buffer against possible decline in market prices. Source: DMMD Circular No. 09 of 2024. SBP
[17] Globally, collateral haircuts are applied by many central banks to reduce credit risk in central bank monetary policy lending operations. The Federal Reserve, Bank of England and European Central Bank are some examples of central banks that apply collateral haircuts. Source: Collateral management in central bank balance policy operations. Garreth Rule (2012) *Centre for Central Banking Studies*

3.3 Private Sector Credit

Private sector credit (PSC) grew by 0.9 percent (YoY) as of end December 2025, compared to 22.8 percent (YoY) increase in the same period last year, and an average growth of 14.1 percent in the comparable period of last five years. The moderation in growth in H1-FY26 was anticipated due to high base in the previous year, when ADR-based tax led the banks to scale-up lending to the private sector.

In absolute terms, loans to private sector businesses (PSBs) expanded by Rs 867.2 billion in H1-FY26, compared to Rs 1,915.7 billion in H1-FY25. This increase was driven by both working capital and fixed investment loans. Moreover, the increase was mostly concentrated in Q2-FY26, specifically in December 2025, while Q1 saw seasonal retirement (**Figure 3.11**). Encouragingly, the expansion in fixed investment loans was slightly higher compared to the first half of last year (**Figure 3.12**).

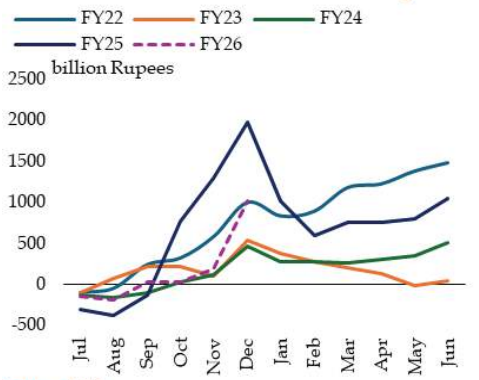
Loans to Private Sector Businesses-Flows Figure 3.12



Source: SBP

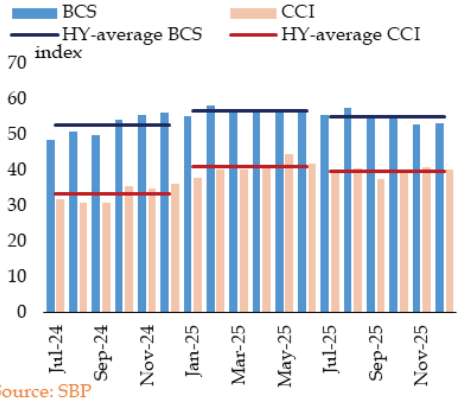
While the imposition of ADR-based tax along with elevated input costs mainly drove credit growth during H1-FY25, the expansion in credit to PSBs in H1-FY26 reflects a noticeable pickup in economic activity amid improved business and consumer confidence (**Figure 3.13** & **Table 3.3**). On supply side, increased bank deposits during H1-FY26 compared to last year enhanced the availability of loanable funds.[18] Additionally, the government

Private Sector Credit-Cumulative Flows Figure 3.11



Source: SBP

Business & Consumer Confidence Figure 3.13



Source: SBP

[18] On cumulative basis, total deposits of banks increased by 4.3 percent in H1-FY26 compared to 0.9 percent in the same period last year. Source: SBP

Underlying Indicators of Private Sector Credit **Table 3.3**

percent change

	H1-FY25	H1-FY26
Cost of production		
Global commodity prices	-4.1	-7.6
PKR/US$ ER (avg. +app./-dep.)	3.4	-1.1
Wholesale price index:	4.4	0.3
Diesel	-15.3	6.7
LNG	37.8	6.3
Coal	20	-3.7
Electricity	7.9	-15.4
Economic activity		
LSM	-1.8	4.8
PSDP	14.7	43.2

Source: SBP; PBS; WB

support measures for priority sectors, agriculture and SMEs, also contributed to continued expansion in credit to PSBs.

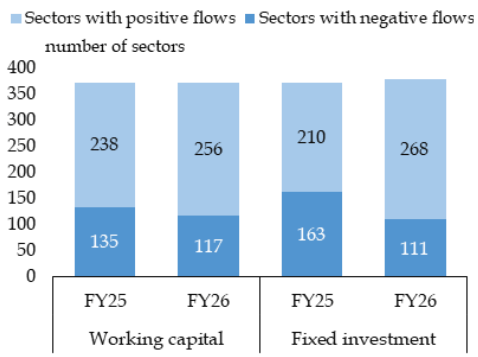
Meanwhile, lower output of important crops that dented farm incomes propped up short-term borrowing requirements of some agriculture-related sectors. However, despite various incentive schemes, share of agriculture credit in Pakistan remained stagnant at low levels. In this context, **Box 3.1** explores the pathways to enhance agriculture credit.

Pickup in economic activity drove the expansion in working capital loans in some sectors

The PSBs availed working capital loans amounting to Rs 643.6 billion in H1-FY26, compared to Rs 1,686.2 billion in the same period last year. While the overall amount was lower compared to last year, the number of sectors availing credit for working capital increased to 256 in H1-FY26 from 238 in H1-FY25 (**Figure 3.14**). The major sectors availing short-term financing included *textile & wearing apparel, rice processing, agriculture & fishing and motor vehicles* (**Figure 3.15**).

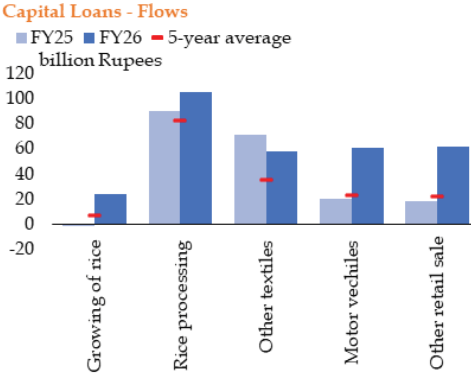
An uptick in economic activity, specifically strong recovery in LSM output, lifted short-term financing requirements of various sectors (**Table 3.4**).[19] The recovery in sales and softening input costs improved profit margins, which together with declining interest rates, suggests

Frequency Distribution of Loans to Private Sector Businesses **Figure 3.14**



Source: SBP

Major Sub-Sectors Availing Working Capital Loans - Flows **Figure: 3.15**



Source: SBP

[19] LSM grew by 4.8 percent during H1-FY26 compared to contraction of 1.8 percent in the same period last year. Output of 14 out of 22 LSM subsectors increased during H1-FY26. Source: PBS

Loans to Major Private Sector Businesses – H1 Table 3.4

flows in billion Rupees

	Total Loans*		Working Capital**		Fixed Investment		Average 2022-24		
	FY25	FY26	FY25	FY26	FY25	FY26	WC	FI	TL
Total	1915.7	867.2	1686.2	643.6	240.9	283.1	449.4	160.1	625.8
Manufacturing	1401	501.6	1305.1	396.9	100.1	113.4	383.6	108.8	493.7
Textile & wearing apparel	611.1	136.4	609.3	116.2	2.8	22.7	179.3	46.7	226.6
Basic pharma.	222.9	17	215.1	11.5	8	5.7	2.1	2.6	4.6
Cement & plaster	107.1	5.4	119.7	21.4	-12.3	-16	5.8	7.5	13.1
Rice processing	92.1	106.1	91	105.5	1.1	0.6	72.6	1.2	73.8
Fertilizers	45.8	37.6	26.5	5.5	19.4	32.1	2.5	6.2	8.7
Refined petroleum	42.7	26.9	20.7	17.1	22	9.8	19.8	4.7	24.5
Motor vehicles	27.9	68.9	20.7	61.6	7.2	7.3	11.9	2.5	14.4
Basic iron & steel	18.2	6.1	5	7.8	13.2	-0.5	30.4	2.5	32.9
Veg. & animal oils	17.6	-28.1	18.7	-26.4	-1.1	-1.7	12.4	0.8	13.1
Paper industry	14.4	5.7	10.1	1.2	4.3	4.5	12.5	8	20.6
Sugar	-26.7	-39.6	-46.9	-41.1	20.2	4.1	-48.7	-4.6	-53.3
Telecommunication	115.1	47.7	96.9	27.4	18.2	20.3	-4.3	26.6	22.3
Wholesale & retail trade	91.7	155.7	64.5	129.5	29.6	39	40.7	3.3	44.4
Agri.& fishing	59.9	123.1	28.5	69.5	31.5	53.9	20.5	21.4	42.4
Construction	25.9	9	18.1	8	9.3	24.4	4.9	-1.9	17.4
Mining & quarrying	16.3	-3.5	16.5	0.8	-0.2	-4.2	1.9	-1.1	0.9
Power gen. & dist.	-23.9	-85.4	-15.3	-33	-8	-52.2	-6.6	-1.3	-8
Transport. & storage	-14.8	27.6	-20.2	11.2	5.7	16.6	4.5	-0.5	4.2
Real estate activities	-0.4	1.4	-1.4	8.4	-0.7	5.5	0.1	-0.5	-0.1

* Total amount also includes construction finance. In terms of IH&SMEFD Circular Letter No. 28 of 2020, the data on credit/loans has been revised since June 2020 due to inter-sectoral adjustment in private sector business.

** Includes trade finance

Source: SBP

improvement in the repayment capacity of firms. The stronger financial position improved credit worthiness of companies, and hence their ability to borrow (**Table 3.5)**.

Particularly, higher production and exports explain Rs 116.2 billion increase in short-term borrowing of textile & wearing apparel in H1-FY26.[20] However, this was significantly lower compared to Rs 609.3 billion in H1-FY25, which may be partly attributed to lower input costs **(Table 3.4)**.

Motor *vehicles manufacturing* tripled the uptake of working capital loans in H1-FY26, compared to the first half of last year. This showed the impact of buoyant sales and production amid lower borrowing cost,[21] rationalisation of import tariffs and reduction of regulatory duty on

[20] Production of garments increased by 7.5 percent during H1-FY26 compared to a high growth of 9.5 percent recorded last year. Source: PBS

[21] During H1-FY26, production of automobiles increased by 67.2 percent compared to expansion of 49.7 percent in the same period last year. Source: PBS

Financial Indicators of Non-financial Corporates **Table 3.5**

percent growth; ratio

Sectors	Cost of Sale		Sales		Current Ratio		Operating	
	FY25	Sep-25	FY25	Sep-25	FY25	Sep-25	FY25	Sep-25
All Sectors	-2.6	-6.6	-2.5	-4.8	1.3	1.4	9.1	10.3
Textile sector	0.9	-2.8	0.1	-2.2	1.1	1.1	5.4	5.3
Made-up textile articles	13.1	-5.1	13.3	-3.8	1.2	1.1	7.0	4.7
Chemicals, chemical products and	6.1	11.3	9.1	11.1	1.3	1.2	16.8	17.2
Mineral products	1.5	9.7	2.6	7.7	1.9	2.0	14.9	9.9
Manufacturing	-3.3	0.6	-5.9	4.8	9.7	1.2	9.7	16.0
Motor vehicles, trailers & auto parts	22.5	31.1	24.9	32.8	1.4	1.5	11.1	11.4
Fuel and energy sector	-10.8	-30.5	-10.9	-28.2	1.4	1.7	13.7	15.5
Information and communication	4.5	10.0	2.9	17.0	0.9	0.9	11.0	14.9
Coke and refined petroleum	-8.0	-5.4	-9.0	-4.0	1.5	1.6	3.7	5.2
Paper, paperboard and products	-6.6	2.9	-8.8	0.5	1.6	1.4	4.5	5.4
Electrical machinery and apparatus	28.2	-4.7	21.0	2.2	1.4	1.5	8.2	8.0

Source: SBP

import of auto parts.[22,23] Similarly, construction-allied industries including *cement and steel* also availed higher working capital loans amid pick up in construction activity.[24,25]

Weakened farm incomes augmented short-term financing requirement of agriculture and related manufacturing sectors

While financial position of firms generally improved, lower output and exports of some kharif crops hampered cash flow of growers and crop-related manufacturing sectors during H1-FY26. Specifically, declining rice export in FY26 constrained liquidity of rice millers, driving increase in working capital loans. On the other hand, a decline in cotton production weighed on cash position of the farmers, leading to increased short-term financing requirements.[26] Support measures announced by the SBP and the government for small farmers and underserved areas, was another factor explaining increased borrowing in these sectors.

Improved profitability lowered working capital needs of some of the sectors

The significant decline in global crude oil prices trimmed input costs of petroleum refining sector. The improved financial position, as seen from strengthening profit margins, reduced short-term borrowing requirements of *refined petroleum* sector.

Conducive macroeconomic environment encouraged fixed investment

Fixed Investment loans maintained the

[22] Source: FBR S.R.O. 1151 (l)12025, S.R.O 1152(2025)
[23] See Chapter 2 for details.
[24] PSDP spending in H1-FY26 increased by 43.2 percent compared to 14.7 percent in the same period last year. Source: Finance Division
[25] Loans for house building expanded by Rs 13 billion compared to consecutive contraction of 3.0 billion observed in the last two years, indicating expansion in economic activity. Source: SBP
[26] Production of cotton declined by 1.2 percent in FY26, because of lower area under cultivation. Source: PBS & FCA working papers

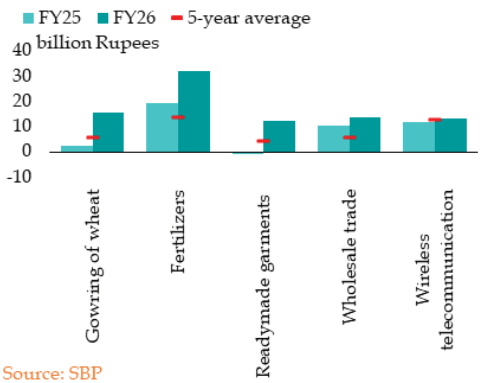
growth momentum with 15.4 percent (YoY) increase as of end-December 2025, up from 10.6 percent in the same period last year. Moreover, total number of sectors availing fixed investment loans also edged up in H1-FY26, compared to H1-FY25 (**Figure 3.14)**.

Lower interest rates, recovery in consumer demand, increased capacity utilisation of major industries, easing inflationary pressures, stable exchange rate, and improved business sentiments encouraged businesses to invest in capacity enhancement. In addition, the need to meet the global environmental standards has also raised investment in sustainable production processes in various exporting firms, especially in textile and clothing sectors, for the past few years. Pakistan's green financing landscape is evolving to encourage climate aligned investment for reducing the impact of climate change on its economy. In this regard, **Box 3.2** suggests some policy measures to promote green financing.

The sectors that availed long-term financing included *agriculture machinery & equipment*, *growing of wheat, wearing apparel, fertilizers & nitrogen* and *telecommunications* (**Figure 3.16**). The *wearing apparel* availed long-term financing for capacity enhancement and upgradation of production processes to achieve energy efficiency.[27] Likewise, the increase in fixed investment loans in *manufacturing of fertilizers & nitrogen compounds* was mainly driven by expansion in retail network by a large producer.[28] Moreover, an uptick in fixed investment loans in *telecommunications* sector, specifically the wireless telecommunications, can be attributed to upgradation of network infrastructure for improved service quality and 5G readiness.

The agriculture sector increased uptake of fixed investment loans led by wheat farmers. Specifically, to benefit from lower borrowing costs and anticipated increase in wheat prices under new policy, the farmers increased long-term borrowing for *growing wheat*. Anecdotal evidence suggests these loans were meant for agriculture machinery import used in land preparation for wheat crop.[29] Moreover *poultry* sector also increased long-term

Major Sub-Sectors Availing Fixed Investment Loans - Flows **Figure: 3.16**



Source: SBP

[27] A leading apparel exporter is investing in capacity expansion in the apparel segment to position itself as one of the leading apparel export players in the global market. The firm is also investing in improving energy efficiency of production process. Source: Interloop Limited Annual Financial Report for 2025.
[28] Source: Fauji Fertilizer company's quarterly financial statement, September 2025
[29] Land preparation for wheat is a capital-intensive activity and needs investment in agriculture machinery. Resultantly, import of agricultural machinery and implements increased to US$ 65.8 million (or grew by 21.6 percent) in H1-FY26, compared to US$ 54.1 million last year. Source: PBS

borrowing to switch to solar power and achieve cost efficiency.

Consumer Financing

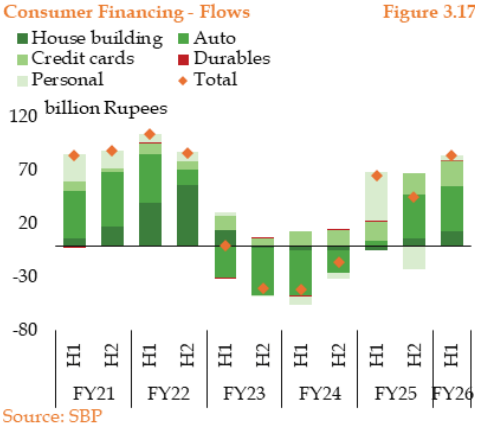
Amid declining borrowing cost, consumer financing expanded by Rs 84.4 billion in H1-FY26, compared to Rs 66.0 billion in H1-FY25. Auto loans accounted for about half of the overall expansion in consumer financing in H1-FY26 (**Figure 3.17**). The increase was led by passenger cars, especially higher engine-capacity models.[30]

House-building finance, which started to recover in H2-FY25, increased further in H1-FY26, with net disbursement of Rs 13.3 billion, against a net retirement of Rs 3.9 billion in H1-FY25. In addition to lower lending rates, decline in construction input prices also supported higher credit uptake for housebuilding.[31] Meanwhile, credit card financing maintained the uptrend. In H1-FY26, the number of cards issued rose by 45 percent year-on-year, while transaction volumes and values rose by 29 percent and 51 percent, respectively, pointing to sustained growth in card-based spending.[32]

Advances to SMEs increased

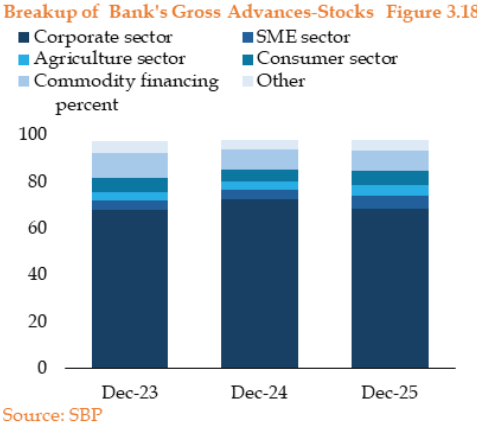
Advances to SMEs grew by 33.2 percent (YoY) in December 2025 compared to the growth of 39.1 percent (YoY) in December 2024. As a result, the share of SMEs in total advances increased to 5.7 percent by end-December 2025 compared to 4.0 percent in the same period last year (**Figure 3.18**). This expansion was broad-based as both working capital and fixed investment loans increased.[33] The expansion in SME financing can be linked to government's support measures aimed at improving access to finance, including government's Risk Coverage Scheme for Small Farmers

Consumer Financing - Flows Figure 3.17



Source: SBP

Breakup of Bank's Gross Advances-Stocks Figure 3.18



Source: SBP

[30] See Chapter 2 for details.

[31] After witnessing an average 26.6 percent increase in FY23-24, the increase in prices of construction inputs eased to 3.3 and 1.2 percent in H1-FY25 and H1-FY26, respectively.

[32] Source: Payment Systems Quarterly Review, SBP.

[33] In December 2025, working capital loans increased to Rs 438 billion compared to Rs 332.8 billion in the same period last year. While fixed investment loans expanded to Rs 408.7 billion compared to Rs 277.8 in last year. Source: SBP

CPI Inflation **Table 3.6**

inflation in percent; contribution in percentage points

Items	Weight	Average Inflation			Contribution		
		H1-FY25	H2-FY25	H1-FY26	H1-FY25	H2-FY25	H1-FY26
NCPI	**100**	**7.2**	**1.9**	**5.2**	**7.2**	**1.9**	**5.2**
Urban CPI	**100**	**8.7**	**2.1**	**5.2**	**8.7**	**2.1**	**5.2**
Food	**36.8**	**2.7**	**0.6**	**3.1**	**1.1**	**0.3**	**1.2**
Perishable	4.4	21.6	-16.8	-8.7	0.9	-0.8	-0.4
Non-perishable	32.4	0.5	3.0	4.8	0.2	1.1	1.7
NFNE (Core inflation)	**53.7**	9.5	7.5	7.0	4.1	3.2	3.1
Energy	**9.5**	24.8	-8.2	5.6	3.5	-1.4	0.9
Rural CPI	**100**	5.0	1.7	5.0	5.0	1.7	5.0
Food	**45.9**	0.4	-2.2	3.9	0.2	-1.1	1.9
Perishable	5.7	21.1	-20.4	-8.8	1.2	-1.3	-0.6
Non-perishable	40.3	-2.1	0.6	5.9	-1.0	0.2	2.5
NFNE (Core inflation)	**42.6**	12.7	9.6	8.1	4.6	3.6	3.1
Energy	**11.4**	2.3	-6.2	-0.1	0.3	-0.8	0

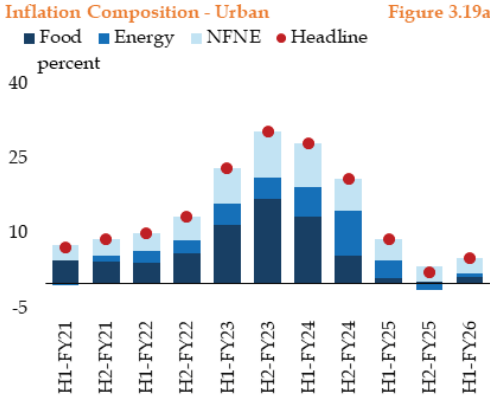
Source: PBS

and Prime Minister's Youth Business and Agriculture Loans.[34]

3.4 Inflation

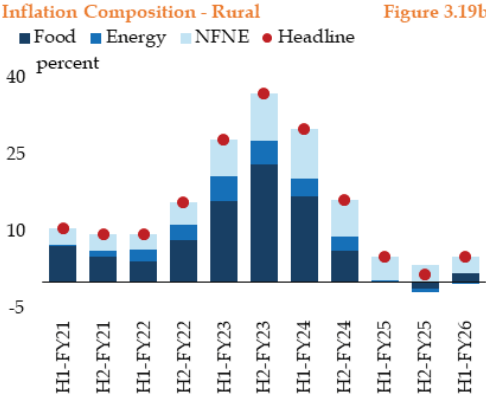
Average NCPI inflation eased to 5.2 percent in H1-FY26 compared to 7.2 percent in the same period last year (**Table 3.6**). The moderation largely stemmed from lower energy and core (NFNE) inflation, amid continued prudent monetary and fiscal policy mix, relative stability in the exchange rate, downward adjustments in administered electricity tariffs and softened international commodity prices (**Table 3.6 and Figure 3.19a and 3.19b).** However, the moderation

Inflation Composition - Urban **Figure 3.19a**



Source: PBS

Inflation Composition - Rural **Figure 3.19b**



[34] Prime Minister's Youth business & agriculture loans scheme provided employment opportunities to youth by extending concessional financing for starting new businesses, improving existing businesses and loans for agricultural purposes.

in energy and core inflation was partly offset by rise in food inflation.

The uptick in food inflation was largely due to supply shortages of non-perishable food items and imperfections in commodity markets, especially wheat and sugar. However, steep decline in the prices of perishable items contained overall food inflation. Moreover, albeit lower than same period last year, core inflation remained sticky at somewhat elevated levels in H1-FY26.

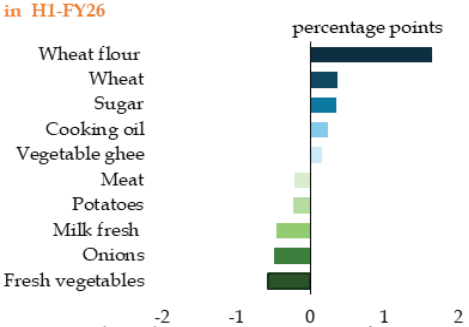
In overall terms, urban inflation eased compared to H1-FY25, supported by moderation in NFNE and energy components. Similarly, softening core and energy inflation helped rural inflation remain unchanged at 5.0 percent in H1-FY26, despite increase in food inflation.

Unfavourable market conditions explain price pressures in food group

Food inflation explained nearly one-fourth of urban inflation and around two-fifths of rural inflation during the first half of FY26. Price increases were most pronounced in wheat and wheat-related products, sugar, rice, and edible oils. The major underlying factor was reduced supply, due to flood-induced production losses, domestic supply-chain constraints, an increase in global price of palm oils and artificial shortages of some commodities (**Figure 3.20a and 3.20b**).

Wheat prices emerged as the major contributor to food inflation. Amid transition to deregulated price regime, wheat production fell by around 11 percent in Rabi 2024-25 season, as farmers reduced area under cultivation for the crop.[35] Impact of the shift in policy regime was compounded by flood-related losses, alongside artificial shortages.[36] The resulting shortfall pushed up prices of wheat and wheat-related products considerably above the last year's level (**Figure 3.21**). In this context, **Box 3.3**

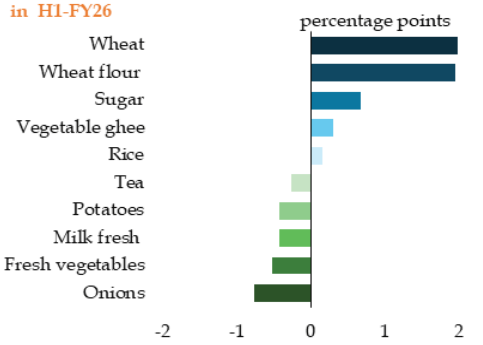
Top Contributors to Urban Food Inflation in H1-FY26 **Figure 3.20a**



Note: Bars show change in item-wise contribution to food inflation relative to H1-FY25

Source: PBS

Top Contributors to Rural Food Inflation in H1-FY26 **Figure 3.20b**



[35] Flood-related damage to wheat stocks amounted to 201 thousand MT. Source: MNFSR Working Paper (October 2025)

[36] Source: Price Controls & Commodities Management Department (PCCMD), Punjab

examines the implications of wheat policy reform under a market-based framework on inflation.

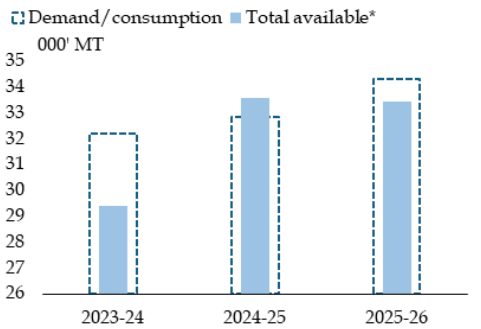
Similarly, rice prices also increased notably after floods. Moreover, a slight decline in sugarcane production in FY25, together with expansion in sugar export quotas that trimmed domestic availability of sugar, dove domestic prices up (**Figure 3.22**).[37] To contain the surge in sugar prices, the government allowed its import and temporarily removed import duties and taxes –including customs duty, sales tax, and income tax – to ease domestic shortages.[38] These administrative measures helped stabilise prices with some lag.

Furthermore, increase in international palm oil prices contributed to higher domestic cooking oil prices.[39] These pressures were compounded by market imperfections, which exacerbated food price inflation during H1-FY26. In response, provincial authorities strictly enforced administered prices for essential commodities, including cooking oil, milk, meat, and other perishable food items.[40] Meanwhile, the Competition Commission of Pakistan issued notices to a number of sugar mills against anti-competitive market practices.[41]

However, sharp decline in prices of mostly perishable food items helped partially offset the rise in prices of non-perishable items. Perishable food prices declined by around 9 percent in both urban and rural regions.

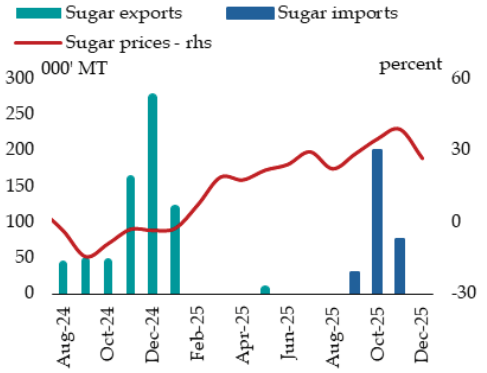
Specifically, a sizeable increase in production of potatoes and onions together

Wheat Demand and Availability **Figure 3.21**



Note: The data shown corresponds to the crop year
*production and carry forward stocks
Source: MNFSR

Sugar Trade and Domestic Prices **Figure 3.22**



Source: PBS

[37] Source: USDA (2025). Sugar Semi-annual, December 2025, Report No. PK2025-0012
[38] Source: MNFSR press release, dated: July 9, 2025.
[39] The international palm oil prices increased during April–September, the most relevant period for domestic prices in H1-FY26 given typical shipping and transmission lags. Source: WB and PBS.
[40] Price monitoring and enforcement visits in Karachi increased by 21 percent in Q2-FY26 compared to Q2-FY25. These inspections were aimed at enforcing administered prices of essential commodities, including cooking oil, milk, meat, and other perishable food items. Source: The Commissioner Office Karachi
[41] Source: Competition Commission of Pakistan press release, dated: November 28, 2025.

with closure of Afghanistan border, improved domestic availability, contributing to lower prices. Alongside perishables, tea prices also eased during H1-FY26, in line with lower international prices that were gradually reflected in domestic prices.[42]

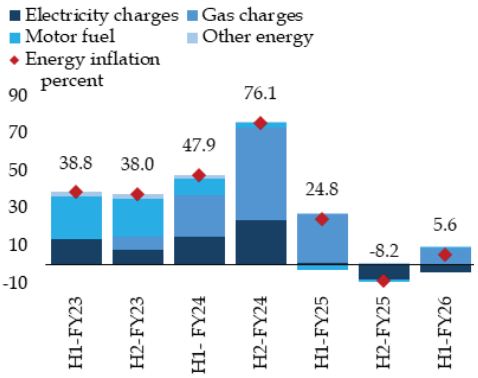
Lower global oil prices, together with downward adjustment in electricity prices, led to a sharp deceleration in energy inflation

Energy inflation dropped to multi-year low in H1-FY26, despite a substantial increase in gas prices (**Figure 3.23**).[43] In addition to pass-through of the decline in global crude oil prices to domestic electricity and, to some extent, motor fuel prices, this also reflected the impact of ongoing reforms in the energy sector.[44]

The government increased domestic gas prices from July 2025 to ensure full cost recovery, rationalize subsidies, and address the accumulating circular debt. Although per-unit tariffs for households were left unchanged, the substantial rise in fixed monthly charges led to around 23 percent increase in gas prices.[45] However, the inflationary impact of higher gas prices was somewhat offset by reduction in electricity tariffs. Negative quarterly tariff adjustments (QTA) and fuel charge adjustments (FCA) reduced consumer electricity charges during H1-FY26 (**Figure 3.24**).[46]

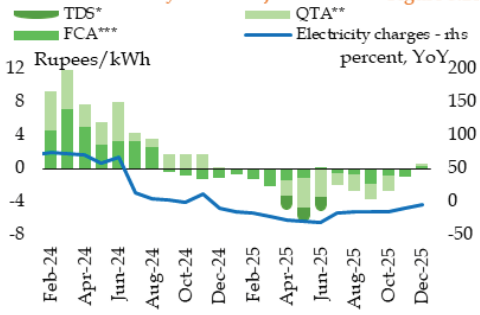
The decline in QTA represented the impact of several policy initiatives in energy sector. Specifically, the introduction of 'Off

Contribution to Energy Inflation - Urban Figure 3.23



Sources: PBS; SBP; Staff calculations

Trends in Electricity Tariff Adjustments Figure 3.24



* Tariff differential subsidy
** Quarterly tariff adjustment for residential consumers
*** Fuel charge adjustments

Sources: NEPRA; PBS

[42] Domestic tea prices reflected developments during April–September, when Mombasa tea prices (in Kenya) declined by around 6 percent. Source: WB and PBS

[43] Urban energy inflation is at its lowest half-year level since FY21 and rural energy inflation the lowest since FY18. Rural energy inflation data starts from FY18, which is the earliest available series. Source: PBS

[44] Including measures that strengthened cost recovery and reduced borrowing requirements, thereby lowering financing costs in the energy sector. Source: IMF Country Report No. 25/332, International Monetary Fund.

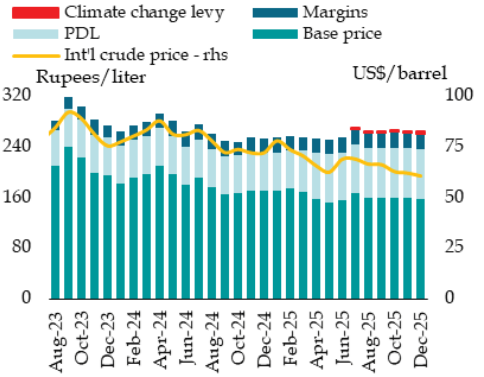
[45] Source: OGRA notification dated June 09, 2025.

[46] QTA is revised every three months to account for variations in capacity payments, O&M costs, exchange rate fluctuations, and other allowed costs not captured in the base tariff. While FCA is a monthly mechanism that passes on the changes in actual cost of fuels (such as coal, gas, furnace oil, LNG) compared to the projected cost used at the time of tariff setting. Source: NEPRA

the Grid (captive power plants) Levy Act, 2025'[47] in May 2025, facilitated transition of industrial units from captive power generation to national grid,[48] leading to increased grid demand and reduction in capacity payments. This, along with the reduction in energy sector circular debt stock, which lowered interest payments on energy sector payables, partly explains the negative adjustment in electricity charges during H1-FY26.[49] Moreover, the government also deferred the annual tariff rebasing scheduled from July 2025 to January 2026, thereby limiting upward pressure on power tariffs.[50]

On the other hand, despite lower international oil prices, domestic motor fuel prices increased. This was mainly due to increase in Petroleum Development Levy (PDL) on motor fuel. Additionally, the government also introduced a Climate Change Levy of Rs 2.50 per litre from July 2025. These together more than offset the benefit from softened global oil price benchmarks (**Figure 3.25**).

Composition of Motor Fuel Prices Figure 3.25

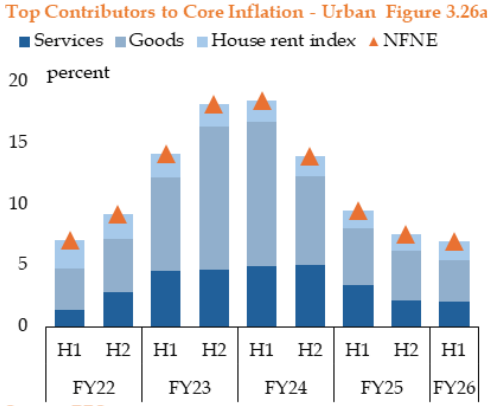


Sources: OGRA; WB

Contained demand and lower input costs eased core inflation

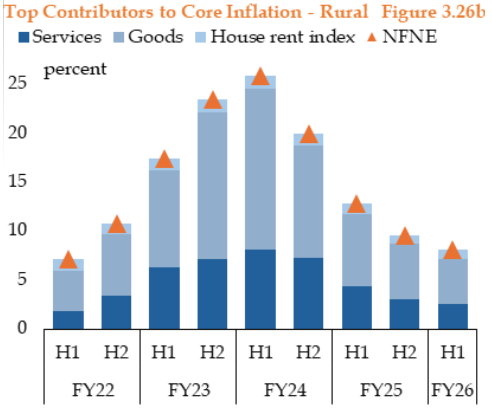
Reflecting the impact of prudent monetary and fiscal policies that contained domestic demand, and benign global commodity prices, core inflation registered a broad-

Top Contributors to Core Inflation - Urban Figure 3.26a



Source: PBS

Top Contributors to Core Inflation - Rural Figure 3.26b



[47] Source: Off the Grid (Captive Power Plants) Levy Act, 2025
[48] IMF (2025). IMF Country Report No. 25/332, International Monetary Fund.
[49] Source: IMF (2025). IMF Country Report No. 25/332, International Monetary Fund.
[50] Source: NEPRA notification dated January 07, 2026.

based deceleration during H1-FY26 **(Figure 3.26a and 3.26b**). Notably, the share of items with inflation below the upper bound of SBP's target range increased in both the urban and rural baskets (**Figure 3.27a and 3.27b**).

The pass-through of softening global commodity prices and a slight appreciation of exchange rate to domestic prices alleviated cost pressures across a range of items. Item-wise price trends indicate that disinflation mainly came from easing prices of cotton cloth, textbooks, recreation and culture, footwear, and marriage hall charges (**Table 3.7**).

Particularly, a drop in domestic raw cotton prices emanating from lower import unit prices contained price increase in cotton cloth. Likewise, lower global paper prices helped reduce textbook prices during H1-FY26.[51] Moreover, a reduction in GST on imported laptops amid lower valuations assessment by the FBR, and lower tax on cable TV charges in Sindh, reduced prices of recreation and culture.[52,53] In addition, the pace of increase in footwear prices and marriage hall charges moderated due to base effects.[54]

Top Contributors to Low Core Inflation **Table 3.7**

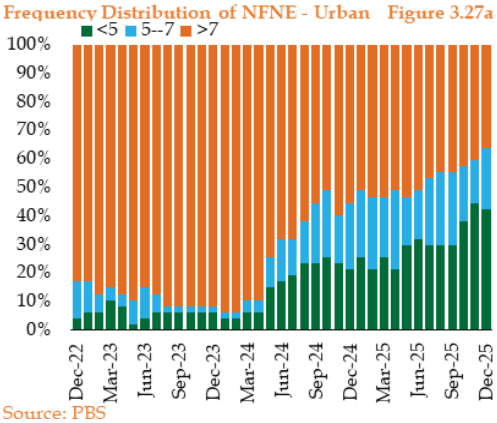
percentage points

	H1-FY25	H2-FY25	H1-FY26
Cotton cloth	10.0	7.5	5.4
Recreation and culture	2.6	1.7	-2.0
Textbooks	1.4	0.4	-2.6
Footwear	6.5	7.8	3.5
Marriage hall charges	5.4	2.8	3.0

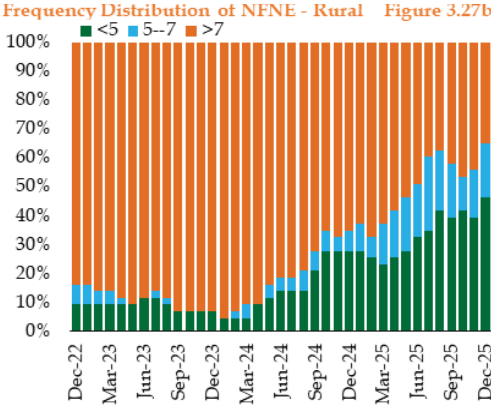
Source: PBS

Notwithstanding the improvement relative to H1-FY25, core inflation in H1-FY26 persisted around the level seen in the second half of FY25. The persistence reflected the impact of increase in international gold prices, house rents and fees of educational institutions (**Table**

Frequency Distribution of NFNE - Urban **Figure 3.27a**



Frequency Distribution of NFNE - Rural **Figure 3.27b**



Source: PBS

[51] PPPL (2025). Quarterly Financial Statements, Pakistan Paper Products Ltd.
[52] Source: Valuation Ruling No. 2000/2025, Directorate General of Customs Valuations.
[53] Sindh Finance Act (2025).
[54] Footwear prices rose in H1-FY25 due to higher gas charges increasing input costs, while marriage hall charges climbed with stricter withholding tax enforcement; the elevated base makes current growth lower vs H1-FY25.

Top Contributors to Core Inflation **Table 3.8**

percentage points

	H1-FY25	H2-FY25	H1-FY26
Personal effects (Gold)	6.2	11.1	16.8
House rent	15.7	18.5	22.5
Education	7.7	9.4	11.7
Products for personal use	5.4	6.8	8.7
Readymade garments	2.0	3.0	2.8

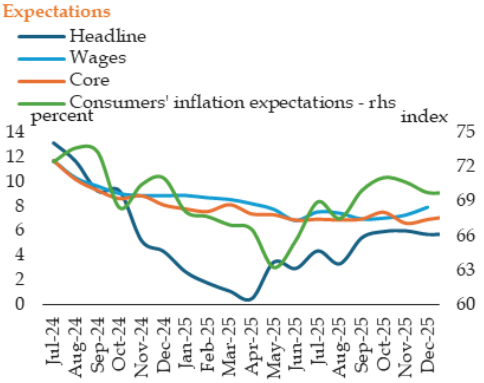
Source: PBS

3.8).[55] In violation of regulatory limits, private educational institutes, specifically medical colleges, introduced sizeable increase in education fees.[56] On the other hand, the house rents increased in line with improving economic activity that raised housing demand in major urban centers.[57] Persistently high house rents largely reflect structural imbalances in the housing market.[58]

In addition, the stickiness of core inflation also suggests the impact of structural challenges including backward-looking inflation expectations and market imperfections. As shown in **Figure 3.28,** barring a brief decline in H2-FY25, the consistently elevated inflation expectations of households induced rigidity in core inflation.[59]

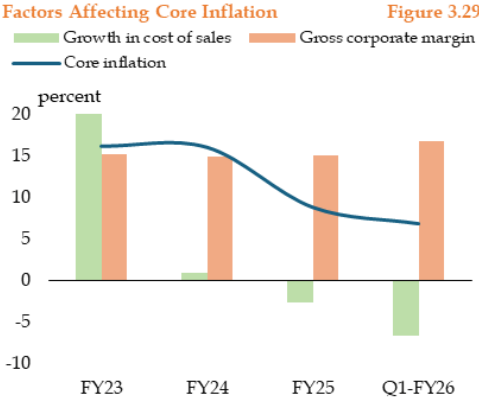
Moreover, increase in corporate gross margins also influenced core inflation trends, as firms in some sectors increased prices, despite easing input costs in Q1-

NCPI, Core Inflation, and Inflation Expectations **Figure 3.28**



Sources: PBS; SBP

Factors Affecting Core Inflation **Figure 3.29**



Source: SBP

[55] Gold carries the major weight in personal effects. While other items in personal effects include silver, wall clock, artificial jewellery, suitcase ragzine, trunk, and ladies' purse.

[56] Source: https://www.na.gov.pk/en/pressrelease.php?content=103, Dated 20th Oct 2025.

[57] Housing prices in H1-FY26 show a rising trend compared to H1-FY25, indicating increasing demand. Source: www.zameen.com

[58] Ali (2021) highlights that Pakistan faces a sizable national housing backlog, which is further compounded by a recurring annual shortfall that continues to add to the deficit each year. Ali, Y. (2021) Analysing macroeconomic factors that affect housing price in Pakistan. PIDE.

[59] SBP (2025) and Choudhary et al. (2016) suggest that backward looking inflation expectations of economic agents induce persistence in core inflation in Pakistan. SBP (2025). The State of Pakistan's Economy Annual Report 2024-25. SBP.

Choudhary, M. A., Faheem, A., Hanif, M. N., Naeem, S., and Pasha, F. (2016). Price setting & price stickiness: A developing economy perspective. Journal of Macroeconomics, Vol. 48. No. 1

FY26, which indicated their pricing power (**Figure 3.29**).[60] Lastly, an upward revision in minimum wages[61] contributed to price pressures in both core goods and services.

Box 3.1: Reform Measures to Improve Agriculture Finance

Agriculture sector in Pakistan contributes around one-fifth of GDP and employs around 33 percent of labour force.[62,63] However, the sector's use of formal finance stood around 5 percent of total private sector credit in FY25, which is low compared to peer countries (**Figure 3.1.1**). Literature shows that credit positively impacts agricultural productivity in Pakistan [Ishfaq and Khalid (2025), Khan (2019), Chaiya et al. (2023)]. Therefore, enhancing agriculture credit can help in sustaining food supply in the face of growing population in the country.[64]

Considering the significance of agriculture credit, the government and SBP have introduced various supporting measures and policies from time to time.[65] Despite these efforts, the share of agriculture credit in total credit continues to remain significantly lower vis-à-vis share of agriculture in GDP. In this regard, this Box suggests following pathways for reforms in view of literature and country experiences.

Enhancing credit guarantee coverage to reduce risk

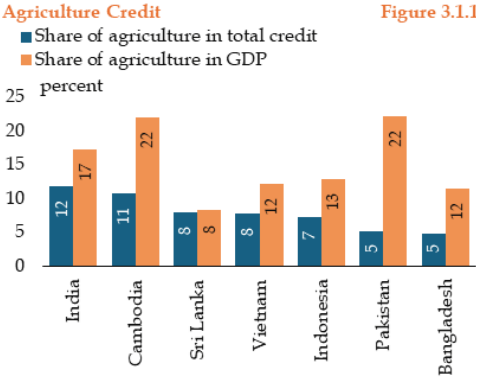
Agriculture is vulnerable to shocks such as weather events, pests, and price volatility, which weaken farmers' repayment capacity and increase default risk (**Figure 3.1.2**).[66] This vulnerability discourages banks from expanding exposure to the sector. To address this issue, Pakistan provides Risk Coverage Scheme for Small Farmers and Underserved Areas, which covers only 10 percent of loan amount.[67] Against this, Cambodia's Credit Guarantee Corporation provides guarantees up to 80 percent.[68] Moreover, the coverage is for crops only and excludes livestock. This is also one of the reasons for relatively lower credit uptake for livestock. The cross-country comparison suggests that increase in coverage of the scheme may be helpful in further improving banks' incentives to lend to agriculture sector.

Lowering farmers' reliance on land collateral through peer support and monitoring

Agriculture loans in Pakistan face strict collateral and documentation requirements due to the sector's high-risk profile. However, fragmented land holdings and poor documentation limit farmers' ability to use land as collateral. Many farmers also avoid pledging their primary asset for fear of losing land in case

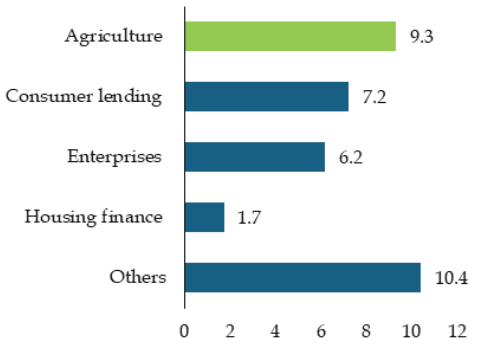
[60] In H1-FY26, 44 of the 47 core goods and services items recorded price increases.
[61] Sources: No. SO (L&P) MW/2025, Labour & HR Department, Govt. of the Punjab. Dated 8th Sep 2025.
No. SOL/LD/8-4/2025/MWB, Labour Department, Govt. of KPK. Dated 10th Sep 2025.
No. SO (L-II)/13-3/2016-I, Labour & HR Department, Govt. of Sindh. Dated 28th Jul 2025.
[62] PBS (2025). Pakistan Labour Force Survey 2024-25, Pakistan Bureau of Statistics, Islamabad.
[63] The sector also employs 61 percent of total female labour force.
[64] Abdullah et al. (2015). Agricultural Credit in Pakistan: Past Trends and Future Prospects, Journal of Applied Environmental and Biological Sciences, Vol. 5, No. 12.
[65] Some of the key initiatives include crop loan insurance scheme introduced in 2008, credit guarantee for small and marginalized farmers introduced in 2016 and targeted relief measures introduced in 2022 for calamity affected farmers. In 2025, SBP introduced Zarkhez-e service, a fully digital, collateral-free loan scheme. In the private sector, Habib Bank Limited has set up a subsidiary HBL Zarai Services Limited in 2024 to support farmers with storage, equipment, seeds, fertilizer, and farming advice.
[66] AgriSense (2023). The state of Pakistan's agriculture & case for product innovation.
[67] Source: ACFID Circular No. 02 of 2025, SBP
[68] Source: https://www.cgcc.com.kh/en/, Accessed on February 24, 2026.

Agriculture Credit **Figure 3.1.1**



Note: Data represent the five-year average (2019–2023)
Source: FAO

Infection Ratio* **Figure 3.1.2**



* FY21-FY25 average.
Source: SBP

of default, which pushes them toward informal lenders to meet liquidity needs.[69] To ease these constraints, Pakistan can draw lessons from India's group-based lending model introduced in 1992, which connects local community groups with banks. This mechanism eliminates collateral requirements and relies on peer support and monitoring.[70] Similarly, Bangladesh's Grameen Bank model organizes borrowers into small groups and centres with weekly meetings, where peer discipline, and field-level monitoring by loan officers ensure repayment and sustain collateral-free credit.[71]

Utilizing alternative data to build credit histories

In rural markets, transactions are often undocumented, making it difficult for banks to assess repayment capacity through conventional methods. Many farmers lack bank accounts or face limited access to formal services, and the absence of credit histories increases lending risk.[66] Considering this, since 2024, SBP has allowed banks to use satellite based data as an alternative to Khasra Girdawari.[72] Moreover, digitisation of land records is also in process in provinces: Punjab has digitalised around 90 percent of its land records,[73] and KPK achieved about 50 percent coverage 2025.[74] Banks can leverage digitised land records for quicker ownership verification.

To further reduce information gaps, banks need to strengthen credit assessment by leveraging alternative data such as input purchases, produce sales, and digital payment trails. To this end, collaboration with platforms like Agri Mall[75] to track payments for input purchases, creating verifiable transaction trails may support credit appraisal. At the same time, regular field monitoring and supervision can improve oversight and build confidence in lending decisions.

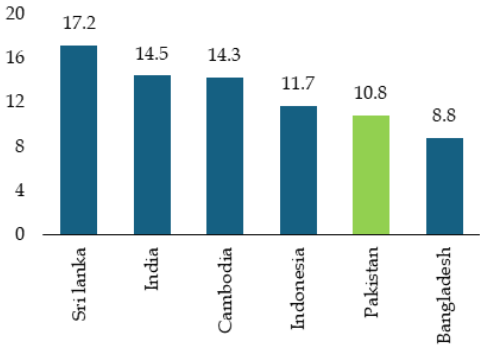
[69] PIDE (2022). The role of arthis in agriculture marketing: an exploiter or facilitator of farmers? Source: PIDE.
[70] Gulati et al. (2019). Agricultural credit system in India: Evolution, effectiveness and innovations.
[71] Rahman (2011). The Synthesis of Grameen Bank Microfinance Approaches in Bangladesh. International Journal of Economics and Finance
[72] Khasra Girdawari refers to the periodic record of crop inspection and cultivation status maintained by the local revenue officials (Patwari).
[73] Source: Punjab Land Records Authority (PLRA)
[74] Source: Revenue and Estate Department, Government of Khyber Pakhtunkhwa
[75] Agri Mall is a one-stop outlet network, which acts as a comprehensive platform for farmers to access high-quality seeds, fertilizers, pesticides, and modern machinery rentals under the Green Pakistan Initiative.

Reducing procedural delays in formal borrowing, through a standardised seasonal financing product

Informal sources are often preferred because they provide quick access to credit. In contrast, borrowing through formal channels can involve delays due to documentation requirements and procedural checks. When credit is not available during the sowing window, farmers may reduce input use, delay cultivation, or resort to informal sources.[66] To tackle this issue, the CM Punjab Livestock Scheme and the CM Punjab Kissan Card introduced in 2024, provide zero-markup seasonal financing to farmers. Introducing such programs in rest of the country can have a broader impact in terms of farmers' enhanced access to affordable credit.

Bank Branch Coverage*

Figure 3.1.3



* Number of bank branches per 100,000 adults in 2023.
Source: WB

Improving access to finance through adopting correspondent framework

Limited bank branch penetration and long distances to financial institutions remain major barriers to agricultural credit in Pakistan (**Figure 3.1.3**). To address similar challenges, Reserve Bank of India introduced Business Correspondent Framework in 2006 enabling banks to deliver services via local agents. These agents can support customer acquisition and loan processing. They can also conduct basic transactions such as small-value credit disbursement and recovery, deposit collection, and remittances.[70] Adopting a similar framework in Pakistan would reduce access barriers, expand outreach, and strengthen farmers' connection to formal credit channels. In addition, Pakistan can leverage Zarai Taraqiati Bank Limited (ZTBL), the specialized institution for agricultural finance, which has significant rural penetration with 58 percent of villages reporting access to its credit services.[76] By enforcing stronger customer due diligence in loan provision and improving loan recovery mechanisms, ZTBL can play a more effective role in expanding agricultural finance.

Training bank staff to assess farmers' needs more effectively

Agricultural financing requires trained staff to assess creditworthiness and financing needs of farmers. Bank staff often lack this expertise, which leads to more risk averse behaviour of banks. To bridge this gap, bank staff should be trained in agriculture sciences and rural finance to better understand agriculture cycles like crop production seasons, livestock management, and seasonality of cash flows. This specialized knowledge will enable banks to introduce financing products tailored to farmer's needs and better risk assessment.

**The contribution of Muhammad Zuhaib is acknowledged in writing this box*

Box 3.2: Combating Climate Change through Green Financing

Pakistan's green financing ecosystem has been gradually evolving in recent years.[77] SBP and the government have introduced various measures to integrate climate risks mitigation into the financial

[76] PBS (2020). Pakistan Mouza Census 2020, PBS, Islamabad.

[77] Green finance is any structured financial activity created to ensure a better environmental outcome. It includes an array of loans, debt mechanisms and investments that are used to encourage the development of green projects or minimize the impact on the climate of more regular projects. Source: World Economic Forum

system in the past few years.[78] However, the scale of green financing in Pakistan remains constrained due to various factors such as lack of awareness about sustainable investment opportunities, high upfront costs of green projects, and narrow range of green products. In this context, this Box discusses several measures to encourage climate-aligned investment in Pakistan.

Monitoring green investment trends. An important challenge in assessing green financing needs is the lack of comprehensive data on private sector investment in green projects. This gap partly stems from the absence of a uniform classification framework. The launch of the Pakistan Green Taxonomy (PGT) in 2025 is a significant milestone, offering clarity on what constitutes a green project, enabling investors to identify compliant assets while reducing the risks of greenwashing.[79] To encourage green financing, Pakistan needs to monitor adoption trends in various sectors, which will aid in identifying policy gaps and refine the framework based on emerging needs. Various advanced and emerging economies compile and publish sector-based green investment trends. For example, US Clean Investment Monitor (CIM)[i] is a quarterly dataset used to track investment in clean energy, clean vehicles production, electrification and other carbon technologies. Similarly, China's Global Green Tech Investment Dashboard[ii] is a comprehensive dataset that tracks investment in Electric Vehicle (EV) value chain, providing insights into country's commitment to sustainable development.

Capacity building in the private sector. Limited understanding of green financing tools remains a major barrier for both banks and businesses, especially small and medium enterprises (SMEs). Financial institutions need to invest in training programs to strengthen internal expertise on climate risks, sustainable lending practices, and the long-term benefits of green investments.[iii, iv] SMEs, meanwhile, require targeted awareness campaigns and capacity building initiatives to encourage the adoption of sustainable production methods. Enhanced technical knowledge will help businesses better identify, structure, and implement green projects, improving their access to finance.

Expanding availability of green financial products. Pakistan currently offers a narrow set of green financing instruments such as green loans, bonds, and insurance products. To broaden access, financial institutions should be encouraged to design innovative solutions tailored to local market needs. A notable example is the first rupee denominated green bond issued by Parwaaz Financial Services Limited (PFSL) in 2025, listed on the Pakistan Stock Exchange to fund renewable energy, clean energy, and clean transportation initiatives.[i] The regulators can promote wider market participation by offering incentives such as reduced registration fees.

Introducing credit guarantee schemes on green projects. Borrowers in underserved sector like SMEs and agriculture often struggle to finance climate-smart investments due to perceived risks and limited collateral. To address this issue, the government should establish credit guarantee schemes and provide concessional funding for priority green sectors. These schemes can significantly improve credit access to these sectors pursuing climate mitigation and adaptation projects.[i, vii, 80]

Establishing ***specialized institution for green financing***. Drawing from international experiences including Australia, India, and the UK,[iii] Pakistan may consider establishing specialized green financing institutions. Such institutions can offer dedicated financial products, provide guarantees for high-risk

[78] See Chapter 6 for details.
[79] Greenwashing is the practice of presenting companies or products as more environment friendly.
[80] Some country examples are the Ghana's Incentive Based Risk Sharing System for Agricultural Lending (GIRSAL), a guarantee scheme to support small farmers and large corporations on agro-value chain and renewable projects and, the Jordan's Loan Guarantee Corporation (JLGC) that offer credit guarantee to industries in renewable energy, energy efficiency, SMEs and microfinance, and offer preferred coverage to women-based SMEs.

projects, issue green bonds and green asset backed securities, and help develop a robust market for green financial trading. They can also serve as key intermediaries for channelling funds from domestic and international investors into climate aligned projects.[iv]

Incentivising ***green investments***. To attract investment in green technologies, the government should introduce incentivise import of equipment used in climate friendly projects. Similarly, foreign investors with the potential to provide technical expertise to local firms should be offered targeted incentives.[v]

Establishing ***environment endowment fund***. Provincial governments can help secure long-term financing for environmental initiatives by creating environmental endowment funds. These funds would pool capital to support green projects and reduce reliance on external grants. In this regard, Punjab Environment Endowment Fund is an example. The fund was established with an allocation of Rs 15 billion to promote environmentally conscious startups and businesses. Other provinces may adopt similar mechanisms to ensure sustainable climate financing.[iii]

Pakistan has introduced significant steps toward greening its financial system. Strengthening regulatory frameworks, increasing market capacity, expanding financial products, and incentivizing both businesses and the public, will further support the country's transition toward a resilient, low carbon economy.

**The contribution of Abdul Basit Alias Shahzad is acknowledged in writing this box*

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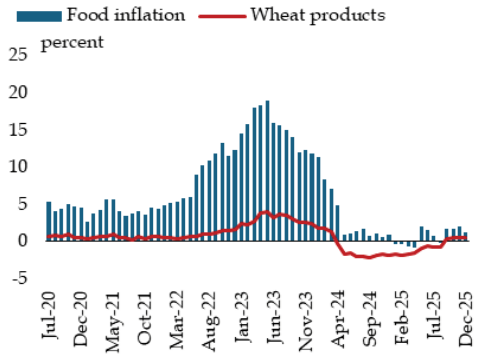
i) Source: CIM. Clean Investment Monitor available at: https://www.cleaninvestmentmonitor.org/
ii) Source: China Global Tech Investment Dashboard available at:
https://cbm.rhg.com/dashboard/china-global-clean-tech-investment-dashboard
iii) SDPI (2022). Policy brief, Green Financing to Support Energy Transition: Options and Challenges for Pakistan
iv) GFI (2025). Green Finance Institute, Transactions to Transitions, October 2025
v) Source: Finance Division, Pakistan's first PKR-denominated Green Bond launched to accelerate climate finance, press release No. 253, 21 March 2025
vi) WB (2021). Guidelines-for-Greening-Public-Credit-Guarantee-Schemes-Consultative-Document-For-public-comment.pdf
vii) AFI (2022). Alliance For Financial Inclusion, Special Report, Green Credit Guarantee Schemes for MSMEs, 2022
viii) CPI (2025). Climate Policy Institute, The State of Green Banks 2025
ix) UNDP (2023). policy brief, Greening the Financial System of Pakistan, 2023
x) WB (2020). Catalyzing Investment for Green Growth, 2020
xi) Source: Department of Environmental Protection & Climate Change, Government of Punjab available at: https://epd.punjab.gov.pk/adps

Box 3.3: Implications of Wheat Policy Reform for Inflation

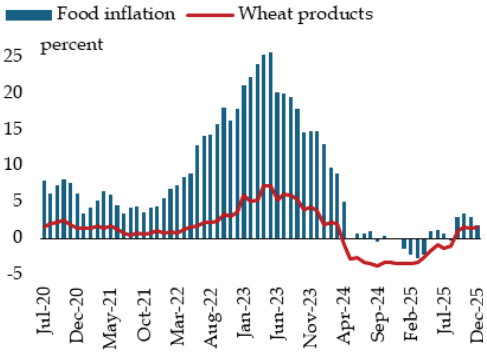
Inflation outcomes in Pakistan are sensitive to wheat price developments. Given a large weight in CPI basket, wheat price movements have often dominated food inflation (**Figure 3.3.1 and 3.3.2**). Wheat price trend is also a major determinant of crop profitability and hence farmers' decision about cultivation of crop. Price movements due to policy measures as well as production shocks and climatic variations therefore transmit across the economy. This box discusses the shift in Pakistan's wheat procurement and minimum support price regime announced in FY25, its implications and some key considerations for effective policy implementation.

Contribution of Wheat in Food Inflation - Urban Figure 3.3.1a



Source: PBS

Contribution of Wheat in Food Inflation - Rural Figure 3.3.1b



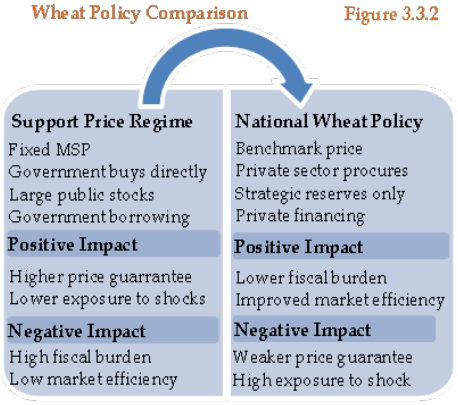
Pre-reform wheat procurement system

Under the earlier framework, the government used to announce an annual Minimum Support Price (MSP) and conducted large-scale wheat procurement through provincial food departments and PASSCO. By acting as a dominant buyer at a pre-announced price, the state effectively set a price floor and shaped market conditions through public stockpiling and release. Over time, this system imposed substantial inefficiencies and fiscal costs. Procurement operations were largely financed through commercial borrowing. Public stockholding was further undermined by storage losses, and quality deterioration, while procurement and release decisions were often influenced by administrative rigidities and political considerations rather than market conditions.[i]

Transition to market-oriented reserve system

The current wheat policy framework reflects a two-stage transition over the last two years. In FY25, the government did not announce MSP and refrained from routine procurement to deregulate the market and reduce fiscal costs. Wheat procurement was left to private traders and flour mills - a period during which price volatility intensified.[81] Under the FY26 policy, the government re-entered the market only to build strategic reserves, rather than open-ended procurement (**Figure 3.3.2**). An indicative benchmark price aligned with international import parity has been introduced in place of a traditional MSP and set at Rs 3,500 per 40 kg for FY26. The benchmark serves as a reference for reserve procurement during the harvest period and does not operate as a legal price floor.[ii]

Wheat Policy Comparison Figure 3.3.2



Source: MNFSR

[81] After a record wheat harvest of 31.4 million metric tons in 2023-24, the crop output fell to 28.9 million metric tons in 2024-25. The drop followed the government's decision not to announce MSP and to stay out of procurement, which weakened farm-gate prices and increased uncertainty for growers. In 2024–25, wheat and wheat flour prices declined by around 33 percent in both urban and rural markets; the associated income losses reduced the financial attractiveness of wheat cultivation and led to a decline in cultivated area, weighing on output.

Execution is delegated to licensed private aggregators, with the government currently undertaking the bidding process. Once selected, aggregators will procure wheat from farmers, arrange financing independently, store wheat in approved facilities under joint custody, meet quality and reporting requirements, and release stocks strictly in accordance with government schedules. Strategic reserve targets include 1.5 million metric tons at the federal level and population-based provincial allocations, including 2.5 million metric tons for Punjab.[iii] The total reserve envelope of around 6.2 million metric tons corresponds to approximately two to three months of national consumption, while routine procurement is expected to be carried out by private market participants from the next crop season.

Implications and risks

Under the new framework, price stabilisation is pursued through strategic reserve operations rather than fixed prices, with implications extending beyond inflation to supply incentives, market behavior, and external exposure. The success of the policy, however, rests on effective management of inflationary risks.

Short-term risks arise primarily from delays in implementation of the new procurement mechanism during the harvest window. The wheat calendar suggest procurement in April–May, and any lag in finalising aggregator selection, financing arrangements, or operational readiness could limit timely buying. [iii] The 2024-25 experience bet illustrates the risk. In the absence of public procurement, harvest-time prices fell to around Rs 2,200 per 40 kg, compressing farm incomes, followed by an increase to nearly Rs 4,000 per 40 kg in September 2025 as supplies tightened. If procurement at scale is not executed on time under the FY26 framework, depressed farmgate prices would again discourage production and reduce marketed surplus, with subsequent upward pressure on consumer prices towards the end of marketing cycle. These short-term risks may be amplified if procurement becomes concentrated among a limited number of large aggregators[82], potentially weakening competition at the farmgate and increasing vulnerability of small growers to intermediary margins.[83] The policy therefore hinges on timely execution to preserve price continuity between harvest and lean months.

Over the medium term, wheat prices are expected to fluctuate within a band defined by import and export prices, improving price discovery and reducing policy-induced discontinuities. However, a closer alignment with international prices increases exposure to exchange rate movements and global price shocks, placing increased importance on credible reserve management and timely releases to anchor inflation expectations.

Thus, effective governance and execution capacity is central to the success of the new framework. The state's role has shifted from direct procurement to contract management and market oversight, requiring skills in auditing, monitoring, and enforcement. Digital traceability of procurement, payments, and stocks, supported by independent verification, is central to preserving credibility and limiting scope for collusion or discretionary intervention.

**The contribution of Syed Hamza Ali is acknowledged in writing this box*

[82] Firm-level allocations are capped between 12,500 MT (minimum) and 500,000 MT (maximum). Source: Prequalification document for licensing of private companies for the procurement, storage, and handling of wheat to maintain national wheat strategic reserves (2025), MNFSR.

[83] Private firms are required to demonstrate availability of covered warehouses or silos (owned or leased) with a minimum storage capacity of 10,000 MT, suitable for food-grade bulk wheat storage. Source: Prequalification document for licensing of private companies for the procurement, storage, and handling of wheat to maintain national wheat strategic reserves (2025), MNFSR.

References:
i) Institute of Strategic Studies Islamabad 2025
ii) Prequalification document for licensing of private companies for the procurement, storage, and handling of wheat to maintain national wheat strategic reserves (2025). Source: MNFSR
iii) Directorate General of Food, Punjab

4

Fiscal Policy and Public Debt

Fiscal consolidation remained on track. Fiscal balance recorded a surplus during H1-FY26, first time in nearly three decades, while the primary surplus remained at last year's level. This improved fiscal performance largely owes to a notable decline in mark-up payments and substantial SBP profit, which more than compensated for a slight weakening in total revenue. The fiscal consolidation significantly slowed the growth in public debt, with moderation in both domestic and external debt accumulation. In addition to fiscal surplus, strengthening the overall public debt profile, higher remittances and the ongoing build-up of foreign exchange reserves strengthened the country's debt servicing capacity and solvency indicators. Nonetheless, liquidity indicators presented a mixed picture, due to an increase in short-term external debt in the period under review.

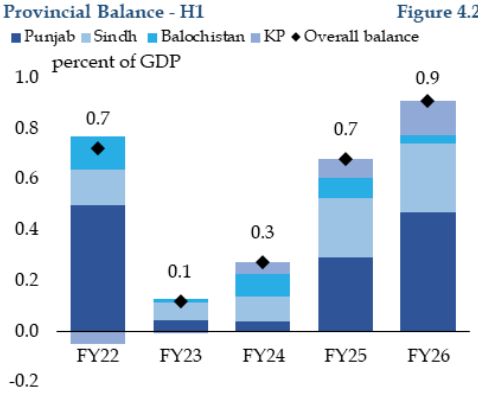
4 Fiscal Policy and Public Debt

4.1 Fiscal Trends and Policy Review

Fiscal consolidation continued in H1-FY26, with a fiscal surplus, first time since H1-FY02[1] **(Figure 4.1)**. This improvement was driven primarily by a sharp decrease in expenditure, led by substantial reduction in markup payments. This decline in expenditure more than offset the fall in total revenues, as percent of GDP. The primary balance, on the other hand, remained broadly unchanged from last year **(Figure 4.1)**, as the gain in revenue was matched by an increase in non-interest expenditure.[2] Importantly, the contribution of provincial surplus in the overall balance increased compared to last year, further contributing to an improvement in the fiscal balance **(Figure 4.2 and Table 4.1)**.

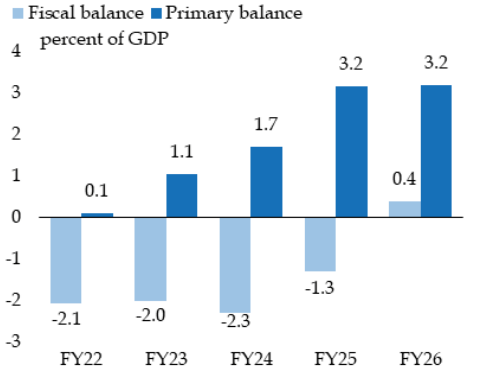
The slight deterioration in total revenue was due to a decline in both tax and non-tax revenue. Tax revenue underperformed relative to targets, despite the additional revenue mobilisation measures announced in the FY26 budget and momentum in economic activity. Non-tax revenue also declined, mainly due to lower SBP profit, though still substantial, while higher PDL collections provided some support to revenues. Importantly, even if SBP profit is excluded, fiscal consolidation remained on track, as both fiscal and primary balances showed an improvement relative to last year (**Figure 4.3**).

Provincial Balance - H1 — Figure 4.2



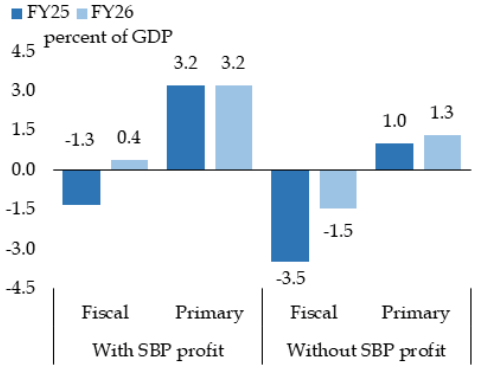
Source: MoF

Fiscal Indicators - H1 — Figure 4.1



Source: MoF

Fiscal and Primary Balances - H1 — Figure 4.3



Source: MoF

[1] The first half-year surplus since FY02, when the MoF started publishing quarterly fiscal operations data.
[2] A large statistical discrepancy was one of the driving factors for the primary surplus in H1-FY26.

Consolidated Fiscal Indicators **Table 4.1**

	billion Rupees				Percent of GDP			
	FY25	FY26			FY25	FY26		
	H1	Q1	Q2	H1	H1	Q1	Q2	H1
Total revenue	**9,764**	**6,200**	**4,484**	**10,684**	**8.6**	**4.8**	**3.5**	**8.2**
Tax revenues	6,067	3,153	3,576	6,729	5.3	2.4	2.8	5.2
FBR taxes	5,625	2,884	3,276	6,161	4.9	2.2	2.5	4.8
Non-tax revenue	3,696	3,046	908	3,954	3.2	2.4	0.7	3.1
SBP profit	2,500	2,428	-	2,428	2.2	1.9	0.0	1.9
PDL collection*	549	372	451	823	0.5	0.3	0.3	0.6
Total expenditure	**11,302**	**4,080**	**6,061**	**10,142**	**9.9**	**3.1**	**4.7**	**7.8**
Current expenditure	10,118	4,047	5,544	9,591	8.9	3.1	4.3	7.4
Mark-up payments	5,142	1,378	2,186	3,564	4.5	1.1	1.7	2.8
Subsidies	237	120	343	463	0.2	0.1	0.3	0.4
Grants	585	319	495	814	0.5	0.2	0.4	0.6
Development expenditure & net lending	744	295	669	964	0.7	0.2	0.5	0.7
PSDP	772	441	665	1,106	0.7	0.3	0.5	0.9
Federal	133	41	15	156	0.1	0.0	0.1	0.1
Provincial	639	400	550	950	0.6	0.3	0.4	0.7
Statistical discrepancy	440	-262	-151	-413	0.4	-0.2	-0.1	-0.3
Fiscal balance	**-1,538**	**2,119**	**-1,578**	**542**	**-1.3**	**1.6**	**-1.2**	**0.4**
Primary balance	**3,604**	**3,497**	**608**	**4,106**	**3.2**	**2.7**	**0.5**	**3.2**
Revenue balance	**-354**	**2,153**	**-1060**	**1,092**	**-0.3**	**1.7**	**-0.8**	**0.8**
Financing (net)	**1,538**	**-2,119**	**1,578**	**-542**	**1.3**	**-1.6**	**1.2**	**-0.4**
External	-79	-39	73	34	-0.1	0.0	0.1	0.0
Domestic	1,617	-2,081	1,505	-576	1.4	-1.6	1.2	-0.4
Memorandum items:					-	-	-	-
Provincial balance	776	781	398	1,179	0.7	0.6	0.3	0.9
Non-interest expenditure^	5,720	2,964	4,027	6,991	5.0	2.3	3.1	5.4
GDP#	113,935	129,567	129,567	129,567	-	-	-	-

* On petrol/diesel; ^total expenditure minus mark-up payments & statistical discrepancy; #budget estimate for FY26, and revised estimate for FY25

Source: MoF

The fall in total expenditure was due to a sharp decrease in interest payments, amid falling interest rates and reprofiling of debt. Lower mark-up payments created space for non-interest expenditure, such as Public Sector Development Program (PSDP), subsidies and grants. Higher non-interest expenditure was in part motivated by flood relief activities.[3] Moreover, the increase in subsidies reflects the government's efforts to contain the accumulation of power sector circular debt.

In the backdrop of continued fiscal consolidation, it is imperative to highlight the importance of such efforts for containing public debt accumulation and reducing debt servicing. This, in turn, has created fiscal space for social and development spending to support growth. While non-tax revenue has been instrumental in keeping the fiscal deficit at manageable levels during the last two years, sustaining it over the medium term requires a continued increase in tax

[3] Current expenditures in Q1 were driven by flood-related rescue and relief activities for provincial governments.
Source: MoF

Tax Revenue - H1 **Table 4.2**

amount in billion Rupees; growth in percent

	Amount		Growth		Percent of GDP	
	FY25	FY26	FY25	FY26	FY25	FY26
Direct	2,782	3,030	29.4	8.9	2.4	2.3
Indirect	2,843	3,131	22.5	10.1	2.5	2.4
Sales	1,898	2,087	25.3	10.0	1.7	1.6
Customs	599	643	10.7	7.4	0.5	0.5
FED	347	401	31	15.6	0.3	0.3

Source: FBR

revenue. Thus, reforms must start with broadening the tax base, along with efforts to enhance administration and governance.

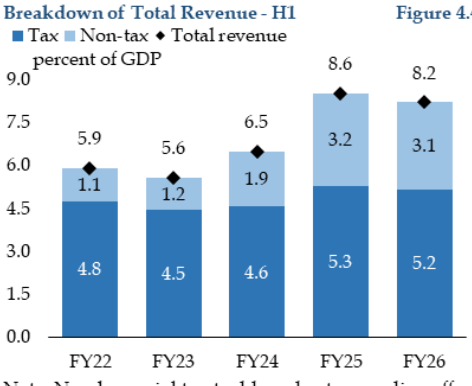
4.2 Revenue

After increasing for the past two consecutive years, total revenue collection declined in H1-FY26 to 8.2 percent of GDP from 8.6 percent last year. This was due to reduction in both tax and non-tax revenue **(Figure 4.4)**.

Tax Revenue

Total tax collection decreased by 0.1 percent of GDP in H1-FY26, primarily due to lower federal taxes, while provincial taxes slightly increased, helping to cushion the decline in total tax collection.

Breakdown of Total Revenue - H1 **Figure 4.4**



Note: Numbers might not add up due to rounding off

Source: MoF

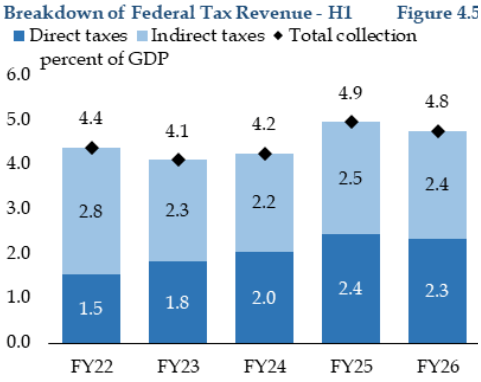
Federal Taxes

Federal tax collection declined to 4.8 percent of GDP in H1-FY26, compared to 4.9 percent of GDP in the corresponding period of last year **(Figure 4.5)**. This decline was broad-based, with all major taxes registering a deceleration in growth (**Table 4.2**). As a result, federal taxes fell short of the target set by the Federal Board of Revenue (FBR), despite robust growth in imports and improvement in economic activity **(Figure 4.6)**.

Direct Taxes

Direct tax collection decline by 0.1 percentage point to 2.3 percent of GDP in H1-FY26. The decline was primarily due to reduction in withholding tax (WHT) collection, while collection on demand and voluntary payments remained almost unchanged in terms of GDP. This can be attributed to lower interest rates, a decline in exports, and negative quarterly tariff adjustments (QTA) and fuel charge

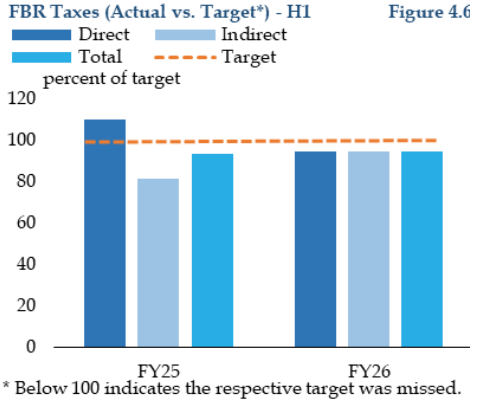
Breakdown of Federal Tax Revenue - H1 **Figure 4.5**



Note: Numbers might not add up due to rounding off

Source: FBR

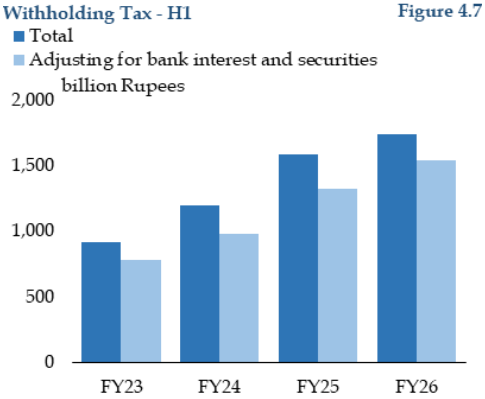
FBR Taxes (Actual vs. Target*) - H1 **Figure 4.6**



* Below 100 indicates the respective target was missed.

Source: FBR

Withholding Tax - H1 **Figure 4.7**



Source: FBR

adjustments (FCA) on electricity bills that led to lower WHT collection.[4,5,6]

In addition to economic factors, several budgetary measures such as lower advance tax on purchase of immovable property, reintroduction of a tax rebate to teachers, and exemptions on cinema operations and on monetary rewards to sportspersons also contributed to a decline in WHT collection.

Nonetheless, the new budgetary measures helped to partially compensate for the decline in WHT due to above-mentioned factors. These measures included higher WHT rates on sellers of immovable property, cash withdrawals,[7] profit on debt, securities disposal and dividends from mutual funds.

Moreover, the government also removed exemptions on digital transactions on e-commerce platforms and pensions,[8] adding them into the tax net. These, together with better enforcement and tax dispute resolution from the tax administration, supported direct tax collection **(Figure 4.7)**.[9]

Indirect Taxes

Indirect tax collection also recorded a slight decline of 0.1 percentage points in H1-FY26, primarily led by lower sales tax collection. While FED and customs collections remained broadly unchanged in

[4] Exports in rupee terms declined by 9.0 percent in H1-FY26 compared to growth of 11 percent last year. Source: PBS

[5] Lower interest rates (price effect) offset the impact of rebound in demand for interest-bearing accounts (volume effect) in H1-FY26, leading to lower collections under 'Bank interest and securities'. Source: Financial Soundness Indicators, SBP

[6] Growth in electricity generation, used as a proxy for electricity consumption, increased only slightly at an average of 1.3 percent in H1-FY26. This indicates that lower WHT collection came on the back of lower electricity charges (price effect). Source: NEPRA

[7] WHT on transactions such as cash withdrawals reflects higher reliance on withholding taxes, which may constrain the transition towards a broad-based tax system.

[8] Pension above Rs 10 million is now subject to a final tax of 5 percent. Source: Budget documents, MoF, and Several issues.

[9] Source: IMF-Pakistan Second Review Under Extended Fund Facility. December 2025

terms of GDP, sales tax collection weakened mainly due to lower receipts from electrical energy following the downward revision in electricity tariffs.

Despite this slight moderation, the momentum in indirect tax collection continued to be supported by policy-driven broadening of tax base. Key steps included further withdrawal of sales tax exemptions on the import and supply of solar panels, the local supply of imported iron and steel scrap, and FED exemption on the allotment and transfer of immovable property. Moreover, the scope of sales tax was expanded to several imported items.[10] These tax rationalisation measures are a step in the right direction, as they would help strengthen the country's tax revenue capacity.

Provincial Taxes

Provincial tax revenue remained unchanged at 0.4 percent of GDP in H1-FY26; stagnating at this level for the past six years. Despite this stagnation in terms of GDP, provincial taxes continue to increase in absolute terms. This has been contributed by both direct and indirect taxes, led by property taxes and sales tax on services, respectively **(Table 4.3)**.

Non-tax Revenue

Non-tax revenues edged down to 3.1 percent of GDP in H1-FY26 compared to 3.2 percent last year. This decline was primarily due to slightly lower SBP profit amid falling interest rates. In contrast, PDL collection maintained an upward trend and reached 0.6 percent of GDP in H1-FY26, which partially offset the decline in SBP profit **(Figure 4.8)**. This was supported by both higher PDL rates (price effect),[11] and POL sales (volume effect).[12]

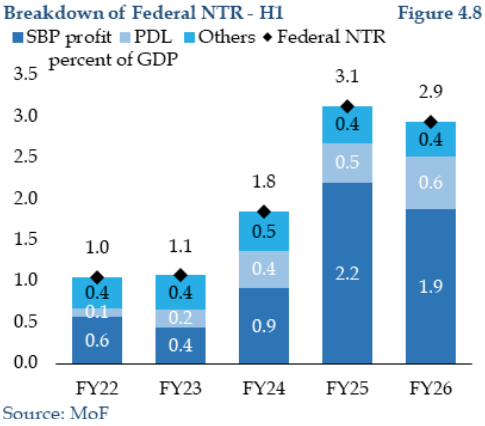
4.3 Expenditure[13]

Total expenditure fell significantly compared to the same period last year (**Figure 4.9**). This drop was primarily due to a steep fall in mark-up payments, which created fiscal space for increased development spending and subsidies (**Figure 4.10**).

Interest Expenditure

In the backdrop of the decline in the policy

Breakdown of Federal NTR - H1 Figure 4.8



Source: MoF

[10] These include imported pet food, chocolates, coffee and cereal bars that are sold in retail packing.

[11] PDL on HSD was initially increased from Rs 74.5 to Rs 77.0 on 1st August 2025 and then subsequently reduced to Rs 75.4 on 16th Nov 2025 and has remained unchanged since then. PDL rate on petrol increased from Rs 78.0 to Rs 79.6 on October 2025. Source: PSO and OGRA.

[12] Albeit decelerated, sales of HSD and petrol increased by 3.5 percent and 2.5 percent, respectively.

[13] This section excludes statistical discrepancy, consistent with previous reports. Due to the large discrepancy reported for H1-FY26, the trends in non-interest spending may vary when included in total expenditure.

Provincial Fiscal Accounts - H1 **Table 4.3**
billion Rupees; growth in percent

	Amount		Growth		Percent of GDP	
	FY25	FY26	FY25	FY26	FY25	FY26
Total revenue	**4,140**	**4,657**	**34.8**	**12.5**	**3.6**	**3.6**
NFC transfers	3,339	3,616	37.1	8.3	2.9	2.8
Own revenue	585	723	31.8	23.5	0.5	0.6
Taxes	443	569	21.2	28.4	0.4	0.4
*GSTS**	*261*	*329*	*13.6*	*25.9*	*0.2*	*0.3*
Non-tax	143	155	80.4	8.4	0.1	0.1
Fed. Transfers	216	318	12.7	47.4	0.2	0.2
Loans (net)	125	168	8.1	35.2	0.1	0.1
Grants	91	149	19.7	64.0	0.1	0.1
Total expenditure	**3,365**	**3,478**	**21**	**3.4**	**3.0**	**2.7**
Current	2,524	2,869	21.7	13.7	2.2	2.2
Development	639	950	17.7	48.7	0.6	0.7
Statistical discrepancy	202	-342	-	-	0.2	-0.3
Overall balance	**775**	**1,179**	**167.9**	**52.1**	**0.7**	**0.9**

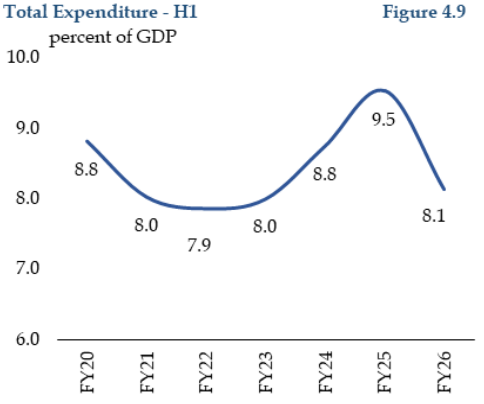
*General sales tax on services
Source: MoF

rate, mark-up payments witnessed a steep decline from 4.5 percent of GDP in H1-FY25 to 2.8 percent of GDP in H1-FY26 (**Figure 4.11).** The reduction in interest payments was mainly led by domestic mark-up payments, which dropped by 33.9 percent. Aside from falling interest rates, this also reflected the government efforts to lengthen the maturity profile of debt, especially by retiring T-bills that carry higher rates (**Chapter 3**).

Non-interest Expenditure

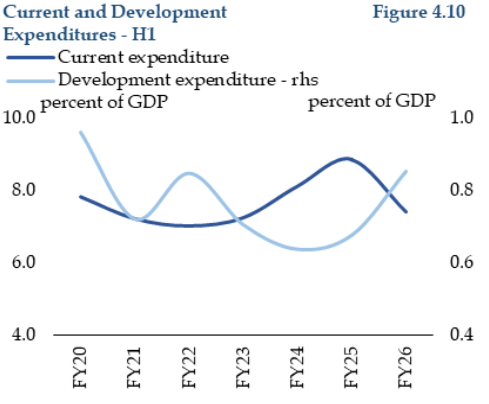
The increase in non-interest expenditure was mainly due to higher subsidies and development spending (**Figures 4.12 & 4.13)**. The growth in both subsidies and development expenditure was higher when compared to the average during the last 7 years (FY20 to FY26). In terms of GDP, subsidies and development expenditure each increased by 0.2 percentage points in H1-FY26.

Total Expenditure - H1 **Figure 4.9**



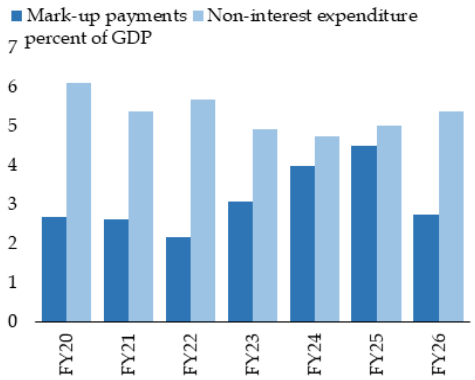
Source: MoF

Current and Development Expenditures - H1 **Figure 4.10**



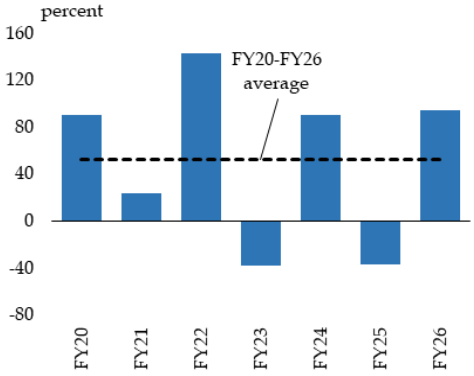
Source: MoF

Interest & Non-Interest Expenditures - H1 Figure 4.11



Source: MoF

Growth in Subsidies - H1 Figure 4.12



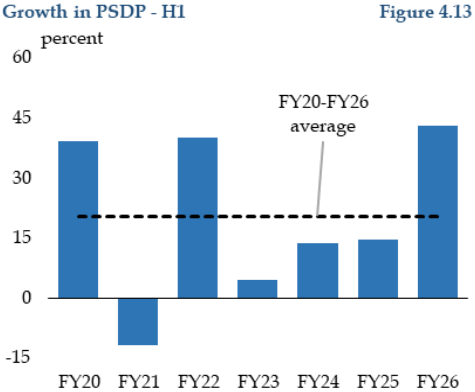
Source: MoF

The increase in development spending was led by a 48.7 percent rise in provincial expenditure (**Figure 4.14)**, while federal development spending grew by 17 percent in H1-FY26. The utilisation of authorized PSDP budgets for H1-FY26 also rose to 59 percent, up from 39 percent last year.[14] The increase in subsidies was mostly on account of energy and power sectors, which accounted for 93 percent of total subsidies. These included subsidies for inter-disco tariff differentials, IPPs, Pakistan Energy Revolving Fund and electricity revenue shortfalls for AJK. A major part of power subsidies was meant to keep net circular debt accumulation at zero.[15] This signals the necessity of power sector reform, amid the push towards renewable energy (**Box 6.5**).

Following subsidies and PSDP, grants also rose sharply in H1-FY26. This largely reflected an increased allocation for the Benazir Income Support Program (BISP), which was up by 41.5 percent compared to last year, with the commitment to increase the benefit size and coverage during FY26.[16]

This increased social and development spending bodes well for sustaining growth momentum, as estimates show that

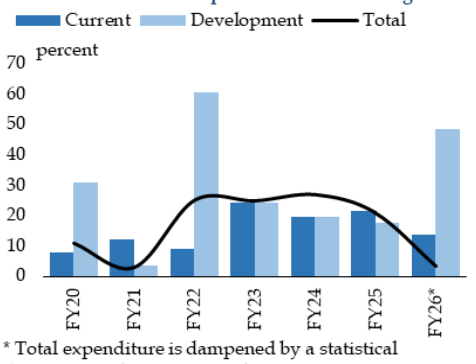
Growth in PSDP - H1 Figure 4.13



Source: MoF

[14] Source: MoPDSI (2025)
[15] Stock clearance subsidies of Rs 400 billion are expected to keep net circular debt accumulation at zero in FY26. Source: IMF (2025)
[16] Kafaalat unconditional cash transfers benefits will be increased from Rs 13,500 to Rs 14,500 and coverage will be expanded to at least 200,000 more families by the end of FY26. Source: IMF (2025)

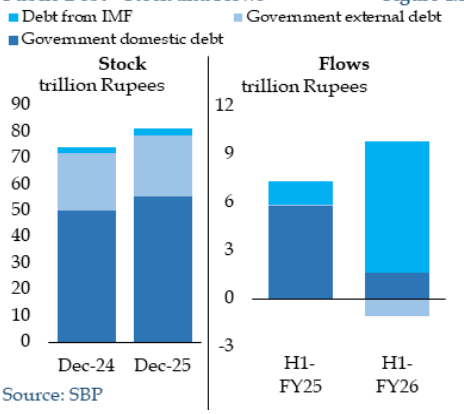
Growth in Provincial Expenditures - H1 **Figure 4.14**



* Total expenditure is dampened by a statistical discrepancy of -0.3 percent of GDP.

Source: MoF

Public Debt - Stock and Flows **Figure 4.15**



Source: SBP

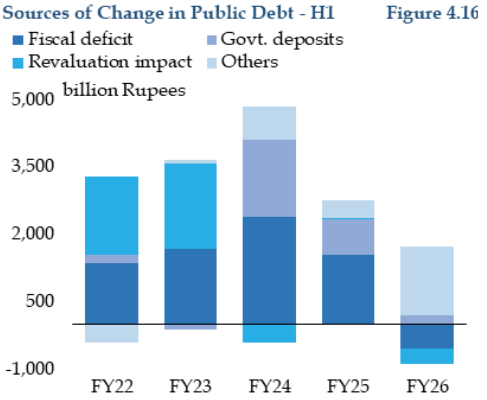
development expenditure has a considerably higher fiscal multiplier than current expenditures (**Box 4.1**).

4.4 Public Debt

Sustained fiscal consolidation and a sharp decline in interest payments significantly slowed the pace of public debt accumulation to 1.1 percent during H1-FY26 from 3.9 percent in the corresponding period of the previous year **(Figure 4.15)**. The gain from PKR appreciation against US dollar and lower accumulation in government deposits, together with retirement of SBP loans, also contributed to slower pace of public debt accumulation **(Figure 4.16)**.[17]

Both domestic and external debt contributed to curtail the pace of public debt accumulation. While increase in domestic debt was contained substantially, external debt saw net retirement during H1-FY26. The latter also reflects the impact of PKR appreciation against US dollar and appreciation of US dollar against other currencies, and government's lower reliance on external financing.[18,19] Moreover, the government continued to rely on financing through medium to long-term instruments, while limiting

Sources of Change in Public Debt - H1 **Figure 4.16**



Source: SBP

[17] Public debt declined by Rs 342.0 billion on account of PKR appreciation against US dollar in H1-FY26.
[18] In terms of PKR, appreciation of US dollar against other currencies also lowered public debt by Rs 18.5 billion during H1-FY26.
[19] As per the Annual Borrowing Plan FY26, deficit financing planned through external sources declined to 1.6 percent of total financing for FY26 significantly lower than 7.8 percent for FY25.

Government Domestic Debt **Table 4.4**

Stocks and flows in billion Rupees; share and growth in percent

	Stocks		Flows		Share		Growth	
	Dec-24	Dec-25	H1-FY25	H1-FY26	H1-FY25	H1-FY26	FY25	FY26
Government Domestic Debt	**49,883.3**	**55,362.9**	**2,723.1**	**891.6**	**100.0**	**100.0**	**5.8**	**1.6**
I. Permanent Debt, *of which*	**3,7863.9**	**43,015.6**	**4,207.7**	**766.5**	**75.9**	**77.7**	**12.5**	**1.8**
GOP Ijara Sukuk	5,709.3	6,552.3	943.1	365.3	11.4	11.8	19.8	5.9
PIBs	31,216.2	34,929.8	3,190.4	-85.1	62.6	63.1	11.4	-0.2
Prize Bonds	394.3	422.7	9.2	15.2	0.8	0.8	2.4	3.7
II. Floating Debt, *of which*	**8,696.0**	**8,744.1**	**-1,551.6**	**-14.8**	**17.4**	**15.8**	**-15.1**	**-0.2**
Market Treasury Bills	8,602.0	8,610.6	-1,565.3	-27.9	17.2	15.6	-15.4	-0.3
III. Unfunded Debt, *of which*	**2,868.7**	**3,156.6**	**69.9**	**135.6**	**5.8**	**5.7**	**2.5**	**4.5**
NSS (Net of Prize Bonds)	2,785.8	3,083.5	78.0	141.1	5.6	5.6	2.9	4.8
IV. Foreign Currency	**373.8**	**384.5**	**0.3**	**4.1**	**0.7**	**0.7**	**0.1**	**1.1**
V. Naya Pakistan Certificates	**81.0**	**62.1**	**-3.1**	**0.1**	**0.2**	**0.1**	**-3.7**	**0.2**

Source: SBP

mobilisation through T-bills. At the same time, with inflation stabilising in the medium-term target range, the share of government borrowing via fixed rate instruments saw a notable increase during H1-FY26. As a result, the overall public debt profile improved in terms of average time to maturity, roll-over risk, interest cost and currency risk.[20]

Moreover, steep decline in interest payments, increase in revenue collection, higher remittances, and continuous build-up in foreign exchange reserves improved debt repayment capacity and solvency indicators. Nonetheless, a mixed picture emerged in liquidity indicators due to increase in short-term external debt in H1-FY26.

Domestic Debt

Domestic debt increased by Rs 891.6 billion during H1-FY26, substantially lower compared to an expansion of Rs 2,723.1 billion in the same period of the last year **(Table 4.4)**. The slowdown in domestic debt accumulation largely owed to fiscal surplus resulting from healthy SBP profit and noteworthy reduction in interest payments. In addition, lower accumulation in government deposits held with the banking system as compared with same period last year, along with Rs 1.6 trillion retirement of SBP loans also contributed to decreasing the pace of domestic debt accumulation during H1-FY26.

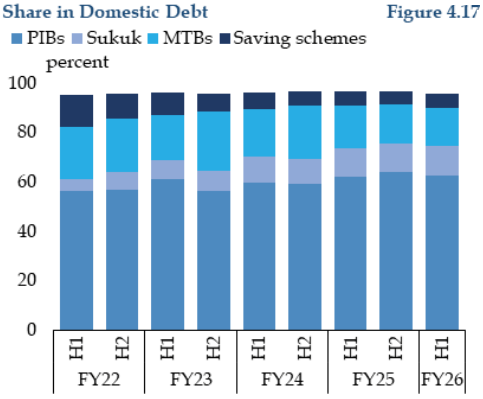
In order to contain roll-over and interest rate risks, the government continued to borrow through long-term fixed-rate securities, while at the same time curtailing mobilisation via T-bills **(Figure 4.17)**.[21] As a result, the share of fixed rate instruments increased to 33.5 percent at the end of H1-FY26, from 27.0 percent at the end of FY25 **(Figure 4.18)**.[22] This helped in improving

[20] Exchange rate stability majorly contributed in reducing currency risk.

[21] The share of long-term securities, mainly Sukuk, increased to 77.7 percent at the end of H1-FY26 from 75.9 percent at the end of the corresponding period last year.

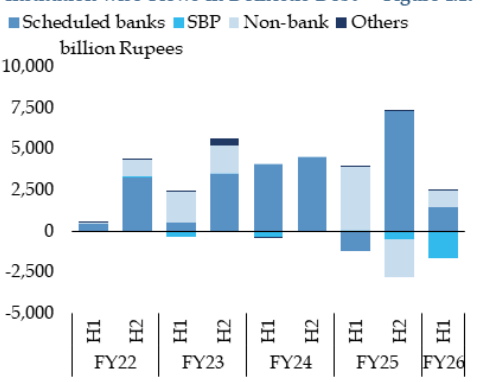
[22] It is pertinent to mention that during high inflation episode, investors tend to invest in short-term or floating-rate instruments to minimise losses due to the expectation of imminent increase in interest rates.

Share in Domestic Debt **Figure 4.17**



Source: SBP

Institution-wise Flows in Domestic Debt **Figure 4.19**

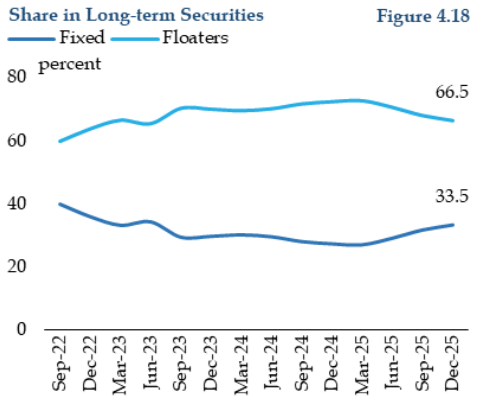


Source: SBP

the domestic debt profile, besides reducing interest cost.

The data on institution-wise holdings shows that the government primarily borrowed from scheduled banks during H1-FY26, which was substantially higher compared to the corresponding period of last year, while it retired SBP debt. In contrast, mobilisation of funds from non-bank sources witnessed a pronounced decline. As a result, the share of scheduled banks' investment in government securities rose to 66.5 percent at the end of H1-FY26, from 56.1 percent in H1-FY25 **(Figure 4.19)**. This can be attributed to the removal of tax on banks linked to their advance-to-deposits ratio (ADR).[23]

Share in Long-term Securities **Figure 4.18**



Sources: MoF; SBP

Furthermore, continuing the last year's trend, National Savings Schemes (NSS) witnessed net inflows during H1-FY26. Particularly, the net inflows in savings certificates and accounts stood at Rs 90.4 and Rs 48.2 billion respectively, compared to Rs 64.5 and 15.4 billion in the same period of the previous year. Behbood Savings Certificates (BSC), Regular Income Certificates (RIC) and Pensioners' Benefit Account (PBA) mainly contributed to net inflows. This largely reflected renewed investors' interest and relatively higher average profit rates on NSS instruments

[23] In the previous year, the banks increased lending to private sector and reduced investment in government securities to avoid ADR-based tax.

compared to the return on government securities and bank deposits.[24]

Domestic Debt Servicing

Interest payments on domestic debt declined to Rs 3.1 trillion during H1-FY26 from Rs 4.9 trillion in the same period last year. The reduction majorly came from lower interest payments against PIBs and T- bills.[25] In addition, interest payments on unfunded debt, mainly driven by Defence Saving Certificates (DSC), also recorded a downtick during the current review period (**Figure 4.20**).

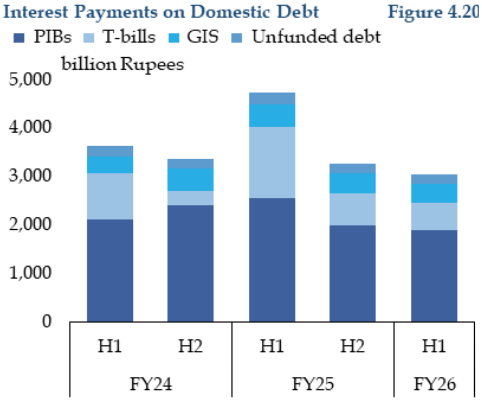
Easing domestic debt servicing is mainly attributed to a significant decrease in interest rates, followed by government's reliance on long-term instruments **(Figure 4.21)**, as per Medium-Term Debt Management Strategy (MTDS) for FY26-28. Consequently, the domestic debt repayment capacity, measured by ratio of domestic interest payments (DIP) to FBR taxes, significantly improved during H1-FY26 **(Figure 4.22)**.

Public External Debt and Liabilities

The stock of public external debt and liabilities (PEDL) stood at US$ 104.9 billion at the end-December 2025, up from US$ 103.7 billion at end-December 2024. The increase mainly stemmed from Public External Debt (PED), which rose by US$ 1.1 billion during H1-FY26 **(Table 4.5)**.

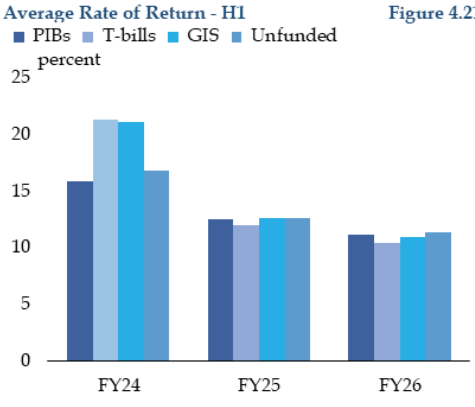
The accumulation in PED was largely due to disbursements under the IMF's EFF, followed by other bilateral and multilateral sources. In addition, investment in Naya Pakistan Certificates (NPC) and short-term commercial loans also witnessed an uptick during H1-FY26.[26] In contrast, repayments of Eurobonds, long-term commercial loans,

Interest Payments on Domestic Debt Figure 4.20



Source: SBP

Average Rate of Return - H1 Figure 4.21



Sources: SBP; CDNS

[24] The average rate of return on NSS instruments remained 11.43 percent during H1-FY26, which is relatively higher than the average interest rate on T-bills, PIBs and Sukuk.

[25] Domestic interest payments declined by 35.4 percent during H1-FY26, mainly contributed by 61.1 and 26.0 percent reduction in interest payments against T-bills and PIBs, respectively.

[26] The increase in short-term multilateral loans reflects disbursements under the oil facility of the Islamic Development Bank, while inflows in NPCs were supported by favourable interest rates amid a decline in the US Fed policy rate.

Public External Debt **Table 4.5**

Stocks and flows in million US$; growth in percent

	Stocks			Flows		Growth	
	Dec-24	Jun-25	Dec-25	H1-FY25	H1-FY26	H1-FY25	H1-FY26
Public external debt (1+2)	**86,621.4**	**91,794.6**	**92,873.1**	**96.3**	**1,078.5**	**0.1**	**1.2**
1. Government external debt	**78,128.6**	**82,526.6**	**82,715.8**	**-18.8**	**189.1**	**0.0**	**0.2**
i) Long-term (>1 year)	**77,016.3**	**81,787.5**	**81,627.6**	**-371.3**	**-159.9**	**-0.5**	**-0.2**
Paris club	5,745.8	6,004.6	5,604.0	-728.6	-400.6	-11.3	-6.7
Multilateral	39,663.7	42,480.1	42,721.3	415.7	241.2	1.1	0.6
Other bilateral	17,908.9	18,038.9	18,704.5	-643.5	665.7	-3.5	3.7
Euro/Sukuk global bonds	6,800.0	6,800.0	6,300.0	0.0	-500.0	0.0	-7.4
Commercial loans/credits	5,774.7	7,156.3	6,834.0	284.4	-322.3	5.2	-4.5
Naya Pakistan Certificates	1,054.8	1,225.1	1,350.1	270.9	125.0	34.6	10.2
ii) Short-term (< 1 year)	**1,112.2**	**739.2**	**1,088.2**	**352.5**	**349.0**	**46.4**	**47.2**
Multilateral	389.6	552.3	796.5	139.6	244.2	55.8	44.2
2. From IMF	**8,492.8**	**9,268.0**	**10,157.3**	**115.1**	**889.3**	**1.4**	**9.6**
3.Foreign exchange liabilities	**11,709.5**	**11,955.3**	**12,079.7**	**-21.6**	**124.3**	**-0.2**	**1.0**
Central bank deposits	3,700.0	3,700.0	3,700.0	0.0	0.0	0.0	0.0
Other liabilities (SWAP)	4,181.0	4,221.5	4,357.8	11.4	136.3	0.3	3.2
Allocation of SDRs	3,827.9	4,033.0	4,019.7	-32.9	-13.2	-0.9	-0.3

Source: SBP

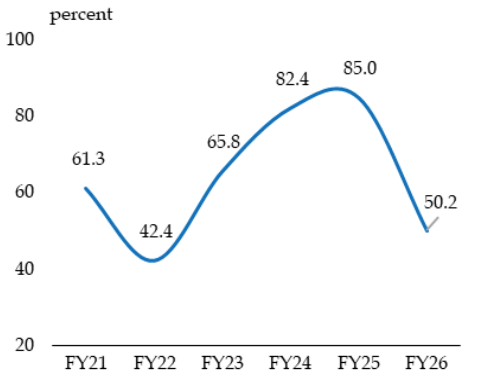
and Paris club loans contained accumulation in PED.

Furthermore, the appreciation of US dollar against other currencies resulting in a US$ 66 million decline, marginally constrained PED growth. The stock of short-term public external debt increased to US$ 1,088 million during H1-FY26. Most of this debt was mobilised from multilateral sources. Despite this increase in short-term borrowing, its share in overall public external debt continues to remain small **(Figure 4.23)**.

External Disbursements

Total external disbursements amounted to US$ 4.3 billion in H1-FY26, higher than US$ 3.6 billion during the corresponding period of FY25. Increase in external financing, points to improvement in the country's risk perception, amidst the ongoing IMF program.[27] Major inflows came from bilateral sources, followed by multilateral creditors and loans under NPC. Among the multilateral inflows, World Bank (WB), the Asian Development Bank (ADB) and the Islamic Development

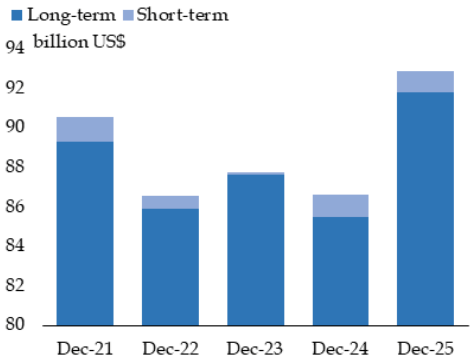
Domestic Debt Repayment Capacity - H1 **Figure 4.22**



Sources: MoF; SBP

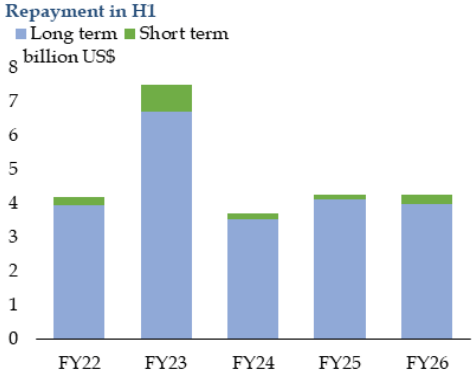
[27] Pakistan's sovereign credit rating improved during the period under review, as reported by Moody's in August 2025.

Public External Debt Breakdown **Figure 4.23**



Source: SBP

External Debt Servicing - Principal Repayment in H1 **Figure 4.24**



Source: SBP

Bank (IsDB) contributed the most **(Table 4.6)**.

Regarding bilateral disbursements, the major inflows were realised from Saudi Arabia and China, followed by Denmark. Like H1-FY25, more than 50 percent of the external disbursements were meant for budgetary support, while the share of project financing was 38.3 percent. In absolute terms, non-project aid in H1-FY26 stood at US$ 2.7 billion, including US$ 1.6 billion budgetary support and US$ 600 million oil facility. Further breakdown of external disbursements highlights that project aid was mainly concentrated in the power sector and flood-related reconstruction activities, while non-project aid was primarily directed towards the petroleum sector **(Table 4.7)**.

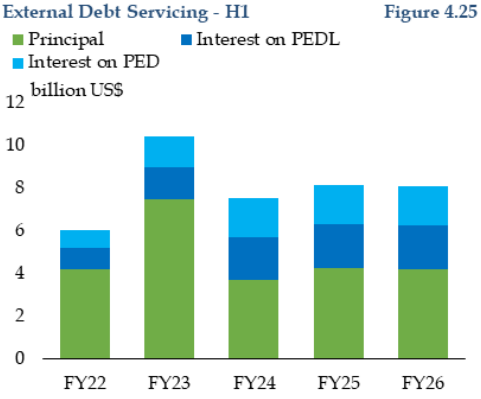
External Disbursements **Table 4.6**

million US$

Sources	Grants		Loans		Total	
	H1-FY25	H1-FY26	H1-FY25	H1-FY26	H1-FY25	H1-FY26
Multilateral	**28.6**	**29.0**	**1,835.9**	**1,938.3**	**1,864.5**	**1,967.3**
ADB	3.9	2.7	905.1	546.6	909.0	549.2
AIIB	-	-	51.0	57.2	51.0	57.2
IBRD	14.7	15.4	125.5	206.3	140.3	221.7
IDA	2.8	8.2	349.1	572.6	351.9	580.8
IsDB (Short-term)	-	-	239.6	483.8	239.6	483.8
Bilateral	**71.2**	**33.6**	**1,668.2**	**2,297.0**	**1,739.4**	**2,330.6**
China (Guaranteed)	-	-	-	255.6	-	255.6
China	2.4	10.6	96.8	61.7	99.2	72.3
Denmark	-	-	-	71.2	-	71.2
France	0.0	0.5	100.5	15.1	100.5	15.6
Japan	9.9	11.9	0.0	-	9.9	11.9
Korea	4.6	-	6.2	9.5	10.8	9.5
Saudi Arabia	-	3.3	8.7	5.4	8.7	8.7
Saudi Fund for	-	-	-	600.0	-	600.0
USA	39.4	0.4	-	-	39.4	0.4
Foreign banks	-	1.9	500.0	54.4	500.0	56.3
Naya Pakistan Certificate	-	-	927.6	1202.1	927.6	1,202.1
Total	**99.8**	**62.5**	**3,504.1**	**4,235.4**	**3,603.8**	**4,297.9**

Source: EAD

External Debt Servicing - H1 **Figure 4.25**



Source: SBP

External Debt Servicing

External debt servicing (including principal and interest) marginally decreased to US$ 6.2 billion compared to US$ 6.3 billion in the same period last year (**Figure 4.24)**. Major repayments were made to Eurobond investors, IMF, and bilateral and multilateral sources. In terms of composition, a major part of the external debt servicing consisted of long-term principal repayments to multilaterals, IMF, and NPC holders. Likewise, interest payments were mostly to multilaterals, IMF and bilateral sources (**Figure 4.25)**.

Major Disbursement Sources **Table 4.7**

million US$

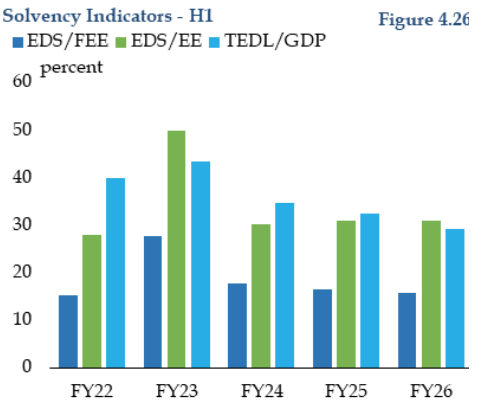
Sources	Type of Aid	Name of Loan/Grants	Amount
China	Loan	Chashma Nuclear Power Plant-5 (C-5)	255.6
ADB	Loan	Sindh Emergency House Reconstruction Project	73.2
IDA	Loan	Sindh Flood House Reconstruction	160.6
IDB	Loan	ITFC Short-term financing for Importing oil & LNG	483.8
IMF	Loan	-	209.5
Saudi Arabia	Loan	Import of petroleum and crude oil	600

Source: EAD

External Debt Sustainability

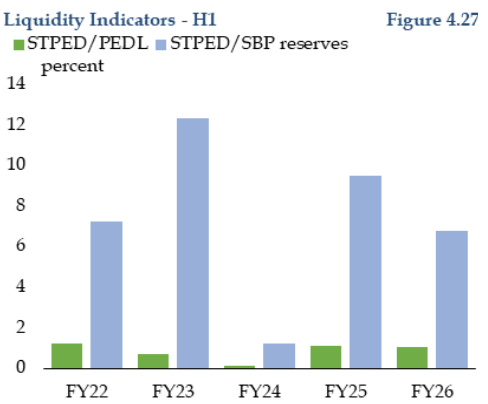
In H1-FY26, external debt sustainability improved, supported by higher remittance inflows, and a buildup in SBP's foreign exchange reserves. Improved solvency indicators based on External Debt Servicing (EDS) to Foreign Exchange Earning (FEE) and EDS to Exports Earning (EE) reflect country's enhanced capacity to repay its external obligations. Likewise, Total External Debt and Liabilities (TEDL)

Solvency Indicators - H1 **Figure 4.26**



Source: SBP

Liquidity Indicators - H1 **Figure 4.27**



Source: SBP

to Gross Domestic Product (GDP) in H1-FY26 fell to its lowest level in the past five years, underscoring the improvement in external debt sustainability **(Figure 4.26)**. Unlike solvency indicators, liquidity indicators posted a mixed picture in H1-FY26. While short-term public external debt (STPED) to public external debt and liabilities (PEDL) slightly deteriorated, STPED to SBP reserves improved significantly due to increase in SBP reserves **(Figure 4.27)**.

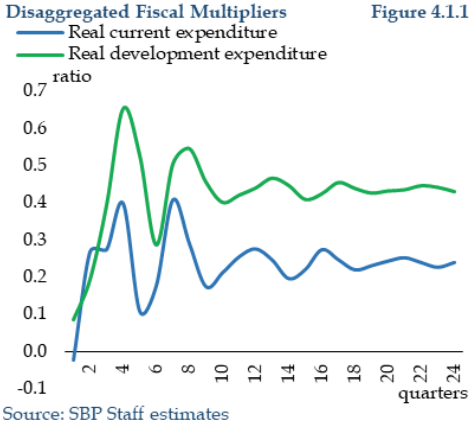
Box 4.1: Efficiency of Fiscal Spending in Pakistan

Research shows that a decrease of pre-committed spending in current expenditure and an increase in discretionary development spending raises allocative efficiency of expenditure in an economy. Estimates show that the impact of increased allocative efficiency is quite significant for Emerging Market and Developing Economies (EMDEs).

Switching 1 percent of GDP from government consumption to infrastructure investment is estimated to increase output by 3.5 percent over the long-term.[28] Similarly, expenditure redirected towards education yields a 6 percent increase in output in the long run (IMF, 2025a). In this context, recent changes in Pakistan's expenditure mix, with reduced interest expenses and increased development spending, if sustained, bodes well for economic growth in the coming years.

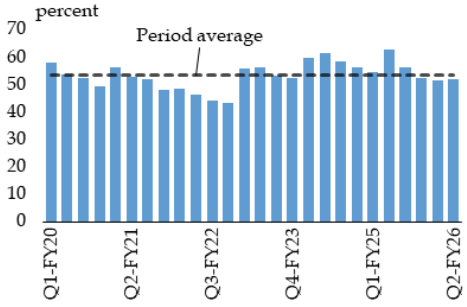
In the case of Pakistan, SBP staff estimates show that the growth dividends of development expenditure outstrip that of current expenditure by an average of 0.19 over a period of 24-quarters and a maximum of 0.42 (in the 5th quarter) for their respective fiscal multipliers (**Figure 4.1.1**).[29] A reallocation of current into development expenditure also signals a decrease in budget rigidities and a greater ability of the government to channelise discretionary spending (**Figure 4.1.2**). Higher rigidity is associated with

Disaggregated Fiscal Multipliers — Figure 4.1.1



Source: SBP Staff estimates

Budget Rigidity* — Figure 4.1.2



* Defined as a ratio of mark-up payments, defence, pension and running of civil government to total expenditure.

Source: SBP Staff calculations based on MoF

[28] The study analyses the long-term gain in infrastructure and human capital investment from 2026 to 2050.
[29] Fiscal multipliers represent the growth dividend of expenditure, a multiplier of 1 means that spending generates a proportional increase in real GDP. Values above 1 indicate a more than proportionate increase, and vice versa. Staff estimates utilise the impulse responses of a Vector Autoregression (VAR) model to find the impact of an expenditure shock on real GDP.

inefficient levels of public expenditure (Olaberria & Herrera, 2020), indicating lower levels of allocative efficiency. In this context, the current trend of expenditure is promising, and continued consolidation bodes well for reducing budget rigidities and increasing the allocative efficiency of spending for greater growth.

However, in the long-term, increasing allocative efficiency alone is not enough. It must be accompanied by enhanced technical efficiency of spending i.e. maximising output for a given level of resources. This may boost fiscal multipliers, lead to improved development outcomes and better service delivery. A primary source for ameliorating technical efficiency is institution building, which is found to have a positive relationship with technical efficiency (Herrera et al., 2025). In this regard, reforms to enhance transparency and improve governance are key. Examples of such reforms are requirements for budget publications and frameworks, contract disclosures and independent audits and oversight.

Decentralisation of spending and spending reviews through local governments are also associated with improved expenditure efficiency, with notable increases in savings and program effectiveness (IMF, 2025a). Furthermore, leveraging digitisation and government technology (GovTech) for public finance management can further boost transparency, if complemented with an enabling environment, e.g. digitally literate workforce, data-driven platforms, etc. (Amaglobeli et al., 2023).

Recent examples of such reforms in Pakistan include a project selection methodology scorecard to improve public investment quality, and digitisation of public procurement for federal and provincial agencies (IMF, 2025b). These steps can serve to increase efficiency by improving the selection of high impact projects, along with increasing transparency and reducing corruption. Deepening measures in this direction are key to enhancing Pakistan's spending efficiency.

Spending efficiency is essential not only to boost output gains but also to determine if such gains will even occur. Research shows that output responds minimally in countries with low investment efficiency (IMF, 2025a). Therefore, fiscal consolidation is a key starting point to increasing allocative efficiency, however, to increase growth dividends and fiscal multipliers in Pakistan, expenditure must be technically efficient with an emphasis on service delivery, transparency and cost effectiveness.

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v. IMF (2025b). Pakistan: Second Review Under the Extended Fund Facility, *IMF Country Report 25/332*, International Monetary Fund, Washington D.C.

**The contribution of Ali Ahmed Shah is acknowledged in writing this box.*

5

Balance of Payments

Pakistan's external buffers continued to strengthen amid contained current account deficit. In H1-FY26, the current account balance turned into a deficit primarily due to widening of trade deficit, as exports declined and imports rose sharply in line with momentum in economic activity. Nonetheless, robust workers' remittances partially offset the combined deficit in trade in goods and services, and primary income accounts. Meanwhile, financial account recorded higher net inflows led by higher official disbursements, while private capital flows somewhat moderated. SBP's FX market purchases and net official loan disbursements supported upward trajectory in foreign exchange reserves. As a result, import coverage of FX reserves further improved and exchange rate remained broadly stable.

5 Balance of Payments

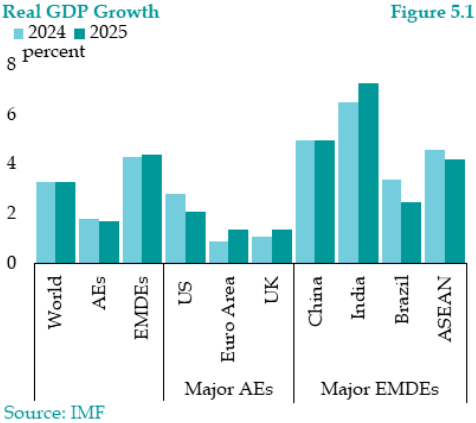
5.1 Global Economic Developments

Global economy remained resilient to trade-related uncertainty and geopolitical tensions in 2025. The global GDP growth is estimated to remain steady at 3.3 percent in 2025, same as in 2024 (**Figure 5.1**). The global trade volumes also picked up towards the end of 2025 as trade policy uncertainty (TPU) eased. However, inflation in both advanced economies (AEs) and emerging markets and developing economies (EMDEs) remained persistent, leading to cautious monetary policy stances by central banks.[1] Despite these, global financial conditions largely stayed benign, which helped global capital flows and cross border investments.[2]

The resilience in global economic activity was underpinned by increased consumer spending, surge in tech-related investments,[3] and spillovers from trade and production front-loading in anticipation of increase US tariffs. Moreover, trade negotiations, calibrated policy settings, and improved policy fundamentals[4] helped deliver a better-than-expected growth outcome. Nonetheless, growth across AEs and EMDEs was uneven. The growth in AEs decelerated due to slower growth in US, whereas growth in EMDEs edged higher led by India.

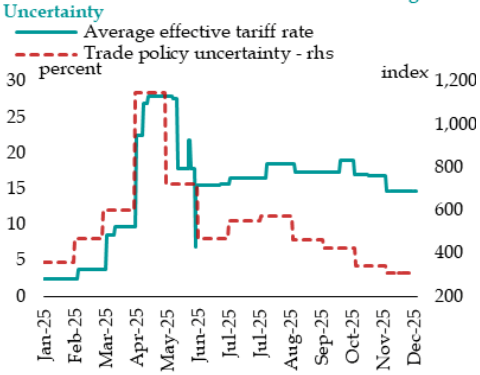
The recovery in global trade was supported by a combination of ease in US tariffs, reduced TPU, relocation of global supply chains, and greater adaptability by

Real GDP Growth — Figure 5.1



Source: IMF

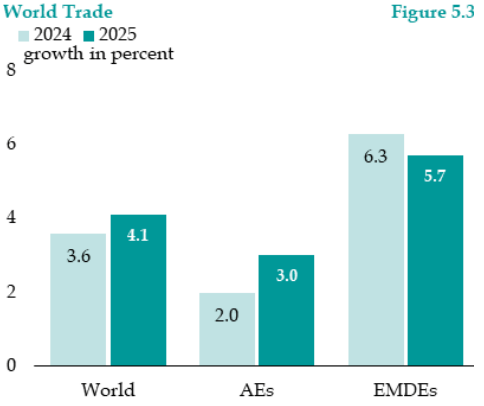
US Effective Tariff Rate and Trade Policy Uncertainty — Figure 5.2



Sources: The Budget Lab; World Uncertainty Index

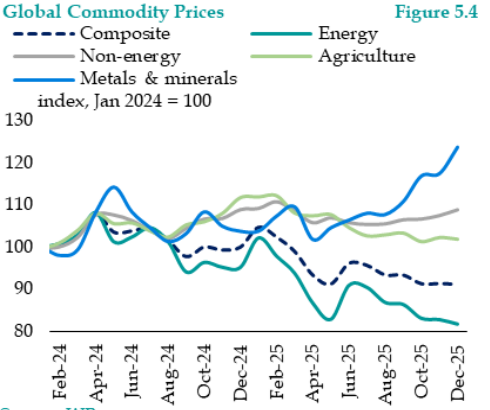
[1] In 185 decisions by 54 central banks during H1-FY26, there were 66 rate cuts, 117 pauses, and 2 rate hikes.
[2] Global FDI flows increased by 14 percent reaching US$ 1.6 trillion in 2025, primarily driven by EU, while developing economies witnessed disinvestment. *Source: UNCTAD, Global Investment Trend Monitor, No, 50, January 2026.*
[3] ICT or tech-related investment in AEs, especially in the USA, has notably increased in 2025. In US alone, real investment in the construction of data centers increased by 21 percent (annualised) in the second half of 2025. *Source: OECD Economic Outlook, December 2025 Volume 2025/2, No. 118.*
[4] EMDEs withstood recent global shocks better than in the past due to enhanced policy credibility and central bank independence, improved fiscal discipline, and deepening local currency markets. *Source: IMF, World Economic Outlook, October 2025, Chapter 2, Emerging Market Resilience: Good Luck or Good Policies*?

World Trade Figure 5.3



Source: IMF

Global Commodity Prices Figure 5.4



Source: WB

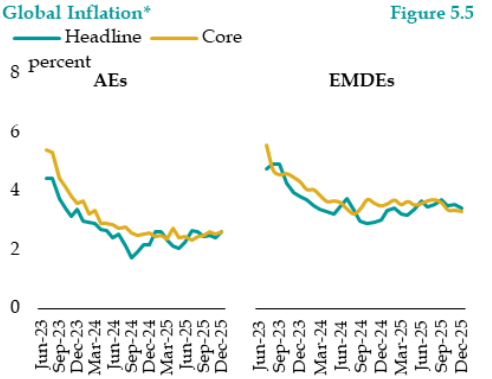
businesses (**Figure 5.2**).[5] Moreover, increased tech-related trade flows, largely driven by AEs, supported overall global trade growth (**Figure 5.3**).

Meanwhile, global commodity prices softened significantly, led by energy and agriculture commodity prices – largely reflecting increased global supply (**Figure 5.4**).[6,7] On the other hand, the prices of metals & minerals, and precious metals rose sharply.[8] Specifically, the prices of gold and silver surged to an all-time high due to increased demand and rising geopolitical uncertainty.

The persistence in global inflation during 2025 was due to sticky services inflation, labour wage pressures and spillovers from higher tariffs (**Figure 5.5**). Nevertheless, divergent inflation paths across AEs and EMDEs compared to their respective targets led to diverse monetary policy stances. While central banks in AEs reduced, those in EMDEs either increased or maintained the policy rate. The resulting ease in financial conditions (**Figure 5.6**) supported financial flows to EMDEs.[9]

These global developments had mixed implications for Pakistan's economy.

Global Inflation* Figure 5.5



* Median inflation of 30 AEs and 44 EMDEs

Source: IMF

[5] National Bureau of Economic Research, Relocation of Global Supply Chains, The Digest, February 2026.
[6] Global oil inventories climbed to 8.2 billion barrels in 2025, the highest level since 2021. *Source: IEA, The Middle East and Global Energy Markets, accessed on March 11, 2026*
[7] Increased harvest in northern Hemisphere and ample beverages supply, besides global headwinds weighed on market prices of agriculture commodities. Source: World Bank, Food Security Update, December 2025
[8] As per World Bank, metals & minerals include aluminium, copper, iron ore, lead, nickel, tin, and zinc. While precious metals is a separate group that includes gold, silver, and platinum
[9] World Bank's Global Economic Prospects, January 2026.

Financial Conditions Figure 5.6

Source: Bloomberg

Lower global commodity prices helped contain the import bill, and steady global economic activity supported higher workers' remittance. Moreover, lower US tariffs on imports from Pakistan relative to some of the regional competitors supported key export segments. In contrast, the decline in global agriculture commodity prices, especially rice, together with intensified competition, increased pressures on Pakistan's exports. Meanwhile, the closure of western border further aggravated the situation.

5.2 Pakistan's Balance of Payments

Pakistan's balance of payments position strengthened further in H1-FY26. This was despite current account balance (CAB) turning into a deficit of US$ 1.4 billion during H1-FY26, from a surplus of US$ 0.9 billion during the same period last year **(Table 5.1)**. However, the underlying CAB i.e. excluding interest payments, still posted a surplus. The surplus in the non-interest current account balance and private inflows, though moderate, enabled SBP to make purchases to build FX reserves. Moreover, SBP further reduced the swap/forward position. The strengthening of external buffers helped maintain stability in foreign exchange market.

5.3 Current Account Balance

The deterioration in CAB was primarily driven by widening of trade in goods and services deficit. The deficit in primary income account slightly narrowed, mainly because of lower interest payments while repatriation of profits and dividends increased. Moreover, the secondary income account witnessed higher surplus, largely reflecting robust workers' remittances, that helped to finance major part of the combined deficit in trade in goods and services, and primary income accounts.

Trade (in Goods) Balance[10]

The trade deficit increased to US$ 19.3 billion in H1-FY26, up by about US$ 5 billion compared to H1-FY25. The widening in trade deficit was largely due to increase in imports, while exports also declined (**Figure 5.7**). Import growth was led by volumes, especially industrial raw materials, intermediate goods, and capital goods, reflecting strong industrial activity. Moreover, tariff rationalisation, also contributed to the increase in imports. On the other hand, decline in exports was due to both lower prices and volumes contributed to decline in exports **(Table 5.2)**. Although unit prices of both imports

[10] This section is based on customs data reported by the Pakistan Bureau of Statistics (PBS). The PBS trade data would not tally with the payments record data. For details on difference between these two data series, see Annexure of this report on Data Explanatory Notes.

Balance of Payments **Table 5.1**
million US$

	FY24	FY25	FY25		H1 - FY26
			H1	H2	
Current account balance	**-2,072.0**	**1,838.0**	**925.0**	**913.0**	**-1,361.0**
Balance on trade in goods	**-22,177.0**	**1,332.0**	**-11,584.0**	**-15,219.0**	**-15,866.0**
Exports (FOB)	30,980.0	32,343.0	**4,130.0**	**4,320.0**	**4,766.0**
Imports (FOB)	53,157.0	59,146.0	**5,747.1**	**5,539.1**	**6,496.0**
Balance on trade in services	**-3,110.0**	**-2,836.2**	**-1,617.1**	**-1,219.1**	**-1,730.0**
Exports of services	7,691.0	8,450.0	**4,130.0**	**4,320.0**	**4,766.0**
o/w ICT exports	3,223.0	3,814.0	1,865.0	1,949.0	2,236.0
Imports of services	10,801.0	11,286.2	5,747.1	5,539.1	6,496.0
Balance on primary income	**-8,986.0**	**-8,837.8**	**-4,688.9**	**-4,148.9**	**-4,643.0**
o/w Interest payments	5,546.0	5,051.0	2,595.9	2,454.9	2,467.0
Profit & dividends	2,215.0	2,220.0	1,226.0	994.0	1,559.0
Balance on secondary income	**32,201.0**	**40,315.0**	**18,815.0**	**21,500.0**	**20,878.0**
o/w Workers' remittances	30,251.0	38,300.0	17,847.0	20,453.0	19,736.0
Capital account balance	**195.0**	**168.0**	**82.0**	**86.0**	**74.0**
Financial account balance*	**-5,370.0**	**1,586.0**	**-644.0**	**-942.0**	**-1,423.0**
Direct investment (net)*^	-2,126.0	-2,462.0	-1,519.0	-943.0	-642.0
Portfolio investment (net)*	376.0	719.0	71.0	648.0	592.0
Other investment*	**-3,610.0**	**159.0**	**805.0**	**-646.0**	**-1,379.0**
Build-up in FX assets abroad*	**-381.0**	**82.0**	**-185.0**	**267.0**	**-264.0**
FX loans & liabilities	**3,229.0**	**-77.0**	**-990.0**	**913.0**	**1,115.0**
Central bank	999.0	0.0	0.0	0.0	0.0
Banks	**715.0**	**-1,536.0**	**-188.0**	**-1,348.0**	**429.0**
General government	**1,565.0**	**2,346.0**	**-353.0**	**2,699.0**	**668.0**
Disbursements	6,044.0	9,544.0	**2,582.0**	**6,962.0**	**3,010.0**
Amortisation	6,727.0	7,643.0	3,208.0	4,435.0	2,462.0
Other sectors	**-50.0**	**-887.0**	**-449.0**	**-438.0**	**16.0**
Disbursements	2,419.0	688.0	**272.0**	**416.0**	**742.0**
Amortisation	1,905.0	1,689.0	**832.0**	**857.0**	**859.0**
Net errors and omissions	**-631.0**	**152.0**	**60.0**	**92.0**	**428.0**
Overall balance	**-2,862.0**	**-3,744.0**	**-1,711.0**	**-2,033.0**	**-564.0**
SBP's liquid reserves (end-period)	**9,390.0**	**15,836.0**	**12,977.1**	**15,836.0**	**17,360.7**

*as per BPM6, negative sign means net FX inflow into Pakistan and vice versa. ^ net FDI inflows - net FDI outflows.
Source: SBP

and exports declined, the fall in export prices was relatively sharp, leading to deterioration in terms of trade.[11]

Exports
Merchandise exports declined by 9.0 percent to US$ 15.1 billion in H1-FY26 from US$ 16.6 billion in H1-FY25. The decline was mainly driven by food and other manufactures, amid closure of the western border, and intensified competition in food exports. This was partially offset by increase in exports of textile and petroleum products **(Figure 5.8).**

Relatively lower US tariffs on Pakistan's exports compared to the peers particularly benefitted Pakistan's textile exports. This is also evidenced from increase in Pakistan's share in US value-added textile imports by 0.8 percentage points during Aug-Dec 2025 (**Box 5.1**).

Food Exports
Food exports fell by 40.3 percent to US$ 2.4

[11] Pakistan's terms of trade deteriorated by 26.3 percent in H1-FY26 compared to H1-FY25. Sources: Haver; PBS.

Merchandise Exports Table 5.2

million US$

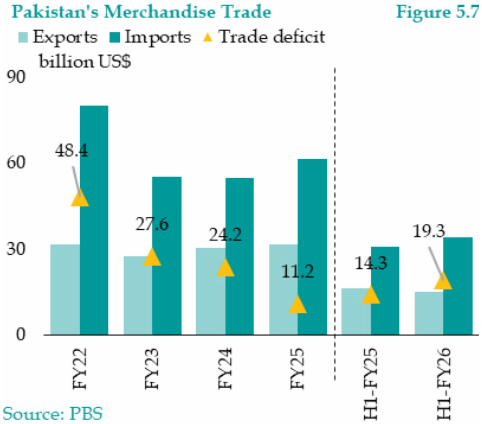
	H1-FY25	H1-FY26	Change		Volume Effect	Price Effect
			Absolute	Percent		
Exports	**16,631.4**	**15,138.6**	**-1,492.8**	**-9.0**	**-**	**-**
Textile: *Of which*	**9,084.6**	**9,167.1**	**82.5**	**0.9**	**-**	**-**
Apparel	4,610.0	4,815.5	205.6	4.5	194.8	10.7
Home textile	2,110.2	2,124.3	14.2	0.7	14.4	0.2
Non-textile: *Of which*	**7,546.9**	**5,971.0**	**-1,575.3**	**-20.9**	**-**	**-**
Food	3,960.0	2,364.9	-1,595.0	-40.3	-	-
Rice	1,875.3	939.9	-935.9	-49.9	-756.5	-179
Oil seeds	303.9	110.1	-193.8	-63.8	-206.0	12.1
Petroleum	271.7	442.2	170.5	62.8	-	-
Petroleum products	229.1	394.4	165.3	72.1	1.3	163.9
Other manufactures: *Of which*	2,159.2	1,984.3	-174.8	-8.1	-	-
Pharma	236.5	168.7	-67.8	-28.7	-62.8	-5.0
Plastic	263.0	148.1	-114.9	-43.7	-104.1	-10.8
Cement	167.5	173.2	5.7	3.4	-9.8	15.5
Footballs	111.5	130.7	19.2	17.2	-18.9	38.1

Source: PBS

billion in H1-FY26. Contraction in rice exports explains more than half of the decline in food group as well as total exports. Both falling global rice prices and volumes contributed to the decline in rice exports. Rice exports have been on decline since India's re-entry in the global rice market in H1-FY25, which intensified competition and exerted downward pressure on global rice prices.

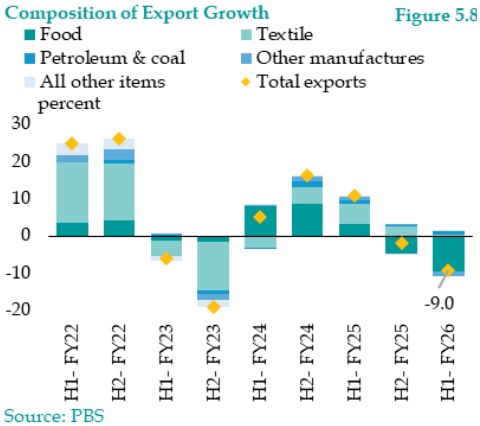
Moreover, rice exports to Indonesia and the Philippines declined owing to increased domestic production under their policy of self-reliance. Whereas Saudi Arabia and United Kingdom diverted their orders from Pakistan to India and US.[12] After rice, export of oil seeds was the second major contributor to decline in food exports. Export of oil seeds declined due to reduced demand of sesame seeds from China – world's largest importer of sesame

Pakistan's Merchandise Trade Figure 5.7



Source: PBS

Composition of Export Growth Figure 5.8



Source: PBS

[12] Share of UK's rice imports from India increased to 36 percent in 2025 from 30 percent recorded in 2024, while Pakistan's share decreased by 11 percent in 2025 from 23 percent recorded in last year. Source: COMTRADE.

Unit Prices and Quantum of Apparel Exports (H1-FY26) **Table 5.3**

Exports to US	Unit Value (US$/M²)*			Quantum (M²)*		
	H1- FY25	H1- FY26	% change	H1- FY25	H1- FY26	% change
World	3.1	3.1	-1.6	23,717	22,950	-3.2
Vietnam	3.8	3.7	-4.3	1,882	2,070	10.0
Philippines	3.8	4.5	20.2	55	44	-18.6
India	3.3	3.4	1.8	583	533	-8.6
Thailand	3.2	3.5	9.1	123	125	1.3
Bangladesh	3.2	3.1	-2.7	1,061	1,086	2.4
Pakistan	3.1	2.9	-7.0	319	386	20.9
Exports to EU-27	**Unit Value (Euro/kg)**			**Quantum (kg)**		
	H1- FY25	H1- FY26	% change	H1- FY25	H1- FY26	% change
Philippines	11.3	11.9	5.3	7,582	7,119	-6.1
Thailand	9.1	8.8	-3.3	29,209	32,228	10.3
Vietnam	6.8	7.7	13.2	78,427	75,708	-3.5
India	3.2	2.7	-15.6	197,154	230,129	16.7
Bangladesh	13.3	12.2	-8.3	13,882	14,660	5.6
Pakistan	4.3	4.2	-2.3	17,919	18,654	4.1

* M² stands for square meter equivalent, which is a notional unit used by Otexa

Source: SBP Staff calculation based on Otexa; Eurostat

seeds. This was because China diverted orders to Ethiopia and Sudan due to better quality and higher oil content.[13]

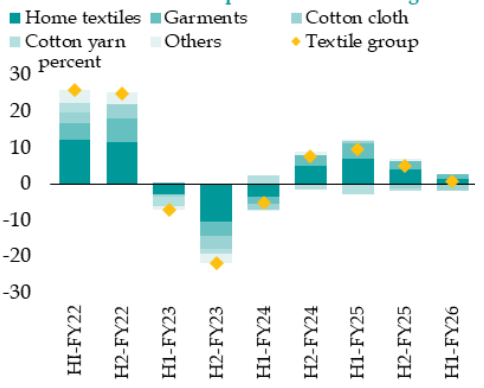
Textile Exports

Exports of textiles increased marginally by 0.9 percent, largely on the back of value-added textiles, particularly knitwear and readymade garments (**Figure 5.9**).[14] The increase in export of knitwear benefitted from higher unit values, whereas export of readymade garments was volume-driven as its unit prices declined. In contrast, exports of cotton yarn and cloth decreased due to lower domestic cotton production as well as decreasing global demand and cotton prices.

This is worth highlighting that the volume of apparel exports to major markets like the US and EU expanded (**Table 5.3**), while their unit values declined. The increased competition from major competitors, particularly China, significantly decreased export prices, which partially explains this divergence. Moreover, underlying domestic structural constraints also limit Pakistan's export competitiveness.

This underscores the need for strategic and technological upgrading across the textile

Contribution to Textile Exports **Figure 5.9**



Source: PBS

[13] Last year, Pakistan had benefitted from both higher demand from China amid supply disruptions from Sudan, Ethiopia, and Myanmar - alongside removal of a 9 percent import duty by China Source: WAP USDA (2025).

[14] These include knitwear, bedwear, and readymade garments.

Merchandise Imports **Table 5.4**
million US$

	H1-FY25	H1-FY26	Change		Volume Effect	Price Effect
			Absolute	Percent		
Imports	**30,785**	**34,439**	**3,654**	**11.9**	**-**	**-**
Food, *of which*	**3,802**	**4,630**	**828**	**21.8**	**-**	**-**
Palm oil	1,539	1,983	444	28.8	255.7	188.1
Sugar	2	174	173	-	296.9	-124.4
All other food items	1,025	1,385	360	35.1	**-**	**-**
Energy, *of which*	**8,088**	**7,986**	**-102**	**-1.3**	**-**	**-**
POL	2,970	3,122	152	5.1	406.4	-254.4
Crude	2,690	2,992	302	11.2	493.4	-191.4
LNG	1,888	1,358	-530	-28.1	**-**	**-**
LPG	536	513	-22	-4.1	**-**	**-**
Machinery, *of which*	**4,464**	**5,163**	**699**	**15.7**	**-**	**-**
Electrical	1,526	1,341	-185	-12.1	**-**	**-**
Textile	229	307	79	34.4	**-**	**-**
Power generating	359	393	34	9.3	**-**	**-**
Telecom	999	1,315	316	31.6	**-**	**-**
Textile, *of which*	**3,389**	**3,370**	**-19**	**-0.6**	**-**	**-**
Raw cotton	1,136	721	-416	-36.6	104	-519.7
Other textile items	1,156	1,403	247	21.4	**-**	**-**
Agro chemical, *of which*	**4,928**	**5,373**	**445**	**9**	**-**	**-**
Fertilizer manufactured	440	429	-11	-2.6	43.8	-13.1
Other chemicals	2,478	2,662	184	7.4	**-**	**-**
Miscellaneous, *of which*	**522**	**604**	**83**	**15.8**	-	**-**
Rubber tyres	80	115	35	43.6	41.2	-6.3

Source: PBS

value chain. In this context, the transition from a linear to a circular textile production model is emerging as a critical pathway to enhance product differentiation, meet tightening sustainability and traceability requirements, and unlock new sources of value addition (**Box 5.2**).

Non-Food And Non-Textile Exports

Plastic materials and pharma exports declined

The decline in exports of plastic products was due to falling global prices amid excess supply, as China redirected its exports to other markets following imposition of US tariffs.[15] Moreover, the increase in US tariffs on imports from Pakistan also impacted Pakistan's plastic exports, as shipments to the US declined. Furthermore, shipments to Canada also declined.[16] The lower exports of pharma products reflect weaker demand from East Asian markets and closure of the western border.

Cement exports increased marginally compared to a sharp rise last year

The slight increase in cement exports was primarily due to increase in unit values, as export volumes saw a contraction in H1-FY26. There was a notable decline in exports to Afghanistan and Bangladesh, due to closure of western border and weaker demand, respectively. Nevertheless, cement manufacturers have started exploring new markets,

[15] European union official website. Source: https://eur-lex.europa.eu/eli/reg_impl/2025/2333/oj/eng

[16] The Canadian International Trade Tribunal found dumping of polyethylene terephthalate, originating from Pakistan, and China, resulting in provisional duties ranging from 84.5 percent to 128.8 percent with effect from June 17, 2025. Source: https://citt-tcce.gc.ca/en/news/tribunal-initiates-inquiry-polyethylene-terephthalate-china-and-pakistan

particularly focusing on African destinations such as Kenya and Cameroon.

Among other manufacturers, export of sports goods increased by 11.1 percent during H1-FY26, mainly driven by higher demand for footballs from the EU countries hosting international football tournaments.

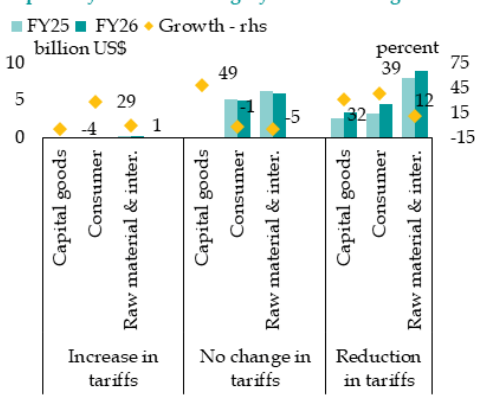
Imports

Imports grew by 11.9 percent during H1-FY26, compared to 17.9 percent growth in the same period of last year. The moderation in import growth mainly owes to softer global commodity prices, which partially offset the increase in import volumes **(Table 5.4).** In overall terms, imports of all groups increased, except for energy and textiles.[17]

Moreover, recent tariff rationalisation under the National Tariff Policy 2025-2030 changed the composition of import growth in H1-FY26.[18] Growth was stronger in groups where tariffs were reduced for a larger number of tariff-lines, especially in consumer goods, transport equipment and food items. A similar pattern was observed in the import of machinery, metals and transport-related items, which accounted for a sizeable share of tariff-line reductions under the tariff rationalisation policy (**Figure 5.10a&b**).

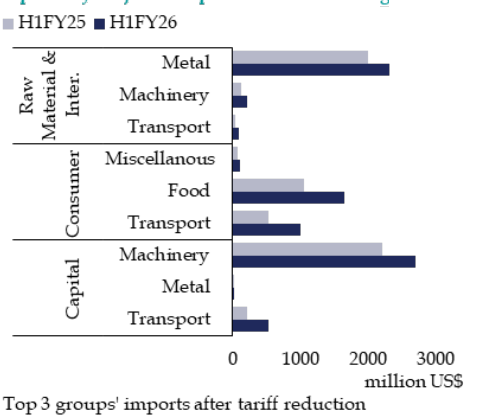
On the other hand, the impact of increase in tariffs was uneven. Tariff increases were largely confined to selected consumer goods, including foods, textiles, and other finished items. Imports of consumer goods, for which domestic alternatives existed, slightly decreased, whereas imports of essential and specialised food items remained steady, indicating relatively less elastic demand.

Imports by Economic Category **Figure 5.10a**



Sources: SBP; FBR

Imports by Major Groups* **Figure 5.10b**



* Top 3 groups' imports after tariff reduction

Sources: SBP; FBR

[17] National Tariff Policy 2025-2030 envisages gradual moderation in import growth by 2030. Accordingly, the current pace of imports remains aligned with the policy trajectory, as import expansion is expected to ease progressively.

[18] The average tariff rate approved in Federal Budget 2025-26 was (i) custom duty to decrease from 11.9 to 11.3 percent (ii) additional custom duty to reduce from 3.7 percent to 1.8 percent (iii) regulatory duty to reduce from 4.6 to 3.7 percent.

Food Imports

Food imports increased significantly by 21.8 percent to US$ 4.6 billion during H1-FY26, primarily driven by higher imports of palm oil and '*all other food items*'.[19] Palm oil imports rose owing to both higher prices and volumes, while imports of soybean oil, tea and pulses declined driven by lower volumes.[20]

Global palm oil prices increased due to higher demand as prices of competing vegetable oils surged.[21] Moreover, lower-than-expected production in Indonesia and Malaysia tightened global supply, further adding to price pressures. Import volumes also expanded due to rising domestic demand for vanaspati ghee, cooking oil, bakery fats, feed industry and instant foods where palm oil is a key input.

Imports of '*all other food items*' increased mainly due to higher import of oil seeds, following the National Biosafety Committee's approval of genetically modified canola, rapeseed and soybean seeds.[22] Additionally, imports of *other food preparations* such as seasoning, emulsifiers, and active yeasts also rose sharply, increasing by 60 percent in value terms and 70 percent in quantum terms during H1-FY26 compared to last year. This is consistent with growth in retail sales of processed foods.[23]

Energy imports declined slightly

A slight decline in energy imports was mainly due to softening global oil prices,[24] while import volumes increased across all categories except liquefied natural gas (LNG) and liquefied petroleum gas (LPG). The imports of crude oil and petroleum products rose in line with higher domestic demand. The reduction in LPG imports may reflect expanded domestic storage and terminal infrastructure,[25] which allows suppliers to efficiently distribute greater volumes of LPG from local producers. While lower LNG imports were due to subdued demand leading to the deferment of Qatar's LNG cargoes under net proceed differential (NPD) arrangement.[26]

Declining global raw cotton prices trimmed the textile import bill

The decline in textile imports was largely due to lower international cotton prices, while quantum increased on account of lower domestic cotton production. In addition, lower crude oil prices improved the cost-competitiveness of polyester, dampening global demand for cotton.

Modernisation and capacity growth underpinned higher machinery imports

Import of machinery registered a broad-based growth across most segments, except for electrical machinery, which declined due to falling solar panel prices.

[19] All other food items constitute around 30 percent of the total food imports.
[20] Prices of soybean seeds declined in international markets mainly due to higher production in South America.
[21] Based on Jul-Dec HS-8 level PBS data, the unit price of palm oil is around US$ 1.06/kg, lower compared to soyabean oil (US$1.09/kg), sunflower oil (US$ 1.2/kg), vegetable oil (US$ 2.1/kg), margarin oil (US$ 2.3/kg), and virgin oil (US$ 3.4/kg)
[22] Oilseeds and Products Update 2025, US Department of Agriculture, Foreign Agriculture Service
[23] Pakistan Processed Food Industry Report: TDAP.
[24] As per World Bank, average price of brent decreased from US$ 77.4 in H1-FY25 to US$ 66.4 in H1-FY26.
[25] An investment of Rs 6.6 billion was made in LPG's infrastructure. Source: PACRA (2024).
[26] NPD is a pricing mechanism in LNG contracts where the seller adjusts the volume or timing of cargoes based on differences between contracted LNG prices and prevailing market rates.

The increase in machinery import reflects ongoing digitalisation, IT modernisation and capacity expansion. For instance, rise in agricultural machinery imports was on the back of government's initiatives aimed at promoting farm mechanisation.[27]

Similarly, construction machinery imports strengthened in tandem with the recovery in construction activity. In the telecom sector, higher infrastructure requirements, driven by network fiberisation, rising international bandwidth capacity, and the forthcoming 5G spectrum rollout, further supported growth in telecom equipment imports.[28]

Imports of transport group increased significantly

The increase in import of transport group broadly mirrors trends in domestic production and sales of automobile vehicles, which increased across most transport categories. Moreover, the tariff on CBU motor cars was reduced on average by 15 percent, its imports increased by only US$ 37.5 million in H1-FY26. The import of CKD motor cars, however, rose sharply by US$ 580 million although the average tariff was reduced by only 1 percent in this category.[29]

Import of used cars also rose sharply following relaxation of regulatory restrictions; for instance, allowing commercial import of vehicles up to five years old. As result, the share of used cars in total transport imports rose from 62 percent to 67 percent.[30]

FY26 also witnessed a structural shift away from pure internal combustible engine (ICE) models to EV models. This transition also aligns with Pakistan's broader climate and energy objectives, including transport-related emissions.[31] As local capability for electric vehicle components is currently limited, it has led to higher reliance on imported CBUs, CKD kits, batteries, power electronics, and specialised parts. Moreover, Pakistan's auto market has expanded with the entry of several new Chinese-led NEV brands primarily through CBU launches alongside announced localisation plans.

Imports of agriculture and other chemicals increased

The increase in imports of agricultural and other chemicals was led by plastic materials, fertilizers, chemicals and medicinal products. Plastic materials imports rose in line with higher industrial activity, particularly in packaging, construction and consumer goods, with their demand being sensitive to international commodity price trends.

Fertilizer imports increased due to higher DAP prices, though the import volumes were lower as DAP inventories were considerably higher this year. Import of chemicals also rose due to their use as

[27] Agriculture department of South Punjab. https://agriculturesouthpunjab.gop.pk/punjab-green-tractor-scheme-phase-3/ ; CM Punjab Hi-Tech Farm Mechanisation Financing program, https://cmhightech.punjab.gov.pk/

[28] Fibersation of network sites increased, while installed international bandwidth reached 17.2 Tbps, and total data usage climbed to 27,727 petabytes. Source: Pakistan Telecommunication Authority, Annual Report 2025

[29] As per SBP staff calculations based on PBS and FBR data.

[30] As of Jul-Dec FY26 compared to Jul-Dec FY25.

[31] New Energy Vehicles Policy 2025-2030, Ministry of Industries & Production: Islamabad

Trade in Services **Table 5.5**

million US$

	FY25	H1-FY25	H1-FY26	Change	
				Absolute	Percent
Services balance	**-2,646.7**	**-1,617.1**	**-1,769.7**	**-152.6**	**9.4**
Exports	**8,406.9**	**4,089.8**	**4,774.7**	**684.9**	**16.7**
Transport, of which	958.7	460.0	463.2	3.2	0.7
Sea freight	94.6	54.5	49.4	-5.1	-9.4
Air passengers	403.2	201.3	210.4	9.1	4.5
Travel, *of which*	728.8	358.6	426.6	68.0	19.0
Education exp.	19.2	9.6	9.3	-0.3	-3.1
Other (personal)	685.4	335.0	408.4	73.4	21.9
ICT Services, *of which*	3,815.0	1,867.3	2,236.8	369.5	19.8
Software consultancy services	1,107.9	550.1	602.0	51.9	9.4
Freelance Services	984.9	429.4	804.0	374.6	87.2
Export/Import of computer software	589.2	295.4	321.8	26.4	8.9
Imports	**11,053.5**	**5,619.3**	**6,544.3**	**925.0**	**16.5**
Transport, *of which*	4,645.5	2,411.1	2,662.5	251.4	10.4
Sea freight	2,278.9	1,126.0	1,206.4	80.4	7.1
Air passengers	1,418.5	777.8	840.9	63.1	8.1
Travel, *of which*	2,407.2	1,154.0	1,730.0	576.0	49.9
Education exp.	623.7	345.2	358.7	13.5	3.9
Other (personal)	1,757.2	793.1	1,355.6	562.5	70.9

Source: SBP

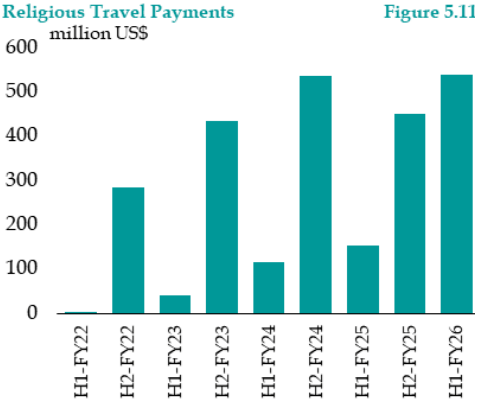
intermediate inputs in industries including manufacturing of garments.

Trade in Services

The services account deficit widened to US$ 1.8 billion in H1-FY26 from US$ 1.6 billion recorded last year. This was mainly due to higher import payments related to travel, transport, and financial and government services that outweighed a considerable increase in export of information, computer, and telecommunications (ICT) services **(Table 5.5).**

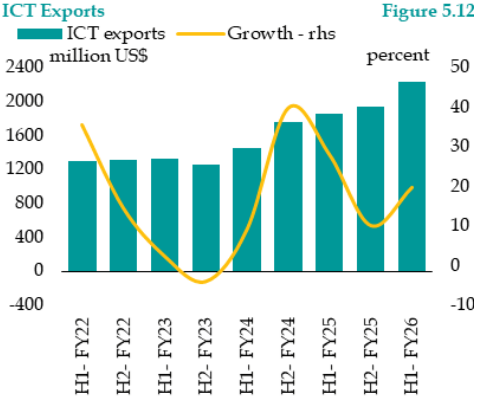
A sizeable increase in travel services imports was mainly on account of religious and other personal travel **(Figure 5.11)**. Payments for religious travel rose sharply reflecting the early announcement of the Hajj policy, which required the applicants to deposit hajj dues by December 2025. In addition, other personal travel - including private tourism – also increased, driven by higher number of outbound travellers, greater reliance on foreign airlines, and relatively stable domestic economic conditions. Similarly, payments for transport services increased by 10.4

Religious Travel Payments **Figure 5.11**



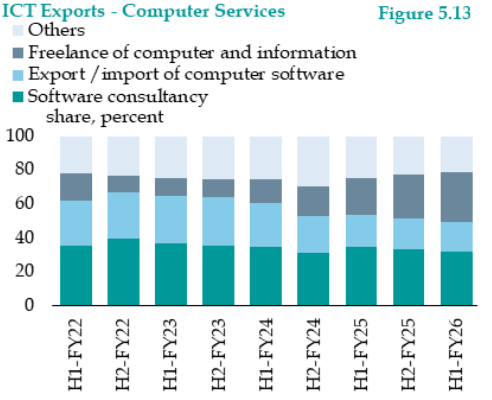
Source: SBP

ICT Exports **Figure 5.12**



Source: SBP

ICT Exports - Computer Services **Figure 5.13**



Source: SBP

percent, mainly due to higher merchandise imports. The increase in payments was somewhat contained by the declining global freight charges, which almost halved in H1-FY26 compared to the same period last year.[32]

The ICT exports, constituting around half of the total services exports, continued to provide a major support to the services account balance. ICT exports rose to an all-time high of US$ 2.2 billion in H1-FY26. Notably, IT exports emerged as the second largest contributor to Pakistan's exports of goods and services, after knitwear exports.[33] This signifies the increasing importance of the sector for country's FX inflows **(Figure 5.12)**.

Exports of computer and telecommunication services accounted for 84 and 16 percent of the total ICT exports, respectively. In computer services exports, freelancing, software consultancy services, and exports of computer software were the major contributors **(Box 5.3)**. Moreover, the composition of computer services exports has changed over years, partly due to the rise of remote work platforms and increased global demand for outsourced digital services **(Figure 5.13)**.[34]

Growth in ICT exports reflects expansion of Pakistan's online labour force[35] and sustained global demand for digitally delivered services. Rising exports from other knowledge-intensive segments, including R&D, professional management and trade-related consultancy, have also complimented the surge in ICT exports. These trends reflect diversification and move into more specialised and skill-intensive services exports.

Primary Income Balance

Primary income balance recorded a lower

[32] Freight index of a 40 feet container dropped to 2,105 in H1-FY26 from 4,334.2 last year. Source Bloomberg.
[33] ICT exports have more than 14 percent share, following knitwear with 17.6 percent share in total exports during H1-FY26. Source: SBP
[34] Report on Outsourced Digital Workplace Service Market by Future Market insights inc. Source: https://www.futuremarketinsights.com/reports/outsourced-digital-workplace-service-market
[35] According to Labor Force Survey 2024-25, 2.3 million (2.9 percent of overall employment) Pakistanis are digitally employed or Gig Workers.

deficit of US$ 4.6 billion in H1-FY26, compared to US$ 4.7 billion in the same period last year. This improvement largely owes to lower interest payments, while profits and dividend repatriation increased compared to the last year (**Figure 5.14**).

Repatriation of profit and dividends increased by US$ 333 million in H1-FY26, with higher repatriation from financial business, power, and food sectors due to improved profitability.[36] These three sectors collectively represented more than half of the total repatriated amount in H1-FY26.

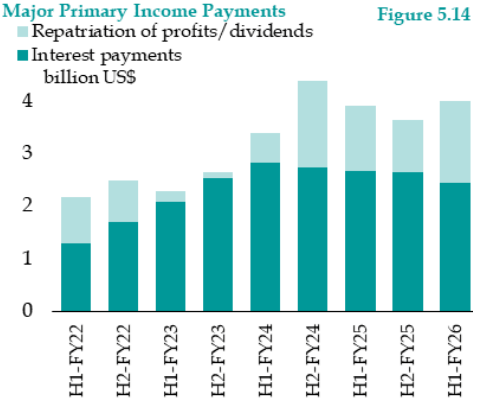
Secondary Income

The secondary income surplus increased by US$ 2.1 billion, reaching US$ 20.8 billion in H1-FY26. This was primarily driven by record high workers' remittances in H1-FY26 (**Figure 5.15)**. Remittance inflows increased from all major corridors except for USA, reflecting the confluence of external and domestic factors.[37]

On external front, strong economic activity in the Gulf countries - especially non-hydrocarbon activity - boosted labour demand. On domestic front, various initiatives under the Pakistan Remittance Initiative (PRI) have facilitated the increased remittance inflows. In this context, it is important to highlight that Exchange Companies (ECs) are now allowed, in addition to commercial banks, to receive SAR 20 for each transaction worth US$ 200 and above.[38]

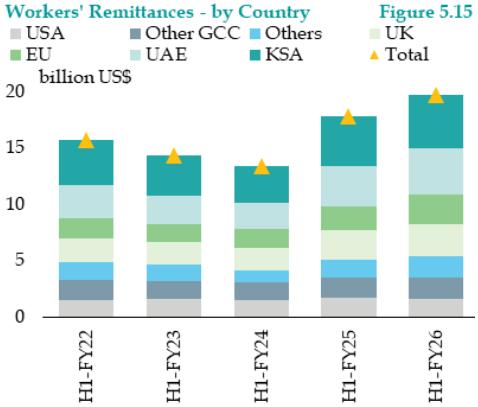
Moreover, SBP also mandated ECs for digital disbursement of workers' remittances through Raast.[39] This is aimed at enhancing cost efficiency, along with accelerating the shift to cashless economy

Major Primary Income Payments — Figure 5.14



Source: SBP

Workers' Remittances - by Country — Figure 5.15



Source: SBP

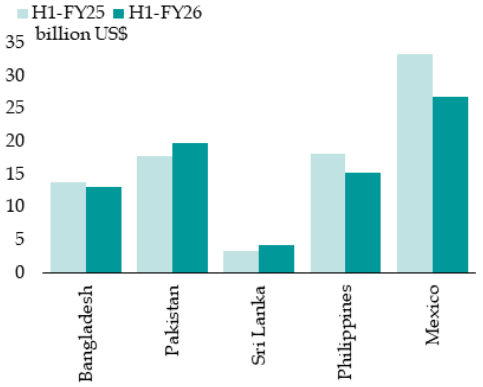
[36] After tax profit of the financial businesses, primarily foreign banks, increased by around 7 percent in H1-FY26 compared to same period of last year. Moreover, profitability of foreign companies in food sector has also increased. Source: SBP

[37] Due to falling workers' remittances from the US, its share in total remittances has also declined since FY24. This also reflects increased remittances inflows from the U.A.E and EU countries. Particularly, higher remittance inflows from the EU region points to changing migration dynamics, including new destinations in the region.

[38] EPD Circular Letter No. 09 of 2024, and EPD Circular No. 04 of 2025

[39] Raast is Pakistan's first digital payment system for end-to-end payments.

Remittance Inflows in Peer Countries **Figure 5.16**



Sources: Haver; SBP

by a greater use of digital payment systems (**Box 5.4**).[40]

This is worth highlighting that increased remittance inflows to Pakistan contrast the slowdown observed in some selected economies in H1-FY26, (**Figure 5.16**). While increased labour demand in Gulf countries is same, the difference lies in expanded coverage of incentives provided by the SBP and the government.[41]

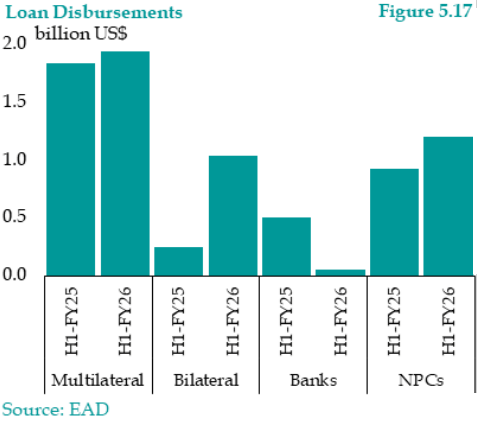
5.4 Financial Account

The financial account recorded net inflows of US$ 1,423 million in H1-FY26, more than twice the inflows of US$ 644 million in the corresponding period last year. The financial inflows continued to be dominated by official disbursements – net of repayments, both from bilateral and multilateral sources **(Figure 5.17)**. Around 98.6 percent of the official disbursements comprised of program loans. Multilateral and bilateral grants, amounting to US$ 29.0 million and US$ 31.7 million respectively, were meant for flood rehabilitation, climate resilience, health, and social protection.

Meanwhile, bilateral loans amounted to US$ 1,041 million, including US$ 600 million under the Saudi oil facility.[42] Multilateral loans were recorded at US$ 1,938 million, majorly from the World Bank followed by the Islamic Development Bank.[43]

As of end-December 2025, net repatriable liabilities under RDAs rose to US$ 2,231 million, of which, Naya Pakistan Certificates (NPCs) attracted US$ 1,202.1 million. Notably, inflows in Islamic NPCs increased, reflecting growing preference for Shariah-compliant investment options. This was despite downward revision in

Loan Disbursements **Figure 5.17**



Source: EAD

[40] SBP now allowed ECs to disburse home remittances in beneficiary's accounts/wallets maintained with Banks/MFBs/EMIs digitally through Raast. Source: EPD Circular Letter No. 02 of 2026.
[41] Lower remittance flows to Philippines, and Mexico were due to unfavourable market conditions in the US - the largest destination in terms of workers remittances and number of workers.
[42] This has been disbursed under Saudi Arabia's approved $1 billion oil facility for Pakistan for FY26.
[43] International Islamic Trade Finance Corporation (ITFC) arranged the largest syndicated financing for Pakistan over the last 3 years. The proceeds of the financing will be used for energy import to meet Pakistan's energy needs.

rates on NPCs in February 2025, which might still be attractive given lower global interest rates.[44] Additionally, tax incentives and smooth repatriation processes have further supported higher inflows.

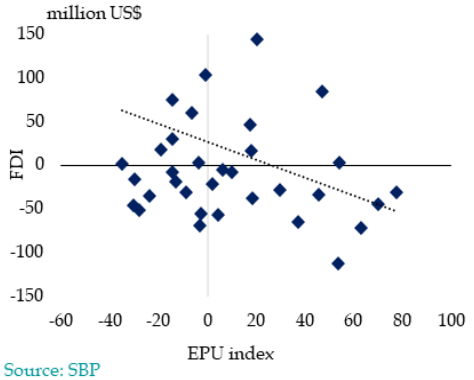
FDI declined amid persistent policy and governance gaps

Net foreign direct investment (FDI) was recorded at US$ 642 million in H1-FY26, substantially lower compared to US$ 1,519 million in the corresponding period of last year. The decline reflects persistent governance and policy uncertainties, which continue to weigh on foreign investment (**Figure 5.18**).[45]

FDI remains concentrated in financial business, leaving efficiency-seeking productive sectors behind

Financial business and power remained the principal recipients of foreign direct investment. The *financial business* was the only major sector to record a higher net inflow, US$ 401.5 million in H1-FY26 compared to US$ 368.2 million in last year. These inflows were primarily due to: (i) the expansion of Islamic banking, attracting capital inflows from Kuwait and UAE, and (ii) continued inflows related to the licensing of the digital banks.[46] This trend is also consistent with global FDI dynamics, which, excluding conduit financial centre effects, have declined significantly for the last two consecutive years.[47]

Economic Policy Uncertainty and FDI Inflows in Pakistan **Figure 5.18**



Source: SBP

In contrast, net FDI inflows to power sector declined sharply from US$ 780.2 million to US$ 430.5 million in H1-FY26, mainly due to fall in investment in hydropower projects from US$ 509 million to US$ 199 million in H1-FY26. These inflows were largely sourced from China, accounting for nearly three-quarters of total FDI in hydel power, followed by Republic of Korea (**Figure 5.19a&b**).

While some projects recorded lower inflows, others including Suki Kinari Hydropower project, posted net outflows due to loan repayments. The regulatory uncertainty might have weighed on investment inflows. Nepra's July 2025 tariff review for Suki Kinari approved only partial tariff adjustments limited to debt

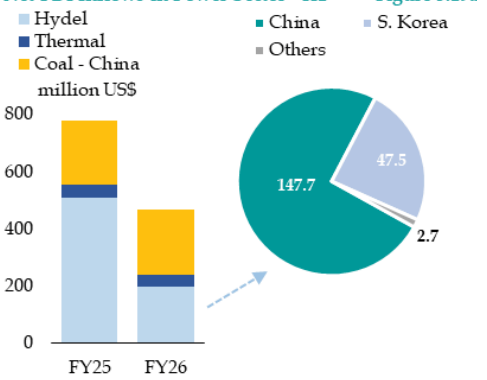
[44] Finance Division vide Gazette Notification No. S.R.O. 33(I)/2025 dated January 16, 2025, and S. R. O. 174(I) 2025 dated February 12, 2025

[45] SBP staff calculation suggests that one percent increase in EPU is estimated to reduce investment by 0.28 percent on average within a quarter in Pakistan.

[46] The literature suggests that financial-business capital inflows are more strongly procyclical and more responsive to changes in macroeconomic condition. Source: Reinhardt, D. and Dell'Erba, S. (2013) Not all Capital Waves are Alike: A Sector-level Examination of Surges in FDI Inflows, CEPR

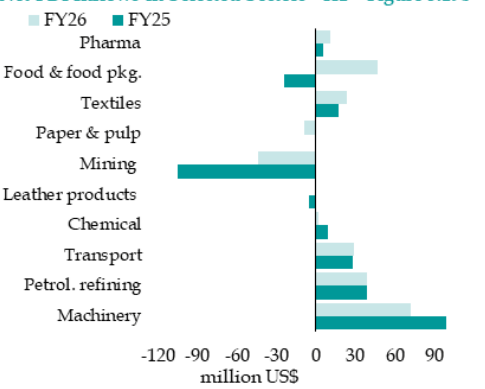
[47] As per UNCTAD World Investment Report 2025 global FDI declined by more than 10 percent in 2023 and 11 percent in 2025. The preliminary data for H1-CY2025 indicates a further 3 percent decrease in global FDI.

Net FDI Inflows in Power Sector - H1 **Figure 5.19a**



Source: SBP

Net FDI Inflows in Selected Sectors - H1 **Figure 5.19b**



Source: SBP

servicing[48], with full-revenue recovery still under review. This may have delayed capital inflows into hydropower projects still in the pipeline, including the Kohala hydropower project.

Moreover, a combination of structural, financial, and policy-related factors also explains the decline in FDI inflows in hydropower. Weak financial health of DISCOs raises concerns over timely payments.[49] This is compounded by policy and tariff uncertainties, including ongoing power purchase price and contractual reforms, which created ambiguity in revenue streams for investors. Furthermore, the declining share of hydropower in the generation mix and rising per-unit cost,[50] also weakens projected returns. In contrast, FDI inflows in coal-based projects, predominantly China-led, remained steady.[51]

The FDI inflows into machinery and electric equipment (*including grid and transmission upgradation*) slowed as multiple projects faced execution delays, which has led investors to defer investments.[52] Meanwhile, oil and gas exploration posted net outflows of US$ 10.8 million compared to inflows of US$ 88.3 million last year. These outflows reflect delayed upstream investment decisions, coupled with global energy firms divesting from low-margin downstream operations and geographies, consistent with broader global portfolio rebalancing towards high-return markets.[53] Mining and quarrying also recorded net FDI outflows in H1-FY26, like last year.

[48] NEPRA (2025). No. NEPRAIRJADG(Tariff)/TRF-232/SKHPL-2013. This NEPRA decision reviews the tariff for the project after it began commercial operations in September 2024, allowing temporary adjustments mainly for debt servicing due to exchange rate and inflation changes, while the full tariff adjustment remains under review.
[49] Off-takers financial health is one of the key metrics foreign investors consider when investing in power-related, capital-intensive projects. Source: Hydropower Special Market Report 2021. Analysis and forecast to 2030, IEA)
[50] Decoding the FY26 Power Purchase Price FY26, Renewable First Report
[51] This trend is consistent with China's continued dominance in global coal-based projects as over 70 percent of the upcoming global coal-based projects are being commissioned by China. Source: Index box website
[52] Anecdotal evidence suggests that Pakistan has secured multilateral financing for upgradation, but the disbursement has been constrained by shortfalls in rupee counterpart funding.
[53] Based on assessment of companies' financial statement analysis and other key sectoral reports.

Fresh inflows have been delayed amid on-going project-specific and regulatory developments. In particular, the phase-I cost revision of Reko Diq project, undertaken to incorporate inflationary adjustments and updated production parameters, necessitated a reassessment of equity valuation and internal rates of return.[54] This has postponed financial closure and the induction of new investors.

In parallel, the suspension of the Balochistan Mines and Minerals Act 2025[55] has added to the near-term regulatory uncertainty. Consequently, the lag in mining sector inflows reflects transactional and sequencing considerations rather than diminished investor appetite.

Nevertheless, some export-oriented sectors, including textiles, food & food packaging, and pharma recorded modest net FDI inflows. These were largely associated with current technological upgradation in textiles, capacity enhancement in food, and improving API capacity in pharma sector. These inflows coincided with rising machinery imports and higher domestic capital formation in these sectors, suggesting that foreign investors view domestic investment commitments, local project feasibility and preparedness, and local co-investment partners as critical precursors to their investment decisions.

FPI outflows were dominated by debt-repayments and profit-taking

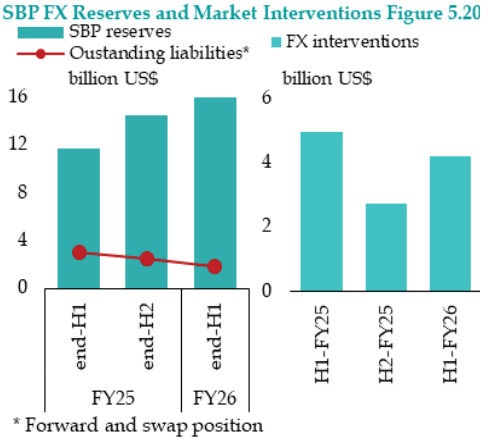
Net FPI saw an outflow of US$ 592 million during H1-FY26, compared to an outflow of US$ 71 million in the corresponding period of last year. This was largely due to the repayment of US$ 500 million Eurobonds maturing in September 2025.[56]

As per the National Clearing Company of Pakistan Limited (NCCPL), foreign investors sold US$ 753.5 million worth of holding in fertilizer, oil & gas exploration, food, textile, OMCs, power, banks and cement sectors. This occurred despite a promising equity market returns in H1-FY26.[57]

5.5 Foreign Exchange Reserves and Exchange Rate

Foreign exchange reserves, held by SBP, increased to US$ 16.1 billion at end-December 2025, compared to US$ 14.5

SBP FX Reserves and Market Interventions Figure 5.20

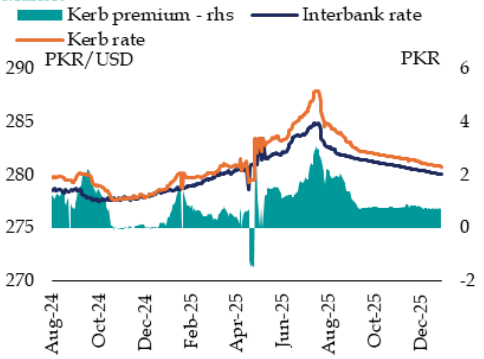


* Forward and swap position

Source: SBP

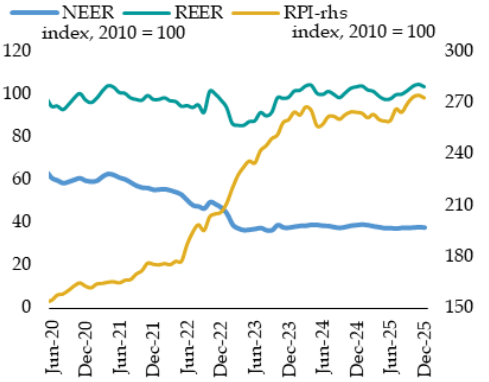
[54] London Stock Exchange website: Increase in Committed Expenditure Reko Diq Project -| LSE
[55] Associate Press of Pakistan
[56] The 10-year bond that was issued in 2015.
[57] The KSE-100 index increased from 78,445 at end-June to 174,054 by end-December 2025. As per Bloomberg data, Pakistan's Stock Exchange was among the best-performing markets in Asia/Pacific region in US dollar terms in 2025.

Exchange Rate: Interbank and Kerb Market **Figure 5.21**



Source: SBP

Real and Nominal Effective Exchange Rates **Figure 5.22**



Source: SBP

billion at end-June 2025.[58] The build-up in FX reserves, despite current account deficit, was mainly driven by SBP's FX purchases, amid moderate private inflows, besides increased foreign (official) financial inflows.[59]

Meanwhile, SBP further reduced the outstanding forward and swap position,[60] indicating a visible improvement in the quality of FX reserves (**Figure 5.20**). The build-up of external buffers continues to support stability in foreign exchange market, despite a moderate current account deficit in H1-FY26.

The PKR/USD exchange rate hovered around 281.7 PKR/USD through H1-FY26. Moreover, the kerb premium, the gap between the interbank and kerb market exchange rates, also narrowed, stabilizing below the historical level of Rupee 1 (**Figure 5.21**).

The real effective exchange rate (REER) index trended upward during much of the H1-FY26, rising from 98 at end-June to 103.7 at end-December 2025. This appreciation in real exchange rate largely reflected higher domestic inflation relative to the trading partners as indicated by the rising trend in relative price index (RPI) (**Figure 5.22**).

Box 5.1: US Tariff Hikes and Pakistan's Textile Exports

United States, the world's largest economy, plays a pivotal role in global trade and value chains. Any change in US trade policy has far-reaching spillovers, particularly for the economies like Pakistan, whose exports are concentrated and weakly diversified. Textile exports account for around 55 percent of Pakistan's merchandise exports. As of FY25, the US was Pakistan's single largest destination with more

[58] Foreign exchange reserves held by commercial banks remained steady at around US$ 4.7 billion at end-December 2025, compared to US$ 4.8 billion at end-June 2025.
[59] SBP made net purchases of US$ 4.1 billion during Jul-Dec 2025.
[60] Outstanding forward/swap position reduced to US$ 2.0 billion in December 2025, compared to US$ 2.5 and US$ 3.0 billion in June 2025 and December 2024 respectively.

than 30 percent of its total textile exports. This concentration amplified Pakistan's exposure risks to shifts in US trade policy.

This box assesses the implications of recently announced US tariff hikes on its textile imports from different countries. It explores how these tariffs reshape the composition of US textile imports across regional exporting countries and what these shifts imply for Pakistan's relative position vis-à-vis its peers. Tariff differentials may influence trade patterns through several transmission channels, including changes in relative price competitiveness, sourcing adjustments by US buyers toward lower tariff suppliers, and the reconfiguration of global supply chains.

Change in US Tariffs on Textile and Textile Exports to US **Table 5.1.1**

percent

Country	Applied Tariff	New Tariff*	Increase in Tariff	Share in US Textile Imports - 2024
Cambodia	10.0	19.0	9.0	4.3
Pakistan	9.6	19.0	9.4	3.6
Vietnam	9.4	20.0	10.6	15.2
Thailand	8.9	19.0	10.1	1.1
India	9.1	25.0	15.9	8.9
China	9.0	34.0	25.0	24.2
Bangladesh	10.0	20.0	10.0	7.0

Sources: Otexa; tradecomplianceresourcehub.com

* Tariffs implemented as of August 2025

Reallocation of US textile imports: winners, losers, and Pakistan's position

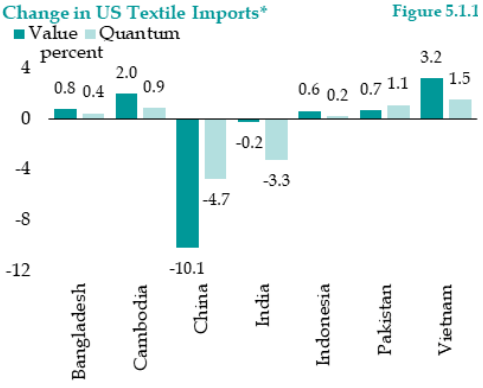
The recent US tariff increases have been relatively smaller for Pakistan than for several competing textile exporters (**Table 5.1.1**). Rather than inducing a uniform contraction in US textile imports, these asymmetric tariff changes have resulted in a reallocation of imports across supplier countries (**Figure 5.1.1**).

Vietnam has emerged as the principal beneficiary, recording a 2.7 percentage point increase in its share of US textile imports, in value terms, during Aug–Dec 2025 relative to the same period last year. By contrast, China experienced a pronounced erosion of its market position, with its share declining by more than 10 percentage points in value and 6 percentage points in volume terms, reflecting the combined effects of substantially higher tariffs and broader trade frictions.

In contrast to other countries, India's response to increase in tariffs shows a divergent pattern in terms of value and quantum. India's share in US import volumes declined by 1.8 percentage points; while it increased by 1.1 percentage points in value terms, implying better competitiveness among other factors.

Pakistan has also registered a modest improvement in its market position, with its share of US textile imports increasing by 0.7 percentage points, in value terms This gain appears to be driven primarily by relatively lower tariff on Pakistan vis-à-vis higher tariffs on other suppliers. The durability and traction in Pakistan's recent gains, however, would depend on two factors: the speed with which competing exporters reconfigure their supply chains and Pakistan's own ability to improve underlying competitiveness beyond temporary tariff advantages. In addition, to capitalize on such opportunities, Pakistan also needs to address domestic supply-side constraints and limitations, including production capacity constraints,

Change in US Textile Imports* **Figure 5.1.1**



* Change in share for Aug-Dec 2025 from Aug-Dec 2024

Source: Otexa and SBP Staff calculation

availability and cost of raw materials, energy and input costs, and the sector's limited penetration into higher value-added textile segments.

A World Bank (2016) [ii] simulation demonstrates that a relatively modest price shocks, such as a 10 percent increase in Chinese export prices, can lead to significant reallocations of US textile imports from South Asian competitors, including Pakistan. However, the extent to which Pakistan can capitalize on such shifts depends critically on exporters' cost structures and their adjustment capacity, particularly in terms of scalability, supply chain flexibility, and responsiveness to rapidly changing global fashion demand. Furthermore, non-tariff barriers such as stringent quality standards, complex certification requirements, compliance with labour and environmental regulations, and inefficient customs procedures, substantially constrains the realisation and sustainability of these potential gains.

* *The contribution of Ana Khattak and Muhammad Nafees is acknowledged in writing this box*

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ii. Acevedo, G.L. and Robertson, R. (2016). Stitches to Riches? Washington D.C: World Bank
iii. Kee, H.L. et al. (2009). The Economic Journal, Issue. 119, pp. 172–199. Note: It is important to note that NTMs differ NTBs in that NTMs are an all-encompassing category, covering both measures that can facilitate trade and those that may restrict it, whereas NTBs refer specifically to trade-impeding measures.
iv. SBP (2024). State of Economy Report, Chapter 5, Half Yearly report, Karachi: SBP

Box 5.2: From Linear to Circular: A Strategic Priority for Pakistan's Textile Value Chain

Globally, textile industry is transitioning away from linear 'take-make-waste'[61] models towards more circular systems. A circular system focuses on recycling, i.e. using recycled materials as production inputs,[62] and ensuring traceable material flows. This shift is driven by newer regulations, buyers demand, and cost pressures. Currently, only 1 percent of clothing is recycled globally, while 75 percent is discarded, underscoring the scale of lost economic value.[i] Meanwhile, the global second-hand[63] and recycled market is expanding rapidly.[ii] Estimates show that using recycled polyester cuts energy use by up to 50-70 percent compared to using virgin materials.[iii]

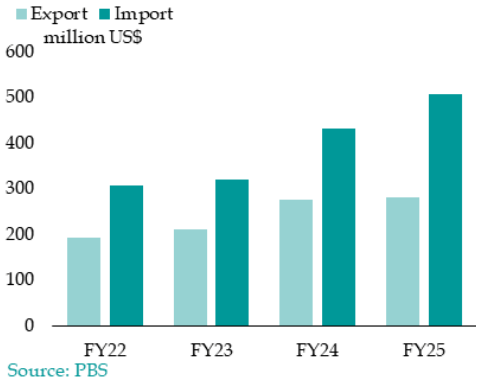
Why this matters for Pakistan's textile sector?

Pakistan's textile sector stands at a strategic inflection point. More than 60 percent of textile exports rely on cotton-based inputs, energy-intensive production processes and less-differentiated products, which limit competitiveness.[iv] Besides these factors, rising input costs, outdated machinery, limited adoption of sustainable practices, and fragmented supply chains further constrain competitiveness of the sector. The limited competitiveness is compounded by market concentration with over 80 percent textile exports destined to just three destinations, i.e. the EU, the UK, and the US. These markets are rapidly tightening sustainability, traceability[64] and circularity requirements through binding regulatory frameworks,

[61] It is a linear economic system where natural resources are extracted ("take"), manufactured into products ("make"), and eventually discarded as waste ("waste") after a short period of use.
[62] Waste valorisation is the process of recovering value from waste by converting it into new products, or inputs for production.
[63] Second-hand clothing market is projected to grow at CAGR 10.3 percent from 2026 to 2034. The resale market to double by 2030. Source: Market Data Forecast report website: Second-Hand Clothing Market Size, Share, 2034; ZIPDO Education Report 2026 website: Resale Industry: ZipDo Education Reports 2026
[64] Traceability in recycling is the systematic documentation and tracking of materials throughout the entire waste management chain, from origin and collection to processing and final, high-value reuse.

including the EU's Eco-design for Sustainable Products Regulation,[65] expanding state-level climate disclosure laws in the US, and ESG-aligned procurement and reporting mandates in the U.K. and Canada. These evolving regulations pose risks to Pakistan's export competitiveness as circular economy practices are increasingly becoming a prerequisite for market access requirements and a critical factor for export resilience. In this context, certification for recycled products is emerging as a commercial differentiator.[66]

Imports and Exports of Second-hand Clothing in Pakistan — Figure 5.2.1



Source: PBS

Pakistan's textile waste[67] and recycling potential

Pakistan generates an estimated 1.7 million tons of textile waste annually. If 50 percent of this waste (850,000 tons) were effectively collected and recycled through a formal system, and assuming the average unit value of US$ 1.4/kg [v] for recycled bleached fibers, Pakistan could unlock a significant economic opportunity of around US$ 773 million. Even using mechanical recycling[68], which is currently dominant in Pakistan and yield around 65 percent of usable fiber after sorting and processing losses, this would translate into an annual export-equivalent value of US$ 773 million. Beyond direct economic gains, scaled domestic recycling would:

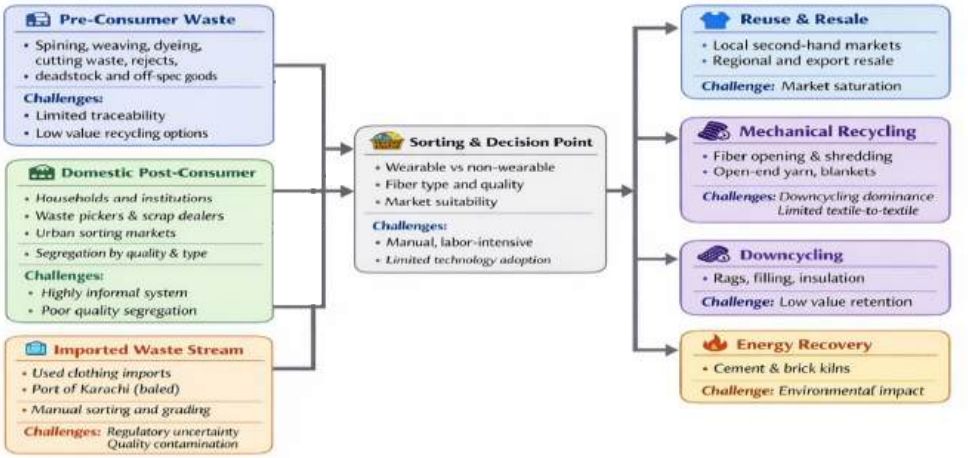
- Reduce reliance on imported virgin fibers[69]
- Lower energy consumption
- Mitigate exposure to carbon pricing mechanisms such as EU's CBAM
- Improve compliance with buyer-led ESG and traceability requirements

Pakistan also imports second-hand textile. Around 50 percent of these imported second-hand textiles are recycled domestically, while the remaining are exported to low-income countries (**Figure 5.2.1**).[vi] In Pakistan, second-hand textiles is gaining traction since 2021, as the country imported used textiles worth US$ 180 million but re-exported worth US$ 266 million after sorting and processing, illustrating a significant potential of value-addition through domestic upgrading.[70] However, recent trends show a widening technology gap that may impact fully exploiting the untapped potential for value-addition through scaling domestic sorting, grading recycling, and upgrading of manufacturing capabilities of second-hand textiles.

The key challenges across each stage of textile circularity are shown in **Figure 5.2.2** that maps Pakistan's textile waste value chain.[viii] The current mechanical recycling produces low-quality fibers and cannot

[65] Eco-design for Sustainable Products Regulation mandates Digital Product Passports for textiles by 2027, requiring verifiable data on recycled content, origin, chemical compliance, and lifecycle impacts.
[66] Firms certified under Cradle to Cradle (C2C) and Global Recycled Standard (GRS) have been shown to secure 15-30 percent price premiums for recycled products and achieve up to 40 percent faster qualification with major international retailers compared to non-certified competitors. Source: Fumao fabric website: https://fumaofabric.com/what-is-the-grs-certificate-for-clothing-manufacturers
[67] Textile waste comprises a combination of pre-consumer waste (scraps from manufacturing), post-consumer waste (discarded garments and textiles), and imported waste, which predominantly consists of second-hand clothing.
[68] Mechanical recycling physically shreds textile waste into fibers for reuse but produces shorter, lower-quality fibers and cannot handle blended fabrics effectively.
[69] The quality of recycled fibres often depends on the method of recycling—mechanical or chemical—and the type of material being recycled.
[70] Destinations of Dutch Used Textiles: Uses and Risks after Export 2023

Integrated Textile Waste Flows and Challenges in Pakistan **Figure 5.2.2**



Source: SBP Staff based on Hussain, M. et al. (2025). Comprehensive Overview of the Pakistan Textile Waste Industry

process mixed-fabric textiles, while informal handling and a fragmented recycling value chain results in low traceability. The absence of a national Digital Product Passport (DPP) or traceability framework further limits material tracking and circular integration. Around 90 percent of collected textile waste is downcycled into low-value products (mops, stuffing, industrial rags), reflecting a strong downcycling bias. The lack of technical training further constrains quality recovery.

In addition to these structural inefficiencies, the management of imported textile waste introduces further constraints. Contamination arises from non-textile materials mixed within imported clothing bales, which reduces the potential of waste valorisation. As a result, reuse and resale channels are unable to absorb all wearable textiles, while mechanical recycling yields lower quality fibers unsuitable for high-value applications such as apparel and garments. Fragmented and informal waste valorisation rarely enables textile-to-textile (T2T) recycling.[vii] Consequently, a significant share of residual waste is diverted to energy recovery, which offers only limited value capture compared to material recycling. Persistent gaps in policy, finance, and technology prevent full realisation of the value embedded in textile waste.

Policy interventions that can expand Pakistan's textile export frontier

To unlock the potential value of textile waste, positioning Pakistan as a regional leader in export-oriented textile recycling and promote a sustainable and competitive textile sector, it is suggested to:

- Develop a National Textile Circularity Roadmap aligned with EU ESPR/DPP timelines with phased targets for recycled content, formal collection rates, and real-time waste-flow tracking.
- Train and certify waste handlers and recyclers to professionalize collection and processing.
- Allow controlled, quality certified second-hand textile imports specifically for recycling. Accelerate investment in chemical recycling and AI-based sorting systems.
- Mandate T2T closed-loop programs for export-oriented manufacturer/retailers on the lines of Interloop[71]

[71] Interloop website: Waste and Circularity - Interloop, Interloop has partnered with Reverse Resources (RR) and National Textile University (NTU) to improve textile to textile recycling, traceability, and waste management across the supply chain.

** The contribution of Ana Khattak is acknowledged in writing this box*

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v. The value of recycled fibers, ranges from US$ 0.8 to US$ 1.60 per kg. Therefore, we assume the value to be US$ 1.4/kg. Source: Hussain, M. et al. (2025). Comprehensive Overview of the Pakistan Textile Waste Industry
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vii. SMEP website: Textile Waste Traceability: Using data to revolutionise textile waste management and recycling – SMEP

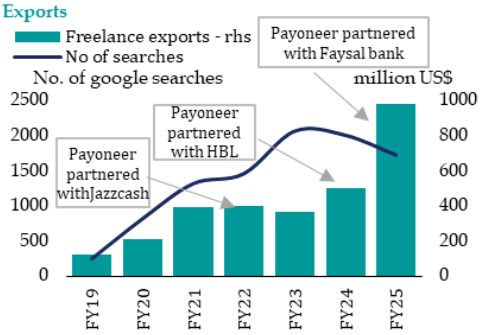
Box 5.3: Freelancing in Pakistan: Current Trends, Potential and Constraints

Freelancing, also called gig economy[72], has emerged as one of the fastest-growing segments of international trade in services, driven by platformisation, remote work adoption, and demand for cost-competitive digital skills. The freelancing sector offers a rare convergence of employment generation, export diversification, and financial inclusion.[73] It absorbs educated youth outside the formal labour market. It is expected to be a US$ 2.5 trillion market by 2030.[74] Freelancers are predominantly young, with around 60 percent under the age of 30.[75]

Pakistan has positioned itself as one of the leading suppliers in this sector[76], bringing US$ 985 million in FY25, which has almost tripled in the last three years. When combined with broader IT and ITes, digital exports exceeded US$ 3.8 billion in FY25, highlighting the role of freelancing as a stable source of foreign exchange earnings.

As per a recent survey, a Pakistani freelancer earns around US$ 5000 per year.[77] While this estimate differs from official statistics, the gap may partly reflect structural factors such as the use of international payment platforms, varying levels of financial inclusion, and the fact that only a relatively small share of freelancers currently maintain accounts with the local banks.[78] Together, these dynamics highlight a clear pathway for income growth: moving up the value chain into specialised,

Google Searches for Fintechs and ICT Exports **Figure 5.3.1**



* No. of google searches for major Fintechs i.e. payoneer, Wise and paypal
Sources: SBP; Google

[72] The gig economy is a system of temporary, short-term, or contract positions for which companies employ freelancers or contractors. Source: Velocity Global
[73] *The Payoneer Freelancer Income Survey Benchmark Your Rates 2015.*
[74] Zipdo website: Freelancing: ZipDo Education Reports 2026
[75] WB (2023). Working Without Borders: The Promise and Peril of Online Gig Work, Washington DC; World Bank
[76] Pakistan is ranked 3rd on the Fiverr76 and 5th on Upwork.
[77] The freelancers' earning is calculated using a weighted average based on survey responses in the Pakistan Association of Freelancer (PAFLA) January 2024 Report.
[78] Only about 38,000 freelancers maintain local bank accounts as per the Prime Minister's Committee on IT Export Remittances.

knowledge-intensive freelancing segments, where stronger formal integration with financial systems and higher value creation tend to reinforce each other.

Initiatives to support freelancers' proceeds

Payment integration and financial access: Initiatives by different stakeholders include integration of global payment gateways with domestic financial institutions, which has supported the increase in freelancing proceeds **(Figure 5.3.1)**. For instance, initiative by Habib Bank Limited (HBL) to solve the payment issues of the freelancers through 'HBL's Freelancer Digital Current Account' and SadaPay enabled Apple Pay and Google Pay payments for freelancers by introducing SadaBiz accounts in October 2023.

Skill development and workforce expansion: The government initiated Digiskills.pk in 2018, wherein free online training to freelancers is being offered. Till date, it has delivered more than 4.5 million training in areas like animation and vlogging; graphic designing; digital marketing.[79] MoITT has initiated the National Freelancing Training Program (NFTP) in 2022 with a target to train 22000+ youth in different in-demand courses.

Foreign exchange and reporting facilitation: SBP has incentivised software exporters, including freelancers, by allowing them to retain up to 50 percent of their net FX earnings in their FCY accounts for making foreign payments conveniently. Moreover, SBP has revised the reporting formats for the electronic Proceed Realisation Certificate (ePRC) and Statement of PRCs (S-PRCs) to better assist IT exporters in reporting their foreign exchange income. SBP further simplified the export realisation procedures, whereby IT companies and freelancers are not required to submit Form "R" for every export transaction. Instead, they will provide a one-time declaration at the time of opening of new account.[80]

Despite supportive initiatives, Pakistan's freelancing ecosystem continues to face structural constraints

The major factors constraining Pakistan's freelancing ecosystem include systemic bottlenecks across payments, skills, infrastructure, regulations, internet connectivity and taxation.[81]

Payment frictions: While international platforms such as Payoneer, Wise, Xoom and Skrill operate in the country and can be linked to local bank accounts as well as mobile wallets, the absence of other widely used global payment services—most notably PayPal—continues to limit choice. As a result, Pakistani freelancers face greater transaction challenges, including fewer reliable payment channels, higher costs, and reduced flexibility compared to their counterparts in many other countries.

Skills and quality gaps: A large share of freelancers in Pakistan remain concentrated in low-to-mid value services, with limited penetration into high-value domains such as web designing, advanced data analytics, and product consulting etc. This concentration is a concern because high-value services not only generate greater foreign exchange earnings but are also expected to experience stronger global demand in the future.[82] At the same time, the rapid advancement of generative artificial intelligence (AI) presents a growing risk for freelancers engaged in routine digital tasks. This underscores the urgency of upgrading skills toward AI-complementary, knowledge-intensive services, where human expertise is more likely to be augmented rather than displaced by technological change.

[79] Ignite website: ignite.org.pk/. Ignite is a National Technology Fund, maintained by the government.
[80] EPD Circular Letter No. 06 of 2026
[81] Pakistan Freelancers association, PAFLA 2024
[82] Upwork. *website https://www.upwork.com/resources/highest-paying-freelance-jobs*

Infrastructure deficits: Limited device ownership, unreliable broadband,[83] and electricity outages undermine reliability in meeting project deadlines, which turns away new projects to other countries' freelancers.

Ambiguous tax treatment: Freelancers have long faced uncertainty in taxation of their earnings, as income from IT/ITes exports, freelance services, and foreign remittances could be variably classified as export proceeds, business income, or personal remittances. This ambiguity often led to double taxation as tax authorities treated total foreign inflows, included unrelated transfers, as taxable incomes. Moreover, only freelancers registered with Pakistan Software Export Board (PSEB) are eligible for the concessional 0.25 percent export tax and 100 percent tax credit on export earnings, while those outside this framework face uncertainty in tax filing, documentation and foreign exchange retention.

Beyond the forementioned factors, there is no formal, consistent mechanism for communication among stakeholders to effectively identify challenges, address limitations, and implement solutions at the local level. Addressing these gaps can create a more integrated ecosystem that may help Pakistani freelancers transition into higher-value, specialised segments, thereby enhancing income stability, boosting export earnings, and contributing more substantially to sustainable economic growth.

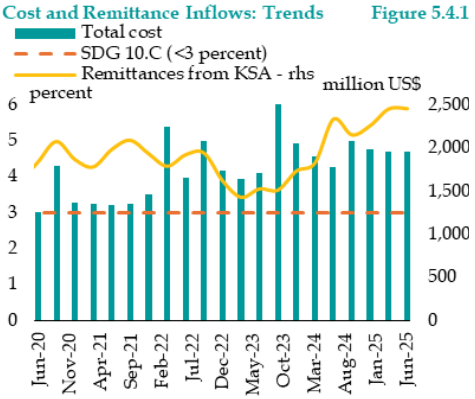
** The contribution of Ana Khatak and Muhammad Nafees is acknowledged in writing this box*

Box 5.4: Raast-Buna Integration: Bringing Efficiency in Remittance Inflows with Lower Cost

Empirical evidence suggests that remittance inflows are cost and time sensitive (**Figure 5.4.1**).[84] Lower transaction costs are associated with higher inflows via formal channels. The government and SBP have provided various incentives through Pakistan Remittance Initiative (PRI) and other regulatory support to attract inflows through formal channels. These incentives included schemes aimed to reduce transaction cost and enhance efficiency. This scheme helped increase the inflows significantly, but it required a sizeable fiscal space. For instance, Rs 65 billion was allocated to finance this scheme in FY25.

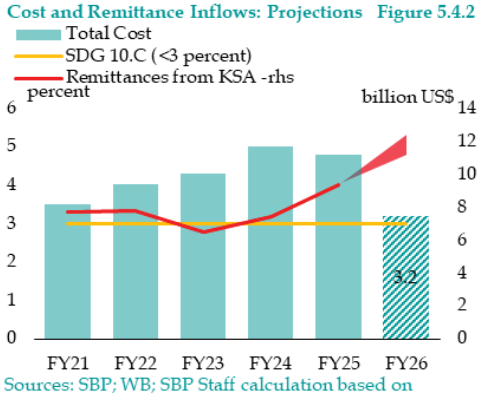
While these schemes help attract remittance inflows via formal channels by reducing transaction costs, these do not address the structural issues that lead to higher costs in important remittance corridors. For

Cost and Remittance Inflows: Trends Figure 5.4.1



Sources: SBP; UN; WB

Cost and Remittance Inflows: Projections Figure 5.4.2



Sources: SBP; WB; SBP Staff calculation based on Kpodar and Imam (2022)

[83] Special Section ICT Export and Tech Startups

[84] Kpodar, K., & Imam, P. A. (2024). How do transaction costs influence remittances? World Development, 177, 106537.

example, Pakistan's largest remittance inflows are originating from Saudi Arabia (KSA) where the transaction cost is also the highest **(Table 5.4.1).**

Major reasons for the higher cost are limited competition, regulatory requirements, operational and settlement costs and fragmented payment infrastructure.[85]

Cost of Remitting US$ 200 to Pakistan March 2025 **Table 5.4.1**

Major Corridors	Total cost (%)
Saudi Arabia	4.7
United States	4.4
Oman	1.9
United Kingdom	1.5
Australia	1.5
United Arab Emirates	1.4
Qatar	0.7
Kuwait	0.5

Source: WB

To resolve these issues, SBP along with Arab Monetary Fund (AMF) launched the Raast-Buna integration project. Raast is Pakistan's instant payment system. It serves as the core of the country's digital payments ecosystem, which enables faster, secure, and low-cost transactions.[86] Buna is a cross-border payment system established by the AMF in 2020, designed to facilitate efficient remittances across the Arab region.

The Raast-Buna integration specifically targets remittances from the Arab region to Pakistan aiming to bring efficiency and lower transaction cost by improving the structure. This project aims to lower the remittance cost to 3.2 percent, nearing the Sustainable Development Goal (SDG 10.C) target of 3 percent.[87,88] This reduction of around 1.5 percentage points would increase remittances from Saudi Arabia alone by US$ 0.5 to US$ 3 billion, if we account for both price and volume effects (**Figure 5.4.2**).[89]

Raast-Buna integration provides a more sustainable path to expand formal remittance inflows at lower transaction costs with enhanced efficiency by reducing issues rather than compensating for them through fiscal subsidies.

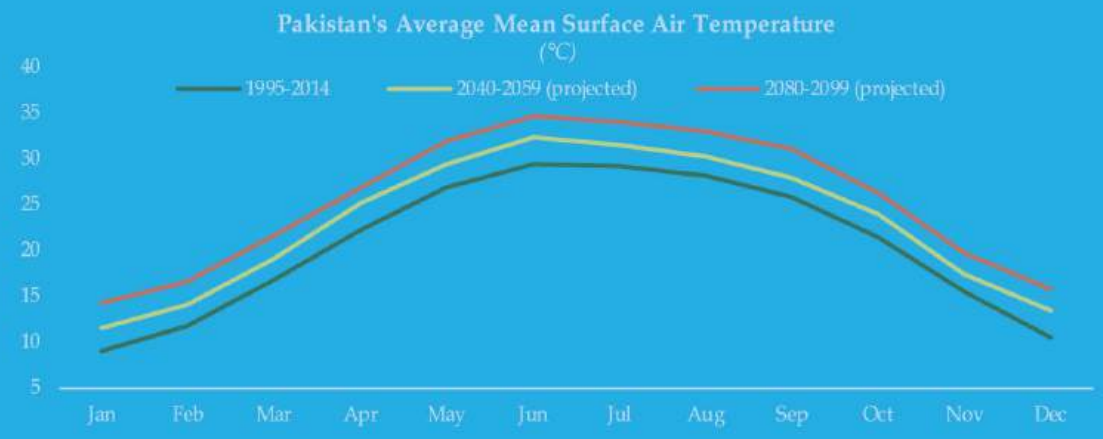
** The contribution of Muhammad Nafees is acknowledged in writing this box.*

[85] More 85 percent of the remittances are sent to Pakistan through commercial banks. The Saudi Monetary authority's regulations about the cross-border payment restrict funds to be sent through only authorised financial institutions, mostly commercial banks. This is not the case for other GCC countries.
[86] Raast-Buna eliminate the cost of prefunding Nostro accounts of the banks.
[87] www.sdgs.un.org/goals/goal10#targets_and_indicators
[88] This includes services charges BUNA would charge its member entities for transactions.
[89] It includes both price and volume effect; 1.5 percent decrease in cost saves directly around US$ 425 million. If it diverts 10 to 20 out of 30 percent of informal remittance inflows to the formal channels, the inflows may increase by around US$ 3 billion. These estimates are based on elasticity of transaction cost to remittance inflows presented in Kpodar and Imam (2024). They estimated that a 10 percent reduction in cost leads 2 percent increase in remittance inflow for panel of 71 countries over the period 2011-2020. WTO

6

Climate Change and its Impact on Pakistan's Economy

Climate change poses an immediate and systemic risk to Pakistan's economy. Despite contributing very little to global greenhouse gas emissions, Pakistan is among the most climate-vulnerable countries. Climate change is already exerting significant pressure on Pakistan's economy and is expected to intensify in the coming years. It is driving substantial losses to both agriculture and industry, while creating challenges for maintaining price stability. Whilst Pakistan contributes only 1 percent to total global GHG emissions, the country's emissions intensity is high, pointing towards an inefficient, carbon-intensive production process. Considering Pakistan's climate vulnerabilities as well as large and steadily growing population and aspiration for sustained economic growth, these realities necessitate large investments in both mitigation and adaptation. Against these challenges, Pakistan's preparedness to address climate change is weak. The country's climate action is constrained by weaknesses in policy and institutional environment; technical capacity and human capital deficits; and limited social readiness – all of which warrant urgent attention. There is also an urgent need to mobilise domestic resources for climate finance, particularly in light of persistently high financing gaps for mitigation and adaptation needs amid limited international climate inflow, and misaligned global priorities.



6 Climate Change and its Impact on Pakistan's Economy

6.1 Introduction

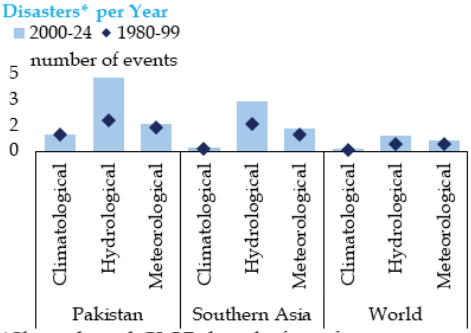
Climate change is no longer a distant risk.[1] It is a real, systemic global risk with profound impact on lives and livelihoods, reshaping economic structure, GDP growth, productivity, and financing decisions across the globe. Moreover, scientific evidence is clear that climate change is also contributing to the breach of other planetary boundaries, triggering tangible risks of irreversible and abrupt environmental damages **(Appendix 6A)**.[2] There is also strong evidence that unless necessary and timely action is taken by the global community, the intensity of climate change will inevitably increase, leading to further economic damages and social disparities amid growing ecological imbalances.

Evidence of the impact of climate change around the world continues to accumulate. Between 1995 and 2024, more than 9,700 global climatic events have led to direct economic losses of around US$ 4.5 trillion (in real terms), affecting 5.7 billion people, and causing more than 832 thousand fatalities worldwide (Germanwatch, 2025). The impact of global climate change is pronounced in Pakistan, which is the 15th most affected country from climatic events between 1995-2024 (Germanwatch, 2025). Climatic disasters in Pakistan have been higher than both global and regional averages in 2000-24 as well as in the preceding two decades **(Figure 6.1)**.

Moreover, signs of continued climate stress in Pakistan are increasingly being manifested through higher temperatures, erratic rainfall, rising sea levels, and rapid glacial retreat **(Figure 6.2a-d)**. Damages from climatic events can escalate non-linearly as climate issues reinforce each other, such as intense rains after a heatwave coinciding with glacial melt (IMF, 2025a).

The biggest underlying driver of global climate change is the emission of greenhouse gases (GHG), chief among which are carbon dioxide (CO_2) and methane (CH_4) emissions. In absolute terms, global GHG emissions are driven by advanced economies (AEs), leading emerging markets and developing economies (EMDEs) along with some major producers of global fossil fuels (**Figure 6.3**).

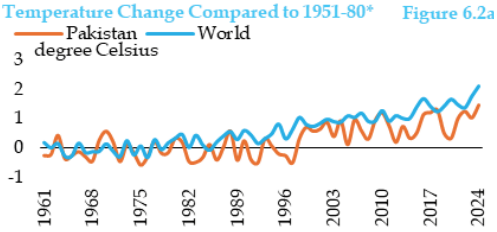
Average Frequency of Selected Climate Disasters* per Year **Figure 6.1**



*Climatological: GLOF, drought, forest fire etc.; Hydrological: floods, avalanches(wet), landslides(wet) etc.; Meteorological: heatwave, storm, cyclones etc.
Source: EM-DAT

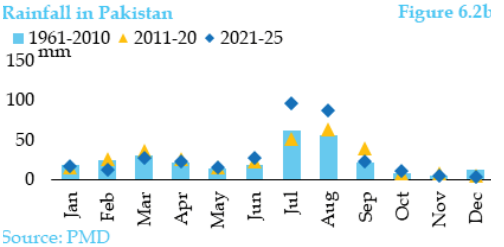
[1] Climate change refers to long-term shifts in temperature (i.e. global warming) and weather patterns that can occur naturally but is now primarily driven by human activities. Source: UN (n.d.a)
[2] Planetary boundaries refer to the limits to nine environmental, biophysical dimensions of earth within which it must remain for humanity to survive and thrive. This chapter mainly focuses on climate change, which is only one of the 7 (out of 9) planetary boundaries crossed. The breaching of planetary boundaries; how it impacts Pakistan, and how Pakistan contributes to their breach is discussed briefly in **Appendix 6A.**

Temperature Change Compared to 1951-80*



Source: CID, IMF

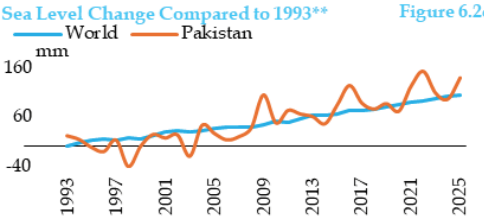
Figure 6.2a Rainfall in Pakistan



Source: PMD

Figure 6.2b

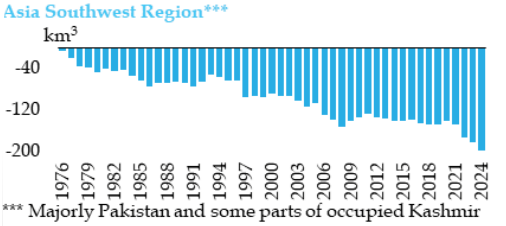
Sea Level Change Compared to 1993**



*1951-1980 avg. temperature is the baseline as per NASA.
^1993 marks the start of sea level satellite record

Source: WB

Figure 6.2c Cumulative Change in Selected Glaciers of Asia Southwest Region***



*** Majorly Pakistan and some parts of occupied Kashmir and China

Source: WGMS

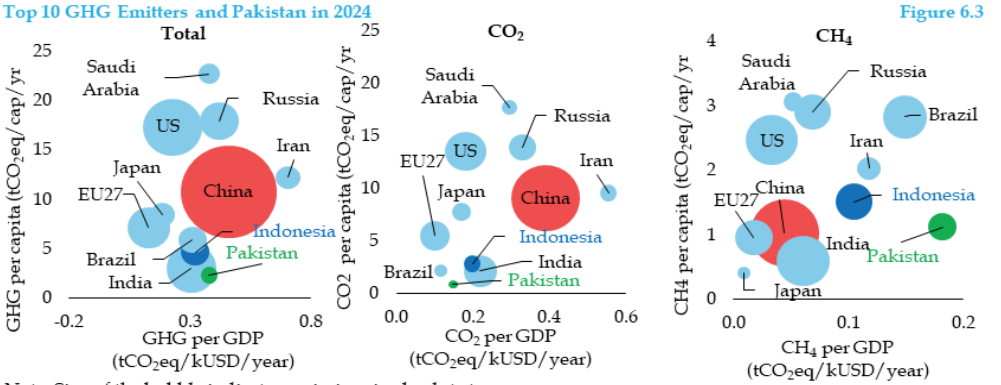
Figure 6.2d

The top ten GHG emitting economies together contribute about 70 percent of total global GHG emissions.[3] In contrast, Pakistan contributes only 1 percent to total global GHG emissions.[4] Similarly, Pakistan's per-capita emissions remain notably low, ranking 147th in the world.

However, Pakistan's emission intensity – measured as GHG emission per unit of GDP – is relatively high, despite modest improvement over time **(Figure 6.3 & 6.4)**. Pakistan ranks 20th in global GHG emission as against 45th rank in terms of nominal

Top 10 GHG Emitters and Pakistan in 2024

Figure 6.3

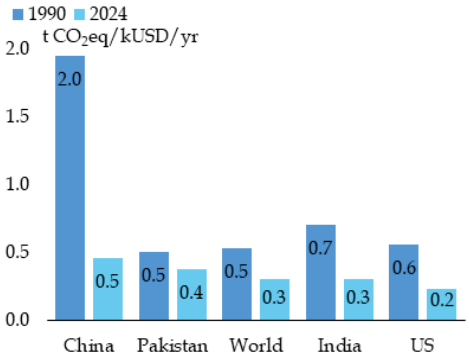


Note: Size of the bubble indicates emissions in absolute terms.

Source: EDGAR

[3] Nearly 54 percent of total global GHG are contributed by the top 4 emitting economies in 2024. Source: EDGAR (n.d.)
[4] EDGAR (n.d.).

Emission Intensity (GHG/GDP) - Selected Countries and Global Average Figure 6.4



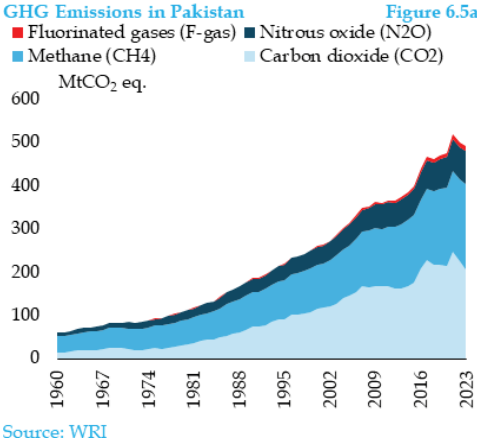
Source: EDGAR

GDP.[5] Since the 1960s, total emissions have increased significantly, with the energy and agriculture sectors as the major contributors **(Figure 6.5a & b).** Pakistan's high emission intensity puts the country at the risk of materially increasing its emissions, if its economy continues to follow the traditional development pathways.

Historically, growth in per capita income and human development in countries around the world has been achieved on the back of high energy consumption and high GHG emissions.[6] However, rising income levels along with population growth continue to be the biggest drivers of global CO_2 emissions in energy sector,[7] despite improvements in the energy intensity of GDP and carbon intensity of energy (**Figure 6.6a**). The same is true for Pakistan, where growth in population and income, alongside relatively high carbon intensity of energy, are driving the growth in CO_2 emissions of energy sector (**Figure 6.6b**).[8]

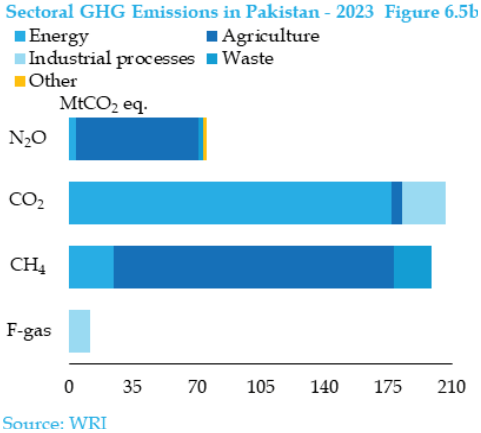
As things stand presently, global climate action remains inadequate across all indicators required to achieve the 2030 target to contain global warming to 1.5 °C

GHG Emissions in Pakistan Figure 6.5a



Source: WRI

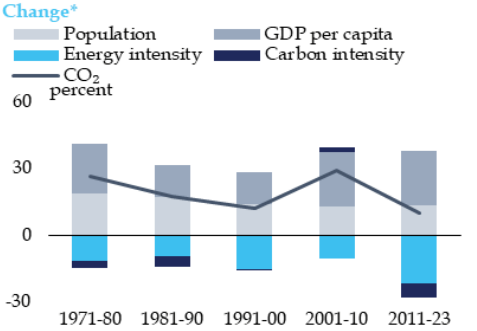
Sectoral GHG Emissions in Pakistan - 2023 Figure 6.5b



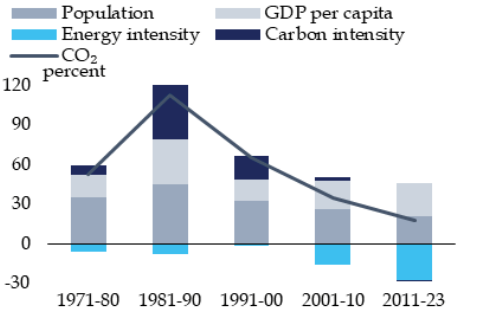
Source: WRI

[5] Both numbers are for 2023. Source: EDGAR (n.d.); WB (n.d.)
[6] Guliyev, H., & Seyfullayev, I. (2025); Li et al. (2022)
[7] Energy sector contributes about two-third of global CO_2 emissions.
[8] Pakistan's carbon intensity of industrial energy consumption is nearly 38 percent greater than that of North America, and 50 percent more than the European Union (EU). Source: WB (2023a)

Global Drivers of Global CO2 Emission Change* Figure 6.6a



Drivers of CO2 Emission Change* in Pakistan Figure 6.6b



* Contribution to energy related CO_2 emissions based on Kaya identity: CO_2 emissions = population x GDP per capita x energy intensity (total energy supply (TES)/GDP) x carbon intensity (CO2/TES).
Source: IEA

(Schumer et al., 2025).[9] The last ten years were the warmest on record; in fact, in 2024 temperatures reached 1.55 °C above the pre-industrial level (1850-1900 AD).[10,11] The situation is grave for Pakistan as it faces warming at a considerably higher rate than world average (GoP, 2025a).

In light of the foregoing discussion, Pakistan faces a particularly challenging position. On the one hand, it is one of the most climate-vulnerable countries despite contributing very little to global GHG emissions. On the other hand, it needs to develop its economy and increase GDP growth, while decreasing emission intensity. This is indeed a daunting challenge, considering that decoupling of GDP growth — from CO_2 emission and resource depletion— is a transition that even AEs with all their financial resources, strong institutions and technological progress have only begun recently.[12]

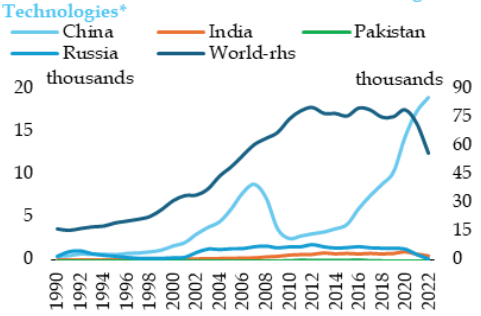
Notwithstanding these challenges, Pakistan has shown strong commitment to climate action through the formulation and progressive enhancement of Nationally Determined Contributions (NDCs). Under the Paris Agreement, Pakistan has pledged to cut 50 percent of GHG emissions by 2035 compared to Business as Usual (BAU) scenario.[13] To this end, the country has taken several initiatives, such as ten billion tree tsunami, mangrove conservation and restoration drives (GoP, 2025b). Pakistan

[9] Climate action includes mitigation (practices to reduce GHG emissions or enhance carbon sinks to absorb GHG emissions) and adaptation (adjustment of existing system to reduce vulnerability to the current and future impacts of climate change). Source: IPCC (2022); EU (n.d.)
[10] UN (n.d.b)
[11] Under the Paris Agreement, countries committed to reduce GHG emissions to keep long-term global warming well below 2 °C while pursuing efforts to limit it to 1.5 °C, as the impact is much lower at 1.5 °C. Source: UNFCCC (2015)
[12] Berahab, R. (2017)
[13] Under BAU, emissions are projected to rise from 405 $MtCO_2e$ in 2015 to 2,559 $MtCO_2e$ by 2035. Of the pledged fifty percent reduction, seventeen percent will be achieved unconditionally through domestic resources, whereas the remaining thirty-three percent is subject to provision of grant based or concessional international finance, technology transfer, and capacity building. Source: GoP (2024a).

has also emerged as a global leader in rooftop solar, expanding its capacity by nearly twenty times between 2022 and 2024 (Schumer et al., 2025). At the same time, the country has rolled out an electric vehicle policy alongside energy efficiency measures across various sectors, such as building infrastructure and consumer appliances. Moreover, to support the efforts towards building resilience to climate vulnerabilities and natural disasters, Pakistan has also secured financing under the IMF's resilience and sustainability facility (RSF).

Undertaking actions like these for climate mitigation and adaptation is not only crucial for combating climate risks faced by the country but also for maintaining economic competitiveness.[14] The latter is particularly true in light of rising global investors' interest in environmental, social and governance (ESG) assets amid increasing concern for environment,[15] and shifting trade and investment preferences.[16] In addition, the upward trend in green patents globally presents an opportunity for Pakistan to leapfrog carbon intensive pathways and instead directly adopt green technologies **(Figure 6.7)**.[17]

Patents for Environment-related Technologies* Figure 6.7



*Technologies relevant to environmental management, climate change mitigation, climate change adaptation and ocean sustainability

Source: OECD

Against this backdrop, the rest of this chapter is organised as follows. **Section 6.2** sheds light on the already realised and expected impact of climate change on Pakistan's economy as well as economic policymaking, where the key finding is that climate change has evolved from long-term concern to pressing macroeconomic risk. This is followed by **Section 6.3** that discusses the challenges related to climate action, including limited institutional and technical capacities, which reflect Pakistan's low level of preparedness to face climate shocks. **Section 6.4** highlights the need to mobilise domestic resources for climate finance considering consistently low international inflows. **Section 6.5** offers concluding remarks with broad recommendations.

[14] Climate mitigation and adaptation enhance competitiveness by reducing climate-related losses, supporting green innovation, and leveraging policies like carbon border adjustment mechanism (CBAM) and emission trading.

[15] ESG assets are on its way to become 25 percent of global assets under management by 2030 (Bloomberg, 2024). This is amid growing commitment by corporate shareholders towards profits, people and planet as against yesteryears' sole focus on shareholder value maximisation. For instance, in 2019 Business Roundtable (BRT), a 50-year-old association of American CEOs, shocked corporate governance theorists with a commitment to deliver value to all corporate stakeholders, including communities, instead of only serving shareholders. BRT also support reduction in GHG emission (BRT, n.d.).

[16] For details, see Section 6.2 and Box 6.2

[17] The share of SDGs related patents increased from about 25 percent in 2015 to 31.4 percent in 2023. Within this, patents specifically linked to climate action (SDG 13) and affordable and clean energy (SDG 7) grew faster than most other SDGs between 2000 and 2023, highlighting accelerated innovation in green technologies. (WIPO, 2024)

6.2 Impact of Climate Change on Pakistan's Economy[18]

Climate change poses multi-sectoral and multifaceted threats to Pakistan's economy. The directly exposed sectors, most notably agriculture, energy, infrastructure, and tourism, experience the most immediate and visible impacts,[19] with their repercussions extending into industry and services sectors. They also have negative socio-economic consequences that undermine the progress towards sustainable development goals (SDGs).[20]

Climate disasters have already inflicted economic losses amounting to US$ 29.3 billion on Pakistan's economy during 1992-2021 (IMF, 2025), whereas the 2022 floods alone caused damages of around US$ 28 billion (MoPD&SI, 2022).[21] SBP staff estimates also show that in terms of direct impact, floods had significant and negative effect on GDP, albeit it was partially compensated owing to post-diluvial improvements in agricultural output and post-disaster rehabilitation and recovery. Nevertheless, the floods also had an indirect (negative) impact on GDP through increases in input prices (**Box 6.1**).

In the long term, World Bank (2022) estimates show Pakistan's GDP is projected to fall by 4.5–6.5 percent by 2050 due to climate change in the optimistic scenario, and by as much as 7–9 percent in the pessimistic scenario, where agriculture and industry are the most exposed sectors.[22] Without timely climate action, the output of both these sectors is estimated to drop by up to 17 percent, by 2050.

Moreover, in addition to physical and operational level impacts, there are significant transitional risks that impact various sectors of the economy.[23] In view of these risks, this section maps out broad contours of climate change impacts and its risks across agriculture and industrial sectors, along with risks to inflation, external account, and fiscal position.

Impact on Agriculture

Pakistan's agriculture sector is among the country's most climate vulnerable and hardest-hit sectors, being highly sensitive to climate variability and extreme weather events. Given the sector's importance, even modest climate shocks translate into huge economic losses and threaten food

[18] In consideration of limited empirical estimates of future climate-related losses in Pakistan, some sub-sections of Section 6.2 are based on global literature review in the context of Pakistan's economy. Forecasting of its economic impacts is challenging since frequency and magnitude of climatic events are uncertain (Batten, 2018).
[19] IPCC (2023)
[20] IMF (2025a); UN-Habitat (2023).
[21] Both numbers are adjusted for 2021 inflation.
[22] The risks of these declines are compared to BAU without further climate impacts and a counterfactual steady GDP growth of 4 percent by 2050. Pessimistic scenario assumes the likelihood of simultaneous and multiple climate events, which may compound the direct and indirect risks.
[23] Examples of physical impact include flood related damage to crop and industrial facilities, whereas examples of operational impact, includes heatwaves affecting agricultural and labour productivity. Transitional impacts stem from policy pressure, carbon pricing, shifting consumer demand requiring decarbonisation via new materials/processes. Source: BoE (2018)

security.[24] In fact, agriculture sector was the hardest hit in the 2010, 2022, and 2025 floods with damages estimated at US$ 5.0, 13.0, and 1.5 billion, respectively (NDMA, 2025; MoPD&SI, 2025).

Crop production: Crop production is highly sensitive to fluctuations in temperature, rainfall patterns, water availability, and extreme events – such as floods, droughts, and heatwaves (ADB, 2017). For example, in 2010, floods submerged 2.3 million hectares of *Kharif* crops, destroyed around 2 million bales of cotton (ADB & WB, 2010). In 2022 floods, crops accounted for around eighty percent of total agriculture damage, with livestock contributing 17 percent. Around 1.8 million hectares of agricultural land was damaged (MoPD&SI, 2022). Similarly, during 2025 floods, agriculture sector was the most affected, with 2.2 million acres of crop land inundated.

Furthermore, estimates suggest that a 0.5 – 2.0 °C rise in temperature will reduce overall agricultural productivity by around 8 – 10 percent by 2040 (Dehlavi et al., 2015), while overall crop yields may decline by 47 percent by 2050 (UNDP, 2024). Yield reductions due to climate change are estimated to be widespread across all major crops **(Table 6.1)**. Similarly, a 3–5 °C rise can reduce cotton and sugarcane yields by up to 6 and 16 percent per year, respectively (Akbar & Gheewala, 2020).

Change in Yield* **Table 6.1**

percent

Major Crops	Pakistan vs World	Next Decades (2020-39)	Mid-Century (2040-2059)	End of Century (2080-2099)
Maize	Pakistan	-6.2	-10.2	-10.4
	World	-3.6	-7.3	-11.2
Rice	Pakistan	-13	-22.5	-29.7
	World	-1	-1.1	-2.2
Wheat	Pakistan	-0.6	-2.1	-6.2
	World	-3.5	-7.5	-12.9

*Projected annual change due to climate change (moderate emission scenario) compared to a scenario without climate change

Source: UNDP (n.d.)

Water stress: Agriculture output losses are compounded by growing water stress,[25] as the sector is the largest consumer of water, using about 96 percent of freshwater withdrawals (WB, n.d.). With more than 82 percent of arable land depending on river-fed irrigation,[26] rising temperature and increasing weather variability exacerbate these issues. This adds to growing demand for scarcer water resources and puts the food system at further risk (ADB, 2012).

Moreover, accelerated glacier melting has not only caused floods, damaging the crops directly but also depleted water resources. As these glaciers deplete, flows may decrease by around 30-40 percent in the next 50 years (ADB, 2017). At the same time, rainfall patterns have become erratic; prolonged dry spells during the winter season and above normal monsoon rains, often resulting in floods, have hampered crop productivity and caused substantial losses to agriculture sector (SBP, 2025; SBP,

[24] The sector contributes 23.3 percent to Pakistan's GDP, sustains over one-third of the labour force with majority being women, and directly and indirectly contributes around 70 percent of the country's exports. Source: PBS (2025a); PBS (2025b); FAO (n.d.a)

[25] Total renewable water resources per capita have fallen from 4,858.3 m3/inhab/year in 1964 to 1,012.72, m3/inhab/year in 2022, well below the water stress threshold of 1,700 cubic meter. Source: FAO (n.d.b)

[26] Source: FAO (n.d.a)

2023a). These climatic pressures on water resources are compounding the challenges posed by inefficient water management that has led to greater water scarcity, and low use efficiency **(Figure 6.8)** amid depletion of ground water at an alarming rate (PIDE, 2022).

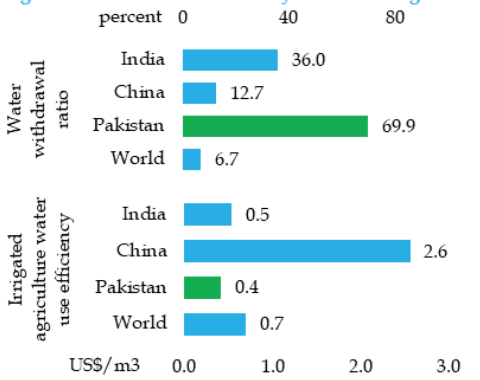
Livestock: Climate change directly affects livestock sector in terms of loss of livestock, its reproduction and health. For instance, the 2010 and 2022 floods in Pakistan caused about 1.5 million and 0.8 million livestock fatalities, respectively (MoPD&SI, 2022; ADB & WB, 2010). In addition, climate change can affect livestock indirectly via feed and fodder (Gauly et al., 2013). Excessive heat stress not only harms the health, fertility, and productivity of farm animals but also causes an immediate reduction in milk yield of dairy animals (Rahman et al., 2019).

Moreover, water scarcity impacts feed production, leading to livestock weight loss and higher mortality during prolonged dry periods (Chandio et al., 2023).[27] In the absence of climate action, livestock losses in Pakistan are estimated to be 18 percent of GDP by 2030 (UNDP, 2024). In addition to these physical impacts, the livestock sector also faces a major transitional impact considering that it is characterised by relatively high methane intensity of livestock products **(Figure 6.9)**.

Impact on Industry

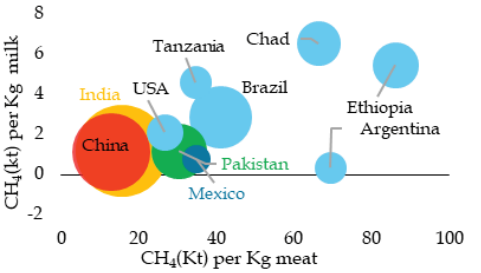
While the impact of climate change on agriculture remains central, it has cascading impacts across industrial sectors, including manufacturing, energy and others. These impacts range from physical damage to supply chain breakdowns and reduced productivity. For example, the recent floods in Pakistan affected industrial activities both due to reduced raw materials availability and supply chain disruptions, with estimated industrial losses at US$ 0.3 billion in 2010 and US$ 3.8

Agriculture Water Use Efficiency in 2022 **Figure 6.8**



Source FAO

Methane Emissions from Livestock in 2023 - Top 10 Countries by Livestock Population **Figure 6.9**



*Total methane emissions by livestock per kg of meat and milk produced by cattle, goat, sheep, & buffalo
Note: size of bubble represents number of animals (cattle, goat, sheep, & buffalo)
Source: FAO

[27] For instance, droughts during 1999-2002 in Sindh and Balochistan killed two million livestock (WB & ADB, 2021), whereas livestock output declined by 48 percent in the worst affected districts by droughts during 2015-2017 (WB, 2022).

billion in 2022 (SBP, 2023a; MoPD&SI, 2022; ADB & WB, 2010).

Manufacturing: In terms of physical damage, the impact of climate change events on crops and livestock have spillover effects on wheat and rice milling, food processing, textile and other agro-based manufacturing industries. These industries face shortage of inputs and raw materials due to loss of agriculture output.

Similarly, within manufacturing, textile and clothing sub-sectors are at risk from climate change across their production cycle (**Table 6.2**). Textile industry also faces a major transitional impact, considering that it is one of the largest contributors to global GHG emissions, higher than aviation and shipping sectors (UNCTAD, 2025; Filho et al., 2022). As a result, there is a demand for sustainable and green production cycle to reduce the impact on climate change through different regulations. Adapting these measures imposes an additional cost on the industry.

Energy: As one of the most climate exposed sectors and one of the main drivers of climate change, energy sector faces a variety of climate risks. Energy infrastructures —generation and distribution systems —are vulnerable to extreme weather conditions and natural disasters (Mikellidou et al., 2018; Goncalves et al., 2024).

In Pakistan, the country's 11,500 MW of hydel power capacity,[28] which was 28.0 percent of total grid as of FY25, is vulnerable to climatic conditions due to increased variability of rain, glacial melting, and drought amid rising temperatures. At the same time, with thermal power grid capacity at 56.3 percent, energy sector also faces a transitional risk, becoming more evident as the country adds decentralised solar to the overall energy mix. Moreover, extreme temperature results in tripping of T&D lines, while high power demand in extreme heat also results in power-breakdown (IGC, 2025a; Mahmood et al., 2013; Mohsin et al., 2024).

Climate Impacts on Textile Sector **Table 6.2**

Climatic event	Impact channel	Impact
Temperature, precipitation, extreme weather	Raw material supply	Yield reduction, quality decline, price volatility
Water availability, energy supply, extreme weather	Production operations	Operational disruptions, increased costs, resource scarcity
Extreme weather, sea level rise	Supply chain logistics	Infrastructure damage, transport delays, higher shipping costs
Climate migration, job displacement	Labour stability	Workforce Disruptions, Social Challenges in Production Hubs

Source: Sustainability directory

Impact on Labour Productivity

Labour productivity in Pakistan across all sectors, including agriculture and manufacturing, is estimated to decline by 7 percent and 10 percent due to climate change under moderate and high emission scenarios, respectively.[29] UNDP's Human Climate Horizon (HCH) estimates show that Pakistan is at risk of losing

[28] NEPRA (2025).
[29] MoF (2024).

significantly higher number of labour hours per worker in a year compared to global average in both low-risk sectors and high-risk sectors over the next three decades.[30] These losses are projected to increase further, if the necessary climate action is not undertaken (**Figure 6.10**).

This is because high temperature and heat stress affect labour productivity across the globe due to occupational safety and health hazard (ILO, 2020). Such is the case in Pakistan as well. A recent survey of textile workers in Karachi showed that extreme heat stress at working places is resulting in health issues and reducing labour productivity (Germanwatch, 2025).

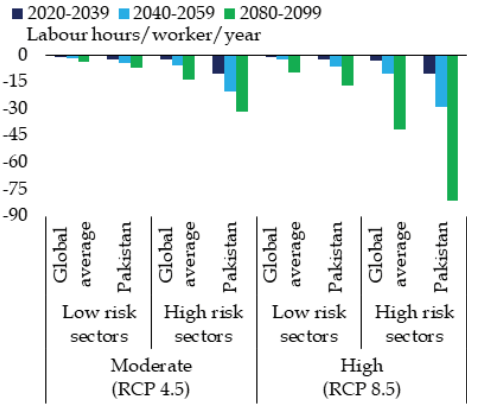
Impact on External Account

Climate change impacts the external account through various channels (IMF, 2025b). The negative impact of climate change on Pakistan's industry and agriculture spillover onto exports through reduced output and labour productivity. For instance, in FY25, damages to domestic cotton crop due to heatwaves and erratic rainfall necessitated higher cotton imports (SBP, 2025). Earlier in FY23, food and textile exports were affected by the floods, while damage to food crops resulted in higher import of pulses, sugar and cotton. These episodes exemplify the empirical findings of Khan et al. (2019) who found a negative relationship between climate change and Pakistan's agriculture exports over the period 1975–2017.

On the whole, developing countries like Pakistan are at the risk of worsening trade balance due to both direct and indirect effects of climate change. The former impacts production, infrastructure and transport routes. The latter results from changes in resource endowments, such as land and water availability, and efficiency of factors of production (Dellink et al. (2017).

In addition to these physical and operational risks, trade balance may also be affected by transitional risks (IMF, 2021). For instance, EU's climate neutral regulations and European Green Deal may put Pakistan's textile exports at a risk going forward, if the necessary actions are not taken (**Box 6.2**). Addressing such risks will not only require compliance with the

Impact of Climate Change on Labour Hours of Pakistan **Figure 6.10**



Representative Concentration Pathways (RCPs) are scenarios that include time series of emissions and concentrations of the full suite of GHGs, aerosols and chemically active gases, as well as land use/land cover. Each RCP ends in numbers (e.g., 4.5, 8.5) that provides only one of many possible scenarios that would lead to the specific radiative forcing characteristics (IPCC Fifth Assessment Report).
Source: HCH, UNDP

[30] High-risk sectors are agriculture, mining, construction and manufacturing, while all others are classified as low-risk sectors for the labour hours estimation. Source: UNDP (n.d.)

evolving environmental standards but also necessitates changes to Pakistan's own import policy to reduce imported emissions that feed into exports (CDPR, 2024).

Similar to exports, foreign direct investment (FDI) is negatively affected in economies and industries that are more vulnerable to climate risks.[31] The risks and uncertainty associated with climatic events can worsen foreign investors' confidence leading to likely reduction in FDI and portfolio investment (IMF, 2025b).

Impact on Price Stability and Monetary Policy

Climate shocks impact price stability through different channels. The impacts are expected to be visible both in the short and medium term, whereas weak mitigation actions also increase the risk of inflationary pressures. For instance, supply side shocks arising from floods, extreme temperatures or drought can affect crop production leading to volatility in food prices (IMF, 2025b). Similarly, damage to transport infrastructure, trade disruptions and policy spillovers may also have differential impacts on prices (UNDP, 2024). Moreover, inflation can also be affected by climate policies, such as carbon pricing, that can cause structural shifts to price patterns across the economy (Debelle, 2019; McKibbin et al., 2020).

Literature suggests that rising temperature has an adverse effect on headline inflation in both low- and high-income countries (Kotz et al., 2023). Within the components of inflation, food inflation is impacted the most in both advanced and emerging economies. This is due to climatic variations in short-term, particularly due to rising temperatures (Faccia et al., 2021). Food inflation is also impacted by negative effects of temperature on crop yield; Abbas et al. (2022) found a negative relationship of temperature and rainfall with wheat production in Pakistan during the period 1979–2020 leading to increase in food inflation.

Similarly, floods also increase inflationary pressures in the short-term (Parker, 2018). For instance, in the 2010 floods, food inflation rose due to supply-chain disruptions, which along with higher government borrowing for post-flood expenditures reduced monetary policy effectiveness to contain monetary expansion and inflation (SBP, 2010). Though short-lived, the impact of the 2022 flood was devastating for inflation in the first few months (Hussain et al., 2025). SBP staff estimates also show that floods have had a positive and immediate contribution to the NCPI inflation, whereas temperature shocks are likely to increase inflation in the long run (**Box 6.1**).

The climate shocks also pose challenges for central banks in achieving monetary policy mandate (NGFS, 2023). For example, volatility in food prices drives inflation expectation (Abbas et al., 2015) and risks central bank's inflation projections. This was the case in FY23 when the then

[31] In EMDEs and other countries, there is a strong negative association between climate vulnerability and FDI inflows. However, the climate preparedness level moderates the negative impact on FDI (An et al., 2022; Gopalan et al., 2023; Shear, 2023)

unfolding impact of the 2022 floods in Pakistan alongside exchange rate and other supply shocks resulted in increased inflation volatility and contributed to revisions in SBP's inflation projection (SBP, 2023b).

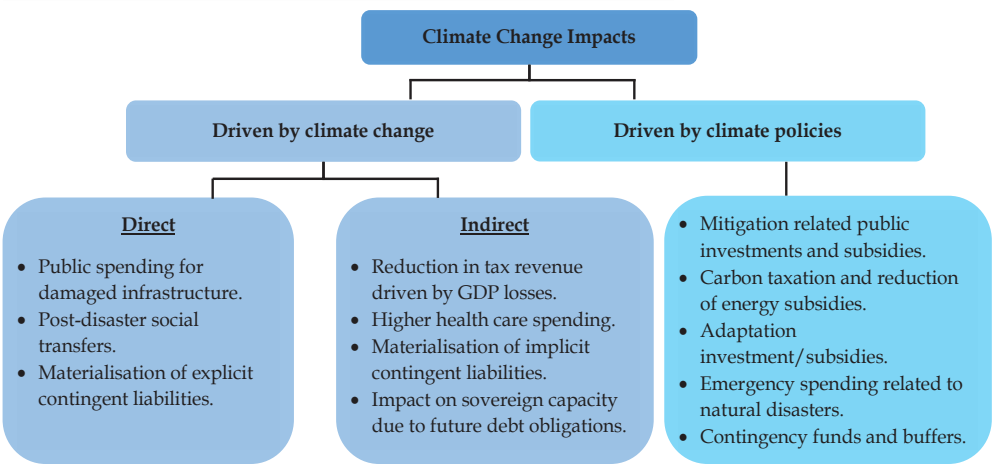
Moreover, higher climate risks and loss of assets can weaken businesses' repayment capacity and banks' balance sheets, and limit lending, reducing the effectiveness of monetary policy.[32] These risks require central banks to be vigilant. However, constraints to data availability, required expertise to forecast climatic events, and identification and quantification of the transmission of physical impacts are major challenges to calibrating appropriate monetary policy response; hence affecting price stability (IMF, 2021; NGFS, 2023).

Fiscal Impact

Climate change has a significant effect on public finance with non-discretionary measures driven by direct and indirect impacts (IMF, 2025b). These include various types of public spending including rebuilding damaged infrastructure, and increased spending on healthcare and social safety. At the same time, GDP losses lead to reduced revenues, and materialisation of government guarantees that squeezes fiscal space further. These have repercussions for future debt obligations and sovereign risk (**Figure 6.11**).

In Pakistan, the fiscal cost of recent floods in Pakistan is a case in point. Pressure on fiscal accounts increased due to expenditures for rescue, relief and rehabilitation needs. Due to limited fiscal space and external financing, a substantial part of budgeted development spending

Impact of Climate Change on Public Finances **Figure 6.11**



Source: IMF (2025b)

[32] Boneva et al (2022); Oguntuase (2020).

was reallocated for flood-related activities in FY11 (MoF, 2011; SBP, 2011). For the 2022 floods, recovery and reconstruction needs were projected to be 1.6 times the budgeted developmental expenditure for FY23, adding to fiscal pressures (MoPD&SI, 2022). The government also had to provide subsidies of Rs 44 billion to flood-affected areas and emergency cash assistance of Rs 70 billion, which was disbursed to flood-affected families through BISP (SBP, 2023a). Subsequently, the federal government also allocated Rs 164 billion in FY24 budget for flood related expenditures,[33] which added a fiscal burden of 0.2 percent of the then budgeted FY24 GDP.

In addition, there are transitional impacts of climate change on the fiscal position to meet the needs of climate mitigation and adaptation. For example, the recent risk assessments by the MoF highlight two alternative scenarios for Pakistan's climate outlook (MoF, 2025).[34] Under the optimistic climate action scenario, the government needs to invest 20 percent of US$ 58.8 billion, required to mitigate GHG emissions by 2030, which will have additional fiscal burden. These additional costs will need to be met through the imposition of carbon taxes and reduction in fossil fuel subsidies (IMF, 2025b; Bachner et al., 2019).

Impact on Urban Economy

Climate change and urban economies have a mutually reinforcing relationship. At the one end, rapid urbanisation is one of the leading causes of climate change with about 70 percent of global GHG emissions principally driven by energy demand, industrial processes, and extensive transport systems that are mainly concentrated in urban centres (Sharma, 2025). At the other end, climate-related hazards put urban economies at the risk of a variety of macroeconomic and socio-economic risks, such as damage to public and industrial infrastructure, productivity losses, increased mortality, illnesses, and scarcity of food and water (IIED, 2009).[35]

In terms of impact on climate change, Pakistan's major cities are also major emitters amid rapid urbanisation and increasing population density in urban areas. For instance, Karachi alone is estimated to produce around 9 percent of the country's total GHG emissions,[36] with nearly 38 percent stemming from manufacturing industries, followed by waste disposal/wastewater (18.3 percent), residential (18 percent), and transport (13.8 percent) segments. GHG inventories of all major cities of the country are not publicly available but anecdotal evidence suggests that the combined contribution of major cities is significant. This, coupled with the

[33] Out of the total, Rs 18 billion were allocated for disaster response costs, Rs 96 billion for subsidies related to disrupted economic activity, and Rs 50 billion for social protection. Source: MoF (2025).
[34] The first scenario is optimistic, which assumes that international support to meet conditional mitigation pledges is received and the world is able to achieve RCP 2.6 target; the second one assumes that governments do not invest in climate change, leading to RCP 8.5 scenario.
[35] Fifty-eight percent of cities report urban flooding, 54 percent cite extreme heat as climate related urban hazards, while around two-third of cities expect hazards to become more intense and frequent. Source: CDP, 2024
[36] Pakistan's GHG emission inventory is estimated to be around 489.87 mmt-CO_2e (GoP, 2024), whereas Karachi's is estimated to be 43.5 mmt-CO_2e. Source: UNDP, 2025

fact that a one percent increase in urbanisation increases carbon emission by 0.84 percent in long run in Pakistan (Ali et al., 2019), suggests that the transitional impact of climate change on urban economies will be significant.

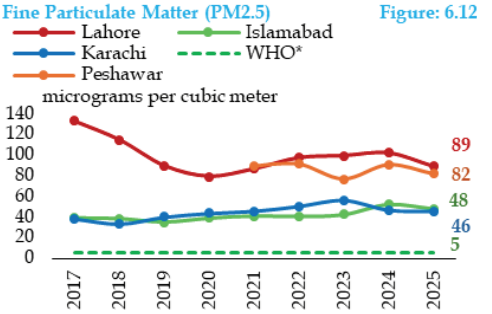
At the same time, however, climate change is also reshaping the country's major cities in at least four major ways. First, urban air quality in Pakistan's major cities has been consistently poor and, in many cases among the worst globally, making Pakistan the most polluted country in 2025.[37] This is driven largely by rapid urbanisation, motorisation and seasonal burning of agricultural residues. High concentrations of particulate matter and other pollutants in cities like Lahore, Karachi, Islamabad and Peshawar regularly exceed acceptable standards, posing serious risks to human health and increasing health expenditure **(Figure 6.12)**.

Second, Pakistan's urban population is growing at approximately 2.4 percent per year compared to global average of 1.4 percent. Owing to ill-planned urban infrastructure amid growing population pressure, concrete and asphalt are replacing vegetation in urban areas. This is leading to faster warming than surrounding rural areas and exacerbating urban flooding amid erratic rainfall patterns (Jabeen et al., 2010). These trends reflect the urban heat island effect where dense construction and reduced green cover trap heat in cities and impacting lives and livelihood (IGC, 2025b).

This worsens the impact of heatwaves, which is one of leading causes of climate related mortality globally (Countdown, 2023). In Karachi, for example, the severe 2015 heatwave caused more than 1,200 deaths (MoCC, 2015). This underscores how climatic events, infrastructural design and social vulnerabilities combine to produce fatal outcomes, where vulnerable groups, such as outdoor workers, the elderly and the urban poor, bear the heaviest impacts. As a result, heatwaves reduce overall economic productivity (Anwar et al., 2022), which is also affected by higher costs of cooling.

Third, extreme heat also alters atmospheric moisture content that triggers short but intense cloudbursts and flash flooding. In Pakistan, the largest sprawling megacities —Karachi and Lahore —have seen more frequent and severe floods. This, together with weak urban planning and insufficient drainage infrastructure, overburdened

Fine Particulate Matter (PM2.5) Figure: 6.12



* WHO recommended air quality guideline level.
Note: PM2.5 is primary indicator of air quality. They are micro inhalable air pollutants from sources like combustion and dust, that enter the bloodstream causing serious cardiovascular and respiratory illnesses.
Source: IQAir

[37] Pakistan was ranked as the most polluted country in 2025 with PM2.5 concentration of 67.3 µg/m³, where Faisalabad, Rahim Yar Khan, Lahore, and Sukkur were among the top 10 most polluted cities in the world. Source: IQAir (2025)

sewage systems, especially in low-lying neighbourhoods, leading to widespread flooding in residential and commercial zones. These recurring floods cause significant damage to infrastructure, impact commerce, disrupt daily life and livelihood and strain essential amenities (Ejaz et al., 2024).

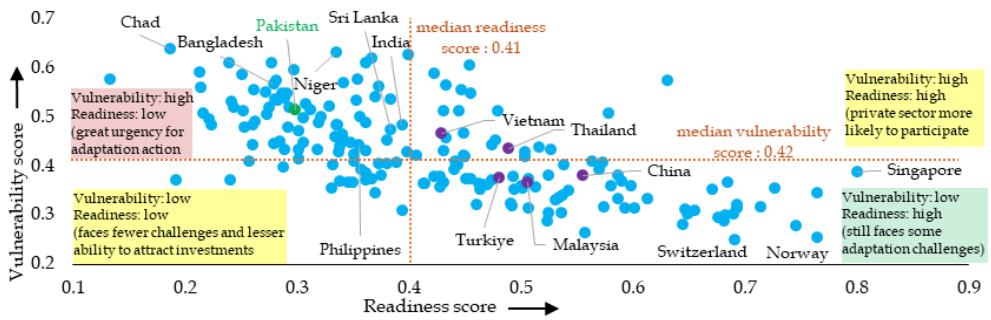
Fourth, climate variability and urbanisation are also placing additional stress on urban water resources. Extreme droughts and increasingly erratic rainfall patterns combined with inefficient water management have intensified Pakistan's looming water crisis. Additionally, runoff from heavy rain washes pollutants from commercial and industrial sites into reservoirs and rivers, degrading water quality, which has serious consequences for agriculture. Meanwhile, excessive groundwater pumping is lowering water tables and drawing down aquifers, making Pakistan a water scarce country according to all water scarcity indicators (Ashraf, 2018).

6.3 Challenges to Pakistan's Climate Action

The foregoing discussion shows that it is critical for Pakistan to undertake climate action. This is a formidable task considering Pakistan's low level of climate readiness despite high climate vulnerability **(Figure 6.13)**.

In addition, the localised nature of the impact of climate events and climate adaptation complicates the design and implementation of climate policy. This is because the current state of local government and local participation in Pakistan is not commensurate with the importance of climate action. Both local government, and local participation in Pakistan are weak (Warraich, 2025). In contrast, whilst mitigation may be pursued through some large public sector projects and initiatives,[38] most of adaptation and

Climate Change Vulnerability and Readiness Index - 2023 **Figure 6.13**



Note: The dotted line represents median; the readiness index measures the ability to leverage investment and convert them into climate adaptation utcomes; scores range from 0 to 1, with higher values indicating better readiness and higher vulnerability. Purple markers represent notable regional peers in terms of readiness.
Source: ND-GAIN

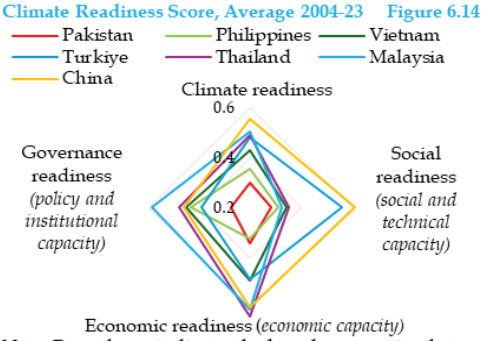
[38] Mitigation projects are typically amenable to centralised and capital-intensive intervention such as utility-scale renewable projects, large-scale afforestation & carbon sequestration, and urban mass transit etc.

disaster management are inherently local in nature, tailored to diverse geographies, climate zones and community-level vulnerabilities.[39]

Moreover, both mitigation and adaptation eventually impact individuals and businesses through physical disruptions, operational adjustments, and financial costs. While public policy and institutions enable and support private climate actions through information systems, regulation, coordination, and financing, the economic burden of climate action ultimately rests on citizens—either in the form of taxes or out-of-pocket expenditures.[40]

In this context, three overarching challenges to effective climate action relate to policy and institutional capacity; technical capacity and human capital; and social readiness. Cross-country comparison suggests that these factors, together with resource availability (discussed in **Section 6.4**), enhance readiness towards climate action **(Figure 6.14).** Strengthening these facets are both necessary and urgent to prepare Pakistan for the impact of climate change and reduce vulnerabilities.

Climate Readiness Score, Average 2004-23 **Figure 6.14**



Note: Parentheses indicates the broader capacities that each readiness category measures; scores ranges from 0 to 1, with 1 being the most favourable

Source: ND-GAIN

Policy and Institutional Environment

Pakistan's climate policy and institutional framework has expanded rapidly over the last decade, producing comprehensive policies and creating dedicated institutions for climate action. However, its effective implementation is constrained by persistent gaps in mandate alignment, coordination, and execution capacity (**Appendix 6B**).

Policy implementation: In terms of policy implementation, there are four major gaps that need to be addressed (Umar et al., 2023). First, there is inconsistent recognition of climate challenges and uneven prioritisation of actions across provinces. This is evidenced by delayed formulation and ineffective implementation of climate policies. Moreover, national frameworks, such as the National Adaptation Plan (NAP), offer broad priorities without regional specificity (UN, 2025).

Second, both the National Climate Change Policy (NCCP) 2021, and most provincial climate policy documents do not explicitly mention timelines for actions. Some policy measures allude to short- and medium-

[39] Adaptation solution varies by region—for example, drought management is needed in Balochistan, while groundwater recharge or rainwater harvesting to counter sea intrusion is the needed adaptation in Lower Indus Delta.
[40] Much adaptation is undertaken by private actors: families elevating homes, farmers changing crops, and businesses investing in low-carbon technologies. Likewise, the private sector bears most transition costs through green investments and carbon taxes.

term measures, albeit without clear execution timelines. For instance, the mitigation targets included in the NDCs are neither time-bound, nor supported by detailed activity roadmaps, weakening prospects of successful implementation. This lack of well-defined milestones, along with inadequate sectoral prioritisation, is not commensurate with Pakistan's climate vulnerabilities and commitments (Masud & Khan, 2023).[41]

Third, there is limited scientific grounding and risk-based assessments. For instance, adaptation and mitigation measures are not guided by robust risk modelling or sector-specific climate impact analysis (UN, 2025). Lastly, climate policy and climate action have not been effectively integrated with other macroeconomic and sectoral policies, including alignment with the fiscal framework (**Box 6.3**) (Masud and Khan, 2023). For instance, whilst climate policy has prioritised renewable energy (RE) expansion through decentralised solar power, several regulatory, governance, and financing challenges create investment and operational barriers towards further RE adoption amidst a lack of grid and transmission readiness **(Box 6.4).**

Institutional framework: In terms of overall design Pakistan's climate institutional architecture is in line with global best practices. In 2017, the Pakistan Climate Change Act (CCA) was passed, creating a legislative backing for climate governance framework. Under the CCA two main bodies were to be created: the Pakistan Climate Change Council (PCCC) and Pakistan Climate Change Authority (PCCA). Envisioned as a whole-of-government coordination and oversight forum, the PCCC is the apex body on climate action chaired by the Prime Minister and brings together key federal and provincial ministers and bodies. The PCCA was envisioned as a dedicated technical platform to formulate and execute programmes and coordinate implementation mechanisms.

Overall, the setting up of this structure was an important step. This is because climate action requires apex-level political leadership,[42] complemented by an independent expert climate body for technical oversight and professional bureaucracy for effective implementation (Elliott et al., 2021).

However, there are three major institutional challenges that have and continue to weigh on climate policy implementation in Pakistan (IMF, 2025a). First, the actual setting up of the PCCC and PCCA were delayed. The PCCC was established in 2022—i.e. five years after the CCA was passed. Similarly, the setting up of the PCCA was notified in May 2024,

[41] NCCP 2021 is the revised version of the earlier NCCP-2012. NCCP 2012 was formulated with a major focus on climate resilient development and adaptation in view of Pakistan's high vulnerability to adverse climatic events. The 2021 revision came after the Paris Agreement 2015, when Pakistan accepted a voluntary reduction in emissions. Hence the updated NCCP 2021 focused equally on mitigation, adaptation and identification of sectoral policy measures. Source: MoCC, 2021

[42] Other countries are also addressing this question. China's National Energy Commission, with "super ministry" status, can influence other ministries and reports directly to state council; Zambia's climate change technical committee is placed under their MoF; while Ethiopia's EPA comes directly under the PM office, etc. Source: GSDRC, 2017

following an order from the Supreme Court of Pakistan to the Federal Government (IMF, 2025a).

Second, both the PCCC and PCCA face the challenge of irregular meetings and operational delays. The meetings of the PCCC, for instance, have been few and irregular (Umar et al., 2023).[43] Similarly, despite its establishment, the PCCA remains largely non-functional due to operational delays, hurdles, and a lack of clarity on how both the Ministry of Climate Change and Environmental Coordination (MoCC&EC) and the PCCA will operate given their similar mandates (IMF, 2025a). The delay in the formation of the authority's rules poses a risk of duplication of technical functions, staffing, and workflow (MOCC&EC, 2025a; MOCC&EC, 2024a). Moreover, the MoCC&EC has inadequate resources, which constrain its programme execution capabilities (Umar et al., 2023).

Third, the unfinished devolution agenda is also contributing to institutional challenges.[44] For instance, although climate-sensitive —agriculture, water, environment, etc.—are largely devolved to provinces, until the NDC 3.0 in 2025, the federal entities continued to make international climate commitments, particularly through the NDCs, without systematic provincial ownership (Sheikh, 2025). This mismatch between constitutional devolution and centralised policy ambition creates an implementation vacuum.

Moreover, provinces that are responsible for nearly 90 percent of required climate-related functions, lack formally mandated provincial NDCs or structured mechanisms to impact national climate goals (Naeem and Aslam, 2023). This institutional disconnect reflects not only the lack of centralised direction and action, but also the absence of a coordinated, whole-of-government response. As a result, regulatory oversight in climate sensitive areas remains weak (Sheikh, 2025).[45]

In the same vein, local governments—critical for ground-level adaptation, municipal services, and localised disaster response—remain under-empowered due to incomplete devolution (Warraich, 2025). Without fiscal authority and administrative autonomy, local bodies cannot initiate or sustain investments in climate-resilient infrastructure, nor can they ensure meaningful community participation (Umar et al., 2023).

Technical Capacity and Human Capital

Limited technical capacity and human capital are among major cross-cutting constraints to Pakistan's climate action. This impacts the public and private sectors alike across diverse sectors of the economy. These constraints manifest in a variety of

[43] As per CCA 2017, the climate change council is required to meet at least twice annually. However, council convened its first meeting only in 2022 (PID, 2022) with subsequent meetings remaining infrequent, indicating delayed operationalisation and irregular functioning.

[44] Decentralisation is crucial for sub-national buy-in for climate action (Khan & Hussain, 2025).

[45] The inadequate enforcement of land-use and floodplain zoning regulations in Swat exemplifies governance gap. As a result, hotel construction and human settlements arose in high-risk riverine areas, exacerbating human and economic losses during recent floods. Source: Habib et al., 2022; Samad et al., 2024.

ways, most important of which are discussed below.

Risk assessment: Timely risk assessment in Pakistan is constrained by technical limitations in climate observation and forecasting systems, including meteorology and hydrology (MoCC&EC, 2025a). For instance, insufficient supercomputing capacity affects the accuracy of climate forecast. In addition, there is also a need for significant improvement in local data input for global forecast systems, in the absence of which forecasts are coarse, restraining the usefulness of the system (Rehman, 2024). In addition to weak early warning systems, technical limitations also affect timely risk communication, reducing their effectiveness in disaster preparedness and response.

GHG inventories: Gaps in GHG measurement undermine the credibility and effectiveness of Pakistan's mitigation planning. Although Pakistan has compiled GHG inventories since 1994, there is a lack of an institutionalised and regularly updated system for GHG inventory preparation mechanism. Moreover, a weak data collection framework and limited GHG emission modelling capacity is one of major limitations to effective mitigation. In particular, the absence of district-level and sectoral emission-factors does not just affect the precision of Pakistan's GHG inventory, but also the regional and sectoral mitigation plan and financing of projects thereof.[46]

Knowledge and training: There is a lack of an integrated approach to capacity building that spans technical, institutional, and knowledge systems in both public and private sectors. For example, agriculture extension departments often lack training in climate resilient farming.[47] Similarly, there is a limited pool of professionals in GHG inventory management in both public and private sectors, whereas there is a shortage of skills in climate sensitive areas, such as hydrology and meteorology, affecting the accuracy of weather forecast (MoCC&EC, 2025a).

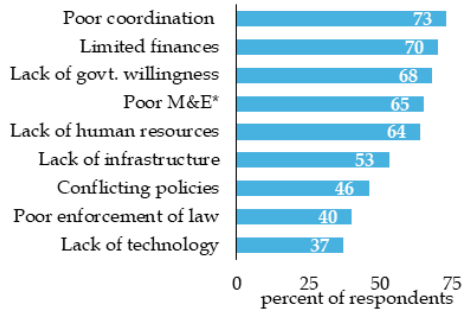
Underlying these challenges is a broader deficit in climate education, research capacity, and human capital development. Climate change education, which is the cornerstone of long-term capacity building, is perceived as insufficient for a wide array of reasons, including insufficient funding and limited resources (**Figure 6.15)**. The majority of firms report capacity-building activities as inadequate, citing insufficient funding, lack of skilled staff and limited technology and access to resources (MoCC&EC, 2025a). Human capital development also remains nascent as universities in Pakistan have a limited role in climate related R&D and technology advancements (Jaffery, 2025).

Social Readiness

Research on social aspects of climate action is clear in the view that purely technical solutions will fall short if key social challenges are left unaddressed (Shaikh, 2024). This is because climate action causes substantial changes to how individuals and businesses operate. Indeed, the success of

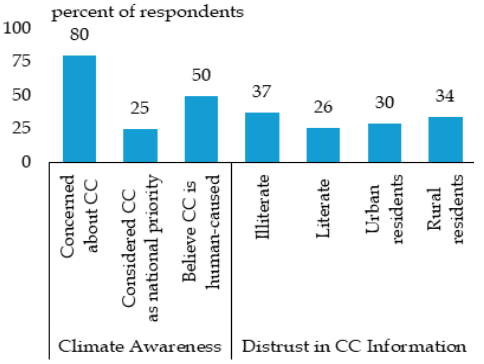
[46] MoCC&EC (2025); Khan, & Hussain (2025); UN (2015)
[47] WB (2017); MoCC&EC (2025); UN (2015)

Organisational Perception of Constraints to Climate Education Figure 6.15



*M&E: Monitoring and evaluation
Note: Based on survey of 175+ organisations
Source: MoCC&EC (2025)

Climate Change (CC) Awareness in Pakistan Figure 6.16



Source: Baron et al. (2023)

climate action depends much on how well the public demands or accepts the required change. Public disregard of climate change as a national agenda and weak public trust amid challenges to political consensus are key social constraints in Pakistan. The country's already low educational attainment also undermines effective implementation of climate policy.

Climate change awareness: Basic climate change awareness seems to be high in Pakistan. A 2023 survey suggests that around 80 percent of Pakistanis are concerned with climate impacts. However, when asked to rank climate change as a national priority, only 25 percent placed it among the top three issues (**Figure 6.16)**. This suggests that Pakistanis do not consider climate change as a pressing challenge that requires urgent action.

Other surveys and studies also point in the same direction. For instance, the understanding that climate change is caused by humans is not widely pervasive in society. A 2025 nationally representative survey shows that 70 percent of respondents attributed climate change to natural cycles or factors beyond human control (GP, 2025). Such views can foster a sense of helplessness, reducing support for climate action. Li et al. (2023a) also find that households' and businesses' willingness to pay for climate action in Pakistan is limited due to low level of education.

Public trust: Climate actions, whether taken by the public sector or private sector, require households and businesses to believe that sacrifices today will pay off in the future and that authorities will manage resources fairly. This rests on public awareness, education, and the level of trust in climate information (Li et al., 2023b).

Research suggests that public trust in climate action in Pakistan is low, which is prevalent across different sections of society **(Figure 6.16).** Moreover, there is a general lack of trust in green products and their benefits, discouraging business entry in this segment (Jianguo & Solangi, 2023; Baron et al., 2023). Weak public trust in climate governance, emanating from

infrequent reporting on current climate projects and financial opacity, impairs the government's capacity to take climate action, such as raising new green taxes or enforcing emission control (CFP, n.d.; Sherani, n.d.)

Public trust is also affected by low community engagement. Research suggests that public sector's climate action in Pakistan has often been top-down, with insufficient input from the affected communities in the design and implementation of adaptation measures (MoCC&EC, 2024a). Moreover, climate journalism is limited to event-driven coverage, amid a lack of prioritisation and training that hinders community engagement on climate change (Ahmed, 2024). Lack of media focus leads to low public scrutiny of climate projects, engendering mistrust.

Political consensus: Building societal consensus for climate action in Pakistan is constrained by the country's political economy. Elite capture in Pakistan has contributed to restricting systemic changes in environmental institutions and reducing compliance with the regulations and behavioural changes by polluters (WB, 2019). Moreover, an abrupt shift towards greener policies could face pushbacks, if they are not managed in an inclusive way. Against this backdrop, environmental and climate advocacy groups in Pakistan, though growing, struggle to counter the influence of powerful industrial lobbies due to limited resources and political influence (Shaikh, 2024).

6.4 Challenges to Climate Financing[48]

Finance is critical to the success of climate action given its vast and diverse scale. In terms of mitigation, global climate finance, mainly sponsored by developed economies, is important to meet the targeted reduction in global GHG emissions. This is because the bulk of pledged emission reductions by most developing countries, including Pakistan, are conditional to the provision of international grants, stemming from the 'principle of common but differentiated responsibilities' (UNFCCC, 2015).

In terms of adaptation, countries must essentially finance domestic adaptation needs on their own since adaptation is inherently local. There have been some recent demands by countries and multilateral development banks (MDBs) for increasing global financing to meet adaptation needs, especially of developing economies (UNDP, 2024). However, unlike mitigation, adaptation efforts cannot be conditional to global financial flows, since when it comes to adaptation and disaster risk management each country is essentially on its own. Against this backdrop, the state of global and domestic climate financing landscape is a major challenge to Pakistan's climate action.

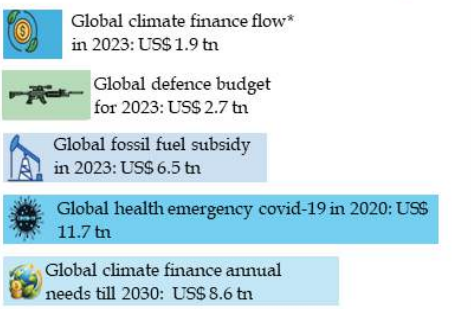
[48] Data related to climate finance —financial needs and flows by type, objectives, sectors and countries —is discontinuous. Data reported by different institutions also often do not match. Notwithstanding these limitations, there is sufficient evidence to believe that the key insights discussed accurately reflect the current state of climate finance in Pakistan and around the world.

Global Climate Finance Landscape

The fundamental issue in global climate finance is the persistent gap between global financing needs and current global priorities—a challenge that Pakistan and several other EMDEs have in common. Global climate financing needs to limit global warming to 1.5 °C are estimated to be US$ 8.6 trillion per year until 2030.[49] However, global climate financial flows remain substantially lower than both financing needs and global spending on other priorities, including the Covid-19 **(Figure 6.17**). This reflects low prioritisation of climate change as a major crisis, and insufficient political will.

Moreover, the recent withdrawal of the US from the Paris Agreement risks increasing the gap between global financing needs and actual flows (Salik, 2025).[50] This is because withdrawal by any major country risks setting a damaging precedent for withdrawals of pledges by other countries. It also raises sovereign risk perception for private investors in EMDEs. Institutional analyses show that predictable concessional global finance is important for mobilising large scale domestic and international private finance (OECD, 2023).

Global Climate Finance in Context — Figure 6.17



*Latest publicly available data is for 2023; however, early data releases estimate the 2024 number to be around US$ 2 trillion.

Sources: CPI; WB; IMF

The large global financial gap presents a challenge to global agenda of climate change and enhances climate risks. The economic cost of climate inaction could amount to US$ 266 billion by 2050 from 1.5°C of warming and it is estimated to reach US$ 1,062 billion by 2100 (Climate policy initiative (CPI), 2025). For countries like Pakistan, this has two major implications. First, like other developing economies, Pakistan may not be able to achieve its conditional GHG emission reduction commitments, which are nearly two-thirds of its total commitments. Second, if global warming breaches the 1.5 °C mark, Pakistan's financing needs for adaptation and disaster risk management may be much higher than what's currently projected.

Global Climate Finance Flows to Pakistan

Pakistan's climate financing needs are estimated to be US$ 331 billion between 2024 and 2030, equivalent to around 10 percent of cumulative GDP for these years

[49] CPI (2025) reports global climate finance needs (required to limit global warming to 1.5 °C) at US$ 8.6 trillion per annum; others such as OECD, IEA and ISO estimate that number to be US$ 5.4 trillion to US$ 11.7 trillion per annum. Average estimates are around US$ 8-9 trillion (OECD, n.d; IEA, 2023; ISO n.d).

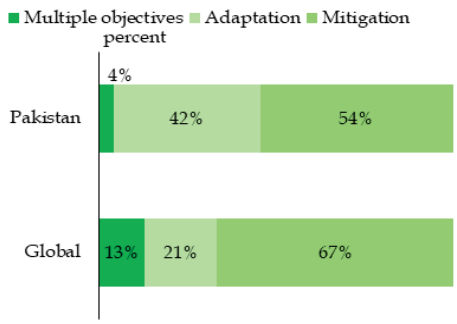
[50] As of January 2026, the United States has officially withdrawn from the Paris Agreement for the second time. Previously, the USA withdrew in 2020 but rejoined in 2021. The US withdrawal may hamper global climate aid as the US contributed around 8 percent of total global climate finance in 2024 alone. (Gabbatiss, 2025)

or US$ 47 billion per year (CPI, 2024).[51] The financing needs reflect the country's high climate vulnerability and very little contribution to global GHG emissions. The country's financing need for adaptation is 42 percent of total financing needs, compared to 21 percent globally (**Figure 6.18a**), whereas financing needs for water and disaster risk management (DRM) are also higher than global average (**Figure 6.18b**).

However, global climate finance flows to Pakistan are far below the country's financing needs. In absolute terms, average annual climate finance inflows have been estimated at US$ 1.4 – 2 billion over the past decade, peaking at approximately US$ 4 billion in 2021. These inflows remain insufficient to fund Pakistan's conditional NDC commitments. Moreover, global climate finance flows to Pakistan also remain significantly lower in per-capita terms, compared to that received by peer economies, including Bangladesh, the Philippines, Kenya and India (Akhtar & Khawaja, 2025). There are three main and somewhat interrelated reasons behind these financing gaps, which are briefly discussed below.

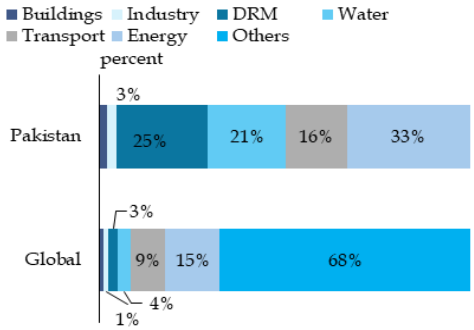
Bankability: Most non-grant international climate financing as well as domestic private sector financing are typically channelled to bankable projects (UKID, 2023).[52] For climate projects, bankability is somewhat more challenging given the long-gestation and complex nature of

Climate Finance Needs - by Objective (2024-30) Figure 6.18a



Source: CPI

Climate Finance Needs - by Sector (2024-30) Figure 6.18b



Source: CPI

[51] GoP's estimates of needed climate finance range from US$ 200-348 billion for climate resilient development by 2030 and NDC implementation. Moreover, the GoP's latest Pakistan Climate Prosperity Plan for multi-phased investment and technology access, focusing on the convergence of development, climate and nature, has identified an investment need of US$ 1.6 trillion by 2050. Source: GoP, 2024; MOCC&EC, 2024b; MoF, 2026.

[52] Climate financing opportunities that are bankable refers to the use of debts or equity in projects that offer a minimum market-based financial returns, if not above-market; where risks are mitigated while revenue streams and cash flows are predictable. Bankability hinges on a variety of factors including sovereign risk; credit risk; exchange rate risk; and political risk, and macroeconomic stability. Moreover, countries with mature financial markets, and stronger institutions, fiduciary standards and regulatory frameworks are better placed to prepare bankable projects.

Multilateral Climate Finance by Objectives and Financing Type (till 2024) **Table 6.3**

million US$

	Concessional loan	Grant	Guarantee	Equity	Approved	Disbursed	Disbursement percentage	Vulnerability*
Adaptation								
China	0	7	0	0	7	5	75	0.38
Malaysia	0	10	0	0	10	3	30	0.37
India	0	58	0	0	58	31	52	0.49
Pakistan	0	163	0	25	188	57	30	0.52
Bangladesh	58	260	0	0	318	172	54	0.57
Total Global	825	7,622	40	543	9,030	4472	50	-
Mitigation								
	Concessional loan	Grant	Guarantee	Equity	Approved	Disbursed	Disbursement percentage	Vulnerability*
Malaysia	0	22	0	0	22	21	92	0.38
Pakistan	37	42	9	0	88	27	31	0.37
Bangladesh	291	63	0	0	355	25	7	0.49
China	0	395	0	0	395	261	66	0.52
India	805	310	0	333	1,447	823	57	0.57
Total Global	8,585	8,732	318	621	18,256	8,781	48	-
Multiple Focus								
	Concessional loan	Grant	Guarantee	Equity	Approved	Disbursed	Disbursement percentage	Vulnerability*
Malaysia	0	14	0	0	14	2	13	0.38
Pakistan	0	15	0	15	30	2	8	0.37
Bangladesh	0	47	0	0	47	35	75	0.49
China	100	79	0	0	179	104	58	0.52
India	200	91	0	25	315	28	9	0.57
Total Global	3,283	5,859	40	570	9,752	2,564	26	-

*Higher vulnerability score indicates higher climate exposure and vice versa

Source: SBP Staff calculations based on CFU data and ND-GAIN

climate projects.[53] The emphasis on bankability has had a two-pronged impact on global climate finance flows to Pakistan.

First, when it comes to global climate finance mitigation projects are considered more bankable than adaptation projects (IMF, 2025c), whereas Pakistan's financing needs for mitigation are lower than global average **(Figure 6.18a)**. Second, the bankability of climate projects in the country is affected by recurring episodes of macroeconomic instability, exchange rate volatility, elevated sovereign risks and political uncertainty, amid underdeveloped financial markets and weak institutional and regulatory environment (Pereira, 2025).[54,55]

These factors reflect in global climate finance flows to Pakistan. Whilst globally, mitigation has seen more approvals and

[53] Climate projects require relatively long and cumbersome preparatory and logistical work to start and take longer to yield returns compared to traditional projects.

[54] This is mainly because of the public good nature of adaptation projects, such as storm-resilient roads, a flood embankment or a weather station does not generate direct cash flow. Consequently, most of adaptation finance remains dependent on strained domestic public budgets. Source: IMF, 2025c; OECD, 2025.

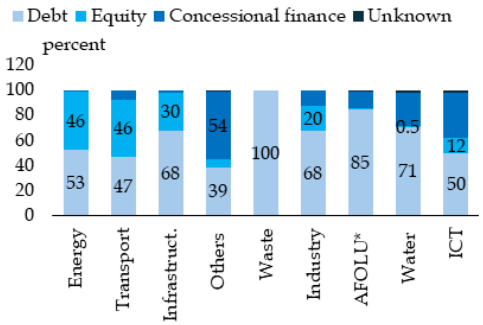
[55] In fact, under the Paris Agreement, adaptation is recognised as a development and equity issue seen from the perspective of humanitarian crisis prevention rather than climate policy Source: UN Paris Agreement 2015 Article 7.2.

disbursements, mostly through loans and equity (CPI, 2024),[56] Pakistan received more inflows for adaptation, which is mainly financed through grants **(Table 6.3)**.

The bias for bankability in global climate finance and Pakistan's low bankability is also reflected in geographical allocation of global climate finance. With debt being the dominant instrument (**Figure 6.19**), global climate finance is lopsided towards AEs, and those EMDEs that have developed financial markets and bankable project pipelines (Kerr & Hu, 2025). For instance, North America, Western Europe, and East Asia attracted nearly 82 percent of total global finance flows in 2022. In contrast, flows to highly vulnerable regions, such as Sub-Saharan Africa and South Asia, were significantly lower, as most EMDEs face a cost of capital penalty that risks making climate projects unfeasible (**Figure 6.20a & 6.20b**) (CPI, 2024; IEA 2024).[57]

Project Pipeline: Pakistan's climate finance gap also stems from a limited capacity to develop project pipeline. Developing project pipelines is important to attract international public and private sector inflows since it gives a sense of direction and confidence to MDBs and market participants, and increases their

Climate Finance - by Sector and Instrument Figure 6.19



*AFOLU stands for agriculture, forestry, other land use, and fisheries.
Source: CPI

commitments (Fraz, 2025; UKID, 2023; IMF, 2025c).

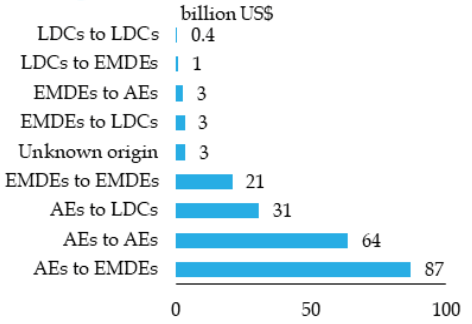
The country's weak project pipelines are due to a variety of factors. At the one end, as discussed in **Section 6.3**, integrated sectoral or provincial action plans do not exist, whereas the National Adaptation Plan also does not have detailed project prioritisation. At the other end, there is a need for evidence-based quantification of the cost of climate inaction to create buy-in for global grants and concessional financing (UKID, 2023).

Lastly, MDBs also report that Pakistan's disbursement rates for climate finance are hindered by bureaucratic bottlenecks and shifting political priorities (Fraz, 2025). For example, World Bank's Pakistan Hydromet

[56] Climate finance data shows that debt overwhelmingly dominates sectors with mature markets and strong private participation, especially the main mitigation sectors. Energy sector projects were financed with the share of (market-rate) debt and equity at 53 percent and 46 percent respectively, reflecting their commercial viability and ability to mobilise private capital on a scale. Transport projects were financed with an almost equal share of (market-rate) debt (47 percent) and equity (46 percent), while only a small share (around 7 percent) came from concessional finance. Source: CPI, 2025.

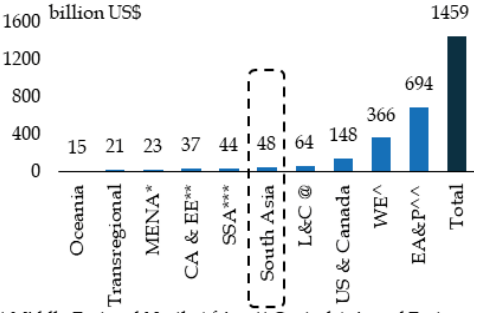
[57] Cost of capital penalty (or capital risk premium) refers to the significantly higher financing costs for clean energy projects in EMDEs compared to advanced economies. For example, the cost of capital for a utility-scale solar PV plant in 2021 was between two to three times higher in key emerging economies than in AEs and China. Source: IEA, n.d.

International Climate Finance Flows from Origin to Destination in 2022 **Figure 6.20a**



AEs: Advanced economies; EMDEs: Emerging market and developing economies; LDCs: Least developed countries
Source: CPI

Global Climate Finance - by Destination in 2022 **Figure 6.20b**



* Middle East and North Africa; ** Central Asia and Eastern Europe; *** Sub-Saharan Africa; @ Latin & Caribbean; ^ Western Europe; ^^ East Asia & Pacific;
Source: CPI

and Climate Services Project concluded in mid-2025 with critical components scrapped. According to the World Bank's completion report, weather radars, automatic weather stations and observatories were dropped due to procurement delays and institutional frictions (WB, 2025a). In addition, lack of technical data anchors, such as integrated MRV (Monitoring, Reporting, and Verification) system, makes it difficult for donors to track outcomes, leading to risk aversion among international lenders (GoP, 2024).

Supporting Domestic Environment: A supporting domestic environment is necessary to attract and absorb global climate finance, especially those from the private sector. In this context, three gaps particularly stand out.

First, limited pool of skilled climate finance professionals[58] affects the ability of provincial and local governments to develop competitive climate finance proposals (Fraz, 2025; MoCC&EC,2025b). Sub-national governments also struggle with setting up monitoring and evaluation (M&E) systems for climate projects (MoCC&EC, 2025b). Project proposals are rejected if financiers are not satisfied with the M&E plan,[59] or if projects do not meet the typical international development assistance assessment criteria standards.[60]

Second, there is a need to fast-track the mainstreaming of corporate sector compliance with Environment, Social and Governance (ESG) framework, CBAM, and other related certifications. In this context, the SECP's notification for listed companies for phased adoption of sustainability-related (IFRS-S1) and climate-related (IFRS-

[58] This includes areas of blended-finance, fiscal guarantees or partial guarantees, and disclosure requirements.
[59] Green Climate Fund, 2018; Global Environment Facility Evaluation, 2006
[60] For example, OECD's Development Assistance Committee criteria use six core standards for evaluating international development and humanitarian aid: (a) Effectiveness; (b) Impact, (c) Efficiency, (d) Relevance, (e) Coherence, and (f) Sustainability. Source: OECD, 2019

S2) disclosure standards is a step in the right direction and are directly aligned with Pakistan Green Taxonomy, facilitating compliance for exports facing carbon-related regulations like the EU's CBAM (SECP, 2025). The IFRS-S2 is particularly important since it requires companies to disclose all their GHG emissions (ACCA, n.d.).

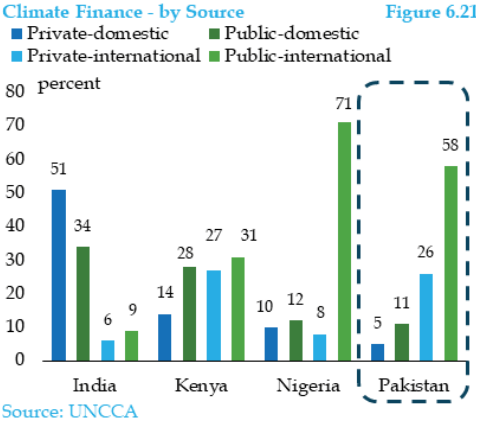
Globally, ESG is rapidly moving from niche to mainstream. ESG assets are expected to reach US$ 40 trillion by 2030, or about 25 percent of total global assets under management (Bloomberg, 2024). In this context, it is important to support and incentivise corporate compliance with the ESG framework beyond listed companies and link all such companies to global investors to attract a growing pool of international ESG capital and green financing.

Third, there is a need to develop the currently nascent and underdeveloped carbon market in Pakistan, considering its potential to finance public and private sector investments in mitigation projects. To this end, the policy framework for carbon markets needs to be improved, alongside the creation of public platforms or a registry that provides visibility into carbon market transactions and other related information (TIP, 2025) **(Box 6.5)**.

Domestic Financing Landscape

Despite relatively lower global climate finance flows, Pakistan relies more on external financing due to limited domestic participation from both public and private

Climate Finance - by Source — Figure 6.21



Source: UNCCA

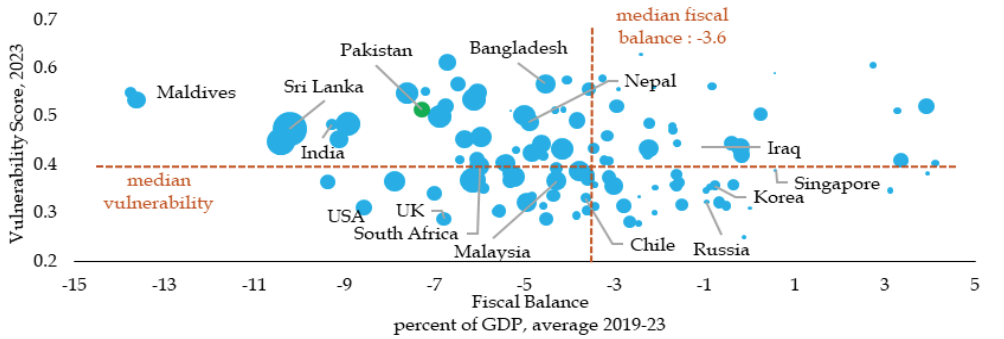
sectors **(Figure 6.21)**. Domestic public climate finance in Pakistan remains limited and contributed only 11 percent of total climate finance in the country between 2018-2021 (Akhtar & Khawaja, 2025). This reflects structural weaknesses in revenue generation and limited financing ability.

Moreover, unlike many advanced and several emerging economies where private capital is increasingly central to climate finance, Pakistan's private sector participation remains marginal with a 5 percent contribution in overall climate finance between 2018-21. Most domestic private finance is highly concentrated in a few large renewable energy projects supported by public guarantees.[61]

Domestic public financing: Pakistan's high fiscal constraint is a major challenge to its ability to address climate vulnerabilities. Pakistan is among the countries that have relatively high fiscal constraints and high climate vulnerability (**Figure 6.22**). As a result of insufficient fiscal space, spending

[61] UNFCCC, 2021; CPI, 2023; OECD, 2023

Fiscal Space and Climate Vulnerability **Figure 6.22**



Note: Higher vulnerability score indicates higher climate exposure and vice versa; size of bubbles represent the interest expense as a ratio of total expenditure.

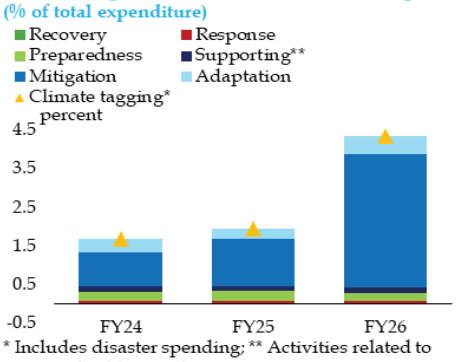
Sources: ND-GAIN; WB

on climate adaptation and building resilience against climate-related disasters is crowded out (IMF, 2023).

Although, as discussed in **Section 6.3 & Box 6.3**, climate budget tagging has begun recently,[62] domestic public finances are constrained by the fact that climate risks have not been systematically integrated into macroeconomic models, fiscal frameworks, and public investment planning in Pakistan. This is important because economic models need to be extended to include a wider range of social and economic impacts to incorporate climate vulnerability and allocate funds beforehand.[63] Furthermore, due to weak integration, post-disaster rehabilitation spending is reactive and financed through budget reallocations rather than prior provisions (UNDRR, 2022).

Moreover, as **Figure 6.23** shows, public spending on adaptation is significantly low. This is not in line with the fact that, unlike mitigation spending, which to some degree is conditional on international support, the responsibility of adaptation primarily rests with the government. Lastly, there are different climate finance units in different ministries with overlapping responsibilities at the federal level, where provinces are operating in silos amid a lack of effective systematic

Federal Budget Climate Classification (% of total expenditure) **Figure 6.23**



* Includes disaster spending; ** Activities related to capacity building and awareness raising

Sources: MoF; WB (2022)

[62] Climate Budget Tagging (CBT) is a systematic process that identifies, classifies, weights and marks budget lines to facilitate the estimation of public spending on climate change mitigation and adaptation.

[63] IMF, 2022; Ghafoor et al., 2016

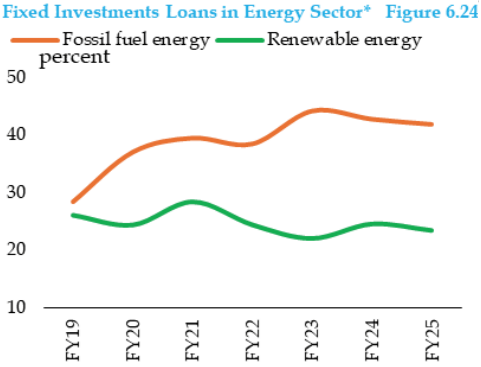
coordination among relevant ministries (UKID, 2023).

Domestic private financing: Domestic private climate finance in Pakistan remains low due to a combination of financial sector constraints, policy uncertainty and weak market infrastructure. This includes underdeveloped capital markets, carbon market, and green bond market. The country issued its first sovereign green Eurobond in 2021, marking an important step toward diversifying climate finance beyond concessional loans and grants. Whilst the issuance helped establish market precedent and signal policy intent, subsequent activity has been limited.[64]

Moreover, the banking sector, which dominates the country's financial landscape with nearly 77 percent of total financial assets (SBP, 2024), mainly lends to the government, whereas bank lending to private sector is mostly concentrated in short-term loans. These characteristics exhibit high risk aversion, making the sector unsuitable to finance long-term climate mitigation and adaptation projects with uncertain cash flows and illiquid collaterals (IMF, 2022). Moreover, the fixed investment loans extended to energy sector are primarily concentrated in thermal generation as opposed to renewable energy **(Figure 6.24)**.

In recognition of these challenges, a number of policy initiatives have been taken. For instance, SBP's Green Banking Guidelines in October 2017 (SBP, 2017),

Fixed Investments Loans in Energy Sector* Figure 6.24



*Energy generation, transmission and distribution
Source: SBP

encouraging banks and DFIs to integrate environmental risk management, facilitate green financing and reduce their environmental footprint. In 2022, SBP also issued Environmental and Social Risk Management manual as a supporting tool (SBP, 2022a). Building on this foundation, the government in collaboration with Ministry of Climate Change and SBP has recently released the Pakistan Green Taxonomy to define green economic activities and guide financial flows toward climate mitigation and adaptation (MoCC&EC, 2025b).

Notwithstanding these positive developments, several challenges persist. For instance, there are capacity gaps within financial institutions in climate risk assessment and reporting, while robust monitoring, verification and disclosure frameworks are still under development. These issues constrain the effective operationalisation of the taxonomy and reduce incentives to mainstream investment in sustainable activities (OECD,

[64] In May 2021, WAPDA launched its first green Eurobond (Indus Bond) for 10 years to raise US$ 500 million at a competitive price. Since then, only two green bonds have been launched: Parwaz Green Action bond and Sovereign Green Sukuk in March 2025 and May 2025, respectively.

2026). Moreover, Pakistan's Green Banking Guidelines are voluntary, whereas several emerging market regulators including China, Bangladesh, Nepal and others have issued mandatory green credit or sustainability requirements for banks (Park and Kim, 2020).

6.5 Final Remarks

Several sobering realities emerge from the above analyses and discussions that warrant urgent and consistent action by individuals, businesses, and public sector officials. First, climate change is irreversible, and its impact on global and Pakistan's economy is real. In some ways, such as the recent floods, the impact has already made its presence felt. And if appropriate climate action is not taken, then climate change is estimated to have even more serious impact on lives and livelihoods, with negative macroeconomic and socioeconomic consequences. These risks that can escalate non-linearly—affecting both rural and urban areas—include damage to agricultural and industrial output with cascading effects on the services sector, price stability, external and fiscal accounts.

Second, although Pakistan contributes little to global GHG emissions, it is highly vulnerable to climate change. Despite that, Pakistan has low level of climate readiness. This means that Pakistan needs to invest substantially in adaptation to be able to deal with the expected impact of climate change. However, the country's relatively high emission intensity, its large and steadily growing population, and aspirations for GDP growth and development also demands large investments in mitigation to avoid carbon-intensive lock-in and simultaneously reducing climate vulnerability.

The growing global capital flows in ESG investments and the increasing global trend in green technologies present an opportunity for Pakistan to directly leapfrog onto climate friendly modernisation and development. However, green growth and low emission development remain a daunting challenge, because even some of the world's advanced and resource rich economies have not been able to successfully achieve it. Recent evidence shows that global climate action remains insufficient as both developed and developing economies are on course to miss their emission reduction targets for 2030 to contain global warming to 1.5 °C.

Third, although Pakistan has shown a strong commitment to global climate action and has made notable progress in formulating a climate change policy framework, the country's climate preparedness is affected by a variety of unaddressed challenges. The implementation of climate policy is not effective due to several reasons including weak integration of climate change policy with other macroeconomic and sectoral policies; overlapping mandates and coordination across and between different tiers of government; weak local governments; and a lack of clear timelines for action.

Weak technical capacity and human capital constraints — such as a limited GHG

emissions database, shortage of skilled personnel for climate risk assessment and climate policy implementation, and deficit in climate education and research capacity —augment these challenges. In addition, there are social constraints at play. These include a public disregard for climate change as a national agenda and weak public trust in government policies and action, amid low political support for climate action. Addressing these social constraints are critical since climate actions require households and businesses to believe that sacrifices today will pay off in the future and that authorities will manage resources fairly.

Underlying these challenges is limited climate finance. Although Pakistan mainly relies on global climate inflows, the global climate finance flows to Pakistan are not commensurate with the country's financing needs for climate action. This is mainly owing to low bankability of projects, undeveloped project pipelines, and lack of a domestic supporting environment.

Domestic climate finance flows, which are especially critical for adaptation finance, are affected by limited public financing. This is due to persistent fiscal constraints, a lack of systematic integration of climate risks into macroeconomic models and overlapping responsibilities. In addition, private financing is also low, constrained by the fact that majority of bank lending goes to the government, whereas private sector lending is in relatively short-term projects amid policy uncertainty and weak market infrastructure.

Fourth, climate action eventually burdens everyone: individuals, businesses, and the public sector. This is because climate action necessitates a change in ways and means of production, consumption pattern, and also how perhaps the society is organised. The latter is an important consideration, especially in the context that while mitigation may still be somewhat achieved through large public sector projects and initiatives, most of adaptation and disaster management are inherently local in nature. Integrated economy-wide planning is, therefore, urgently needed for a balanced climate action and for catering Pakistan's diverse geographies, climate zones, and communities.

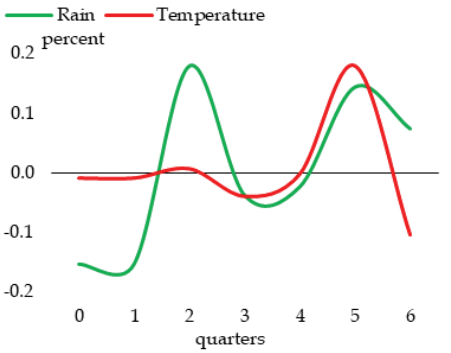
Box 6.1: Estimating the Impact of Climatic Shocks on Economic Growth and Inflation in Pakistan

Introduction: Most studies use temperature to estimate the impact of climate change on economic growth, while others use rainfall or precipitation as other climate proxies. Bilal & Kanzig, 2026; Kahn et al., 2021; Dell, 2012 studied the impact of temperature on a panel of countries.

Their findings suggest that higher temperature variations compared to historical averages result in a reduction in economic growth. The impact may vary depending upon the magnitude of temperature variations. In the case of Pakistan, studies established a negative relationship between temperature and GDP growth and productivity in agriculture, manufacturing and services sectors (Akram & Hamid, 2015; Akram & Gulzar, 2013; Akram, 2015). The impact of precipitation on aggregate growth is mostly seen in developing countries (Damania et al., 2020), with the rise in rainy days and extreme rainfall reducing economic growth (Kotz et al., 2022).

Similarly, studies find impact of temperature on inflation mostly through food inflation (Hagos, 2018; Faccia et al., 2021; Li et al., 2023; Kotz et al., 2023). Moreover, rains resulting in floods impact inflation through reduced output, particularly of agriculture, supply disruptions due to infrastructural damage, and labour productivity. Rojasavachai et al., 2025; Kunawotor et al., 2021; Baten et al., 2020; Mitra et al., 2017 find that rainfall and floods have negative impact on food and headline inflation through various channels.

Response of Real GDP Growth to 1 SD Shock in Rain and Temperature **Figure 6.1.1**

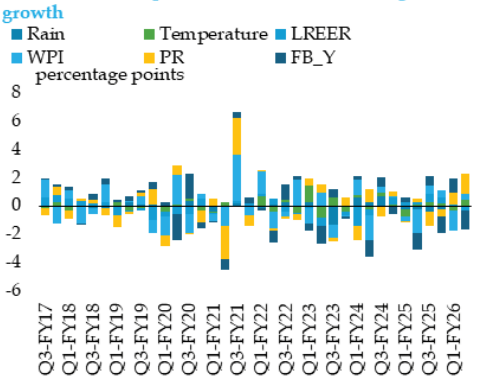


Source: SBP Staff estimates

Methodology: To investigate the dynamic response of growth (RGDP) and inflation to climatic shocks, this Box estimates Impulse Responses (IRs) using Local Projections (LP) on quarterly data spanning from Q1-2016 to Q4-2025,[65] whereas, an extended sample size from Q1-2003 to Q4-2025 is used for inflation model.[66] Moreover, Historical Decomposition (HD) approach is also employed to estimate the period-wise contribution of climatic shocks.[67] National average rain and temperature data is used to capture the impact of climatic shocks on economic growth. In addition, real effective exchange rate (REER), policy rate (PR), fiscal balance to GDP ratio (FB_Y) and wholesale price index (WPI) are incorporated in the model to control for the effects of external, monetary policy, fiscal policy and input prices.

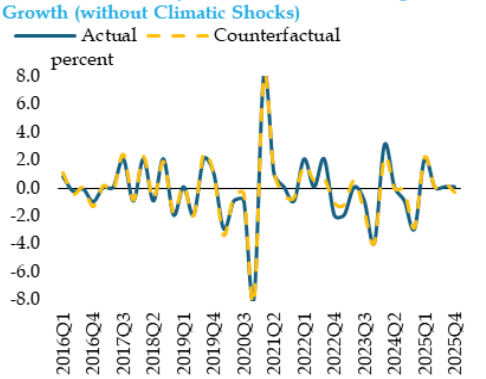
Impact on economic growth: Figure 6.1.1 shows that one standard deviation (SD) shock to rain (flood) has a negative and immediate effect on RGDP in the first quarter, which is partially compensated by some improvement in second quarter. Moreover, fluctuations in temperature are also used to capture the impact of climatic shocks. The findings suggest that the likely response of RGDP to 1 SD-shock to

Historical Decomposition of Real GDP growth **Figure 6.1.2**



Source: SBP Staff estimates

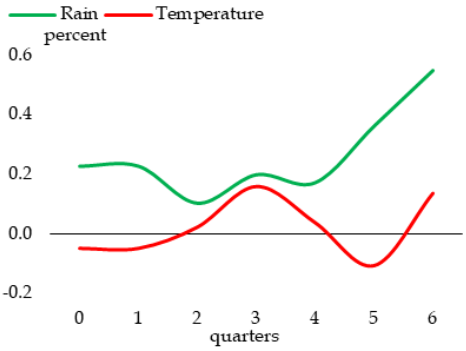
Counterfactual Analysis of Real GDP Growth (without Climatic Shocks) **Figure 6.1.3**



Source: SBP Staff estimates

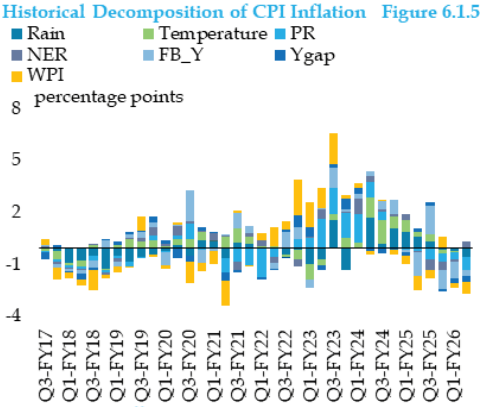
[65] The sample period used for estimation is restricted due to non-availability of quarterly data of real GDP.
[66] LP is useful for its flexibility. LP estimations are based on separate equations; hence they more robust; flexible to non-linearity; and tackle model misspecification.
[67] It may be noted that HD results are based on SVAR estimations.

Response of CPI Inflation to 1 SD Shock in Rain and Temperature Figure 6.1.4



Source: SBP Staff estimates

Historical Decomposition of CPI Inflation Figure 6.1.5



Source: SBP Staff estimates

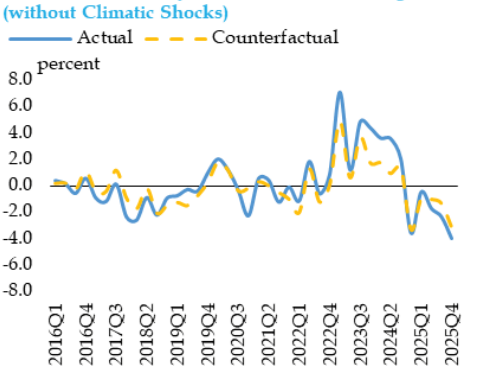
temperature is negative but statistically insignificant in the short-run. This contrasts with earlier studies for Pakistan, which estimated the impact of temperature on GDP separately from rainfall.

The HD-based period-wise contributions of climatic shocks to RGDP are shown in **Figure 6.1.2.** The results suggest that RGDP responds negatively to flood shocks. As far as the impact of temperature is concerned, the period-wise results suggest no significant impact on economic growth. In addition, the findings suggest that monetary policy, fiscal position, input prices (proxied by WPI), and exchange rate movements play pivotal role in the determination of economic growth during 2017 to 2025. The counterfactual analysis confirms the robustness of these results. The findings show that economic growth would have been higher in the absence of climatic shocks (**Figure 6.1.3**).

Impact on inflation: As expected, inflation has positive response to climatic shocks in terms of heavy rain or floods in the country. The results exhibit that one standard deviation (SD) shock to rain (flood) has a positive and immediate effect on inflation which, unlike the case of RGDP, decreases but remains positive up to fourth quarter (**Figure 6.1.4**). This is also consistent with (Hussain et al., 2025) who used rainfall as a proxy for floods and found that the impact of floods is inflationary but for short-term. A positive shock to temperature is likely to increase inflation in the long-run with no immediate or short-run effect.

The HD of inflation is reported in **Figure 6.1.5.** The findings suggest that climatic shocks both in terms of floods and higher temperature have positive and statistically significant impact on inflation. Compared to temperature, floods have a higher impact on inflation throughout the estimation period. Counterfactual analysis also shows lower inflation without climatic shocks (**Figure 6.1.6**).

Counterfactual Analysis of Inflation (without Climatic Shocks) Figure 6.1.6



Source: SBP Staff estimates

**The contribution of Shah Hussain and Syed Qamar Hussain is acknowledged in writing this box.*

Box 6.2: EU's Carbon-related Trade Regulations and Potential Implications for Pakistan's Exports

Adapting to climate change related regulations is becoming instrumental for staying in business and remaining competitive in global markets. This is particularly true in the case of the EU, which is placing carbon-related conditions on its imports, non-compliance of which threatens Pakistan's market access and export competitiveness (Senate of Pakistan, 2025). This Box discusses major climate-related regulations introduced by the EU, and its implications for Pakistan's textile exports.

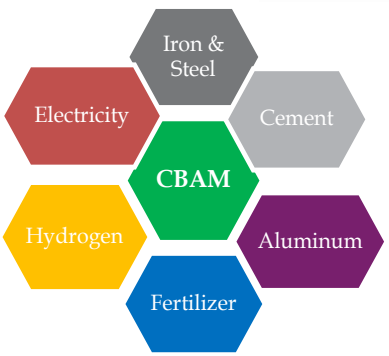
Background:[68] In 2005, the EU implemented a domestic carbon pricing mechanism called the Emissions Trading System (ETS), which was the world's first carbon market. This cap-and-trade mechanism set a limit on the amount of GHG emissions allowed to energy-intensive industries and power generation.[69] In 2019, in response to growing public pressure for stronger climate action and environmental protection, the European Green Deal (EGD) was introduced, which was the EU's overarching strategy to transform the economy towards a climate-neutral future. The EGD announced legally binding targets to cut emissions by at least 50–55 percent by 2030 and become carbon neutral by 2050. It drives change across energy, transport, and industrial sectors. Under the EGD, carbon pricing and industrial reforms were also introduced that have implications for EU's industrial sector as well as for global exporters. One of these reforms was the introduction of Carbon Border Adjustment Mechanism (CBAM) aimed at providing a framework for reaching the EU's climate objectives.

CBAM: Implemented in October 2023 with its initial transition lasting until 2025, the CBAM will eventually help the EU in phasing-out earlier allocation of free emission permits under ETS. Under the initial phase, EU importers were required to report data on embedded emissions during the production cycle of goods entering the EU borders. This data allowed the European Commission to prepare a mechanism for entry of goods before the start of definitive phase beginning January 2026.

The CBAM is currently applied to imports of goods related to six sectors (**Figure 6.2.1**) and a limited number of downstream products, such as screws and bolts. Under this phase importers of CBAM-related products sectors need to apply for CBAM certification before the import of goods. The cost of this certification will reflect the auction price of EU ETS allowances, expressed in euros per tonne of CO_2 emitted.

Implications for Pakistan: The CBAM does not currently have any major impact on Pakistan's exports. This is because with the exception of cement Pakistan exports a negligible quantity of the goods currently under CBAM to the EU or anywhere else in the world.[70] However, after 2030 other ETS sectors, as well as textile—being one of the major

Sectors covered under CBAM **Figure 6.2.1**



Source: European Commission

[68] European Commission (n.d.a).
[69] Electricity and heat generation, energy-intensive industry sectors, including oil refineries, steel works, and production of iron, aluminium, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids and bulk organic chemicals, aviation and maritime. Source: (European Commission, n.d.b).
[70] Based on SBP data, exports of products currently under CBAM accounted for a meagre 0.2 percent of total exports to EU in FY25. This accounted for 0.05 percent of total exports in FY25, based on the SBP data.

contributors to global GHG emissions[71]—may also be a part of CBAM as under the EGD, the EU has committed to become climate neutral by 2050 (CDPR, 2025; APTMA, 2023; APTMA 2025). In addition, there is another major development in the EU related to textile sector, i.e. the EU's Sustainable and Circular Textiles Strategy (SCTS), which focuses on how textiles are made and used, while recognising the sector's economic and social importance.[72] The SCTS incorporates EGD's goals, the EU's Circular Economy Action Plan, and the European Industrial Strategy. This along with the expected expansion of CBAM's scope to textile and other sectors may have significant implications for Pakistan.

The EU is the largest destination of Pakistan's textile exports (**Figure 6.2.2**). To maintain competitiveness in the EU region, Pakistan's textile sector must reduce its carbon footprints given SCTS's focus on the entire lifecycle of textile products — from design and production to use and disposal. The SCTS outlines a range of actions, which include the need to make durable, repairable, and recyclable textile, and removal of microplastic pollution from synthetic textiles.[73]

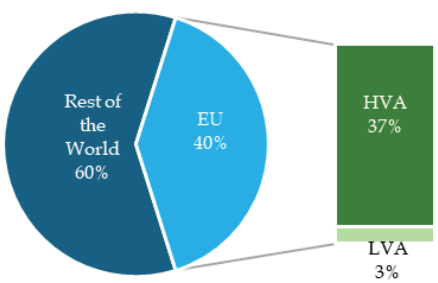
In this context, Pakistan is at risk of losing industrial competitiveness due to three interlinked challenges (APTMA, 2025). These are (a) higher industrial emissions due to increasing reliance on coal between FY15-FY25; (b) carbon embedded in imported inputs which adds to the footprint of export value chains; and (c) a potential implication of taxes on gas for captive power plants that may further push industries towards a more carbon-intensive grid. These trends not only increase Pakistan's exposure to higher cost associated with CBAM but may also complicate the compliance with international climate commitments, such as under the UNFCCC, the Paris Agreement, and SDGs (APTMA, 2025).

The EU actions in the past illustrate that trade preferences can be withdrawn or market access curtailed when compliance gaps persist. Pakistan has previously faced an EU ban on seafood exports on sanitary and phyto-sanitary grounds (MOFA, 2013), and its football industry came under severe commercial pressure over documented child-labour concerns (HRBDF, n.d.). More recently, repeated EU quality and pesticide-residue alerts for Pakistani rice consignments have led to heightened scrutiny and shipment rejections (European Commission, n.d.d).[74] These actions suggest that even though textiles are not yet covered by CBAM, their expected inclusion by 2030 implies that similar compliance-based risks for Pakistan's textile exports are material rather than hypothetical.

Way Forward: Against this backdrop, preparedness appears to be weak, as evident from the fact that less than 40 percent of the country's textile firms hold

Composition of Pakistan's Textile Exports **Figure 6.2.2**

percent of total exports



Note: HVA: High value added; LVA: Low value added.
Source: SBP

[71] Textile consumption in the EU is one of the biggest environmental concerns as textile ranks fifth in overall GHG emissions, and third for water and land use in the EU (European Commission, n.d.c). In Pakistan, the textile sector is responsible for nearly 5 percent of the country's overall industrial emissions (WB, 2025).
[72] European Commission (n.d.c).
[73] The Eco-design for Sustainable Products Regulation passed in June 2024, included textiles in the list of products for EU market that needs to be designed to improve their circularity, energy performance, recyclability, and durability.
[74] European Commission (n.d.d).

eco-label certification.[75] Most of these firms are large export-oriented firms (SBP, 2025), which indicates that carbon neutrality is not pursued across the industry nor across the value chain. This requires urgent attention given the lead time for retrofitting industrial process for carbon neutrality. To this end, several actions need to be taken. Fiscal and financial incentives need to be linked to energy efficiency and emission reduction targets alongside access to financing for climate neutral technologies; central mechanism for monitoring and benchmarking energy efficiency needs to be put in place; knowledge of climate neutral technologies needs to be made available; and awareness needs to be increased that textile firms certified under voluntary environmental standards demonstrate higher profitability, stronger stock performance and better sustainability outcomes (WB, 2025; SBP, 2025).

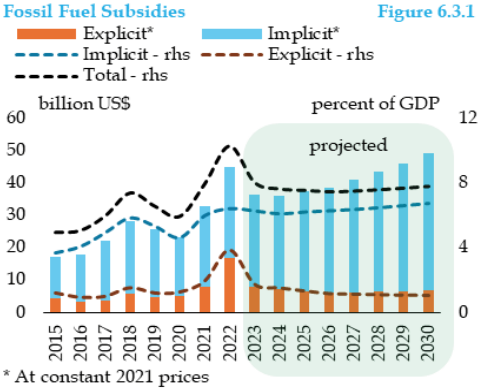
**The contribution of Syed Qamar Hussain and Ravi Kumar is acknowledged in writing this box.*

Box 6.3: The Challenge of Climate Mainstreaming in Pakistan

The large-scale and broad-based nature of climate action requires it to be integrated with economic policies. Global best practices, such as the EU Green Deal, suggest that this integration requires a comprehensive review of existing policies and laws across all federating units. Such an exercise has not been initiated in Pakistan yet. There have been some efforts to incorporate climate considerations in policies as envisaged in the Framework for Implementation of Climate Change Policy (FICCP) 2014-2030. Similarly, the recently launched Pakistan Climate Prosperity Plan is also a step in the right direction given its aim to embed climate resilience at the core of economic planning through a dynamic modelling system; and its vision to adopt whole-of-society and whole-of-government approach to address the challenges of climate change (MoF, 2026). However, successful execution of this plan would depend on the addressing of institutional challenges discussed in Section 6.3, and comprehensive review and revision of federal, provincial and sectoral policies and laws that have not yet been undertaken. In this context, the significant gaps highlighted in the discussion below, demonstrate limited climate mainstreaming in Pakistan.

Fiscal policy: Fiscal policy seems to be sending mixed signals vis-à-vis climate action. On the one hand, carbon levy has been introduced as part of reforms under IMF's RSF to mobilise revenue for clean development. On the other hand, sales tax exemption on import or supply of solar panels has been withdrawn, which undermines transition towards clean energy (PwC, 2025). Moreover, while the share of explicit fuel subsidies is declining, the implicit subsidies, in the form of undercharging environmental costs and foregone consumption tax on fuel prices, is projected to increase **(Figure 6.3.1)** (IMF, n.d)**.**

Fossil Fuel Subsidies — Figure 6.3.1



* At constant 2021 prices

Source: CID, IMF

Pakistan's fiscal architecture remains structurally less aligned with its climate policy objectives. Although Climate Budget Tagging (CBT) has been recently introduced at federal level, it is yet to be introduced in provincial budgets, which significantly limits effectiveness within Pakistan's decentralised

[75] Around 100 out of the 456 ecolabels tracked worldwide, apply to the textile sector with the major focus on energy, water, and chemical efficiency.

fiscal system (IMF, 2025c). At intergovernmental level, the NFC award allocates resources without recognizing, incentivising, or conditioning transfers on climate action, leaving provincial development budgets under no obligation to prioritise NDC commitments or climate resilience. This weak incentive structure contributes to tangible delays in necessary investments, such as, in flood resilience infrastructure) (Sheikh, 2025). Similarly, climate change is also not adequately embedded in public investment management. For instance, although the Planning Commission has revised project proposal guidelines (PC-1) to require integration of climate action in projects, most development projects continue to be approved using outdated formats that ignore climate risks (Krogstrup & Oman, 2019; IMF, 2025c; Sheikh, 2025).

Monetary policy and financial stability: SBP recognises climate change as major financial stability risk and includes it as a major theme in its Strategic Vision 2023-28. The measures regarding climate mainstreaming for the financial sector include, but are not limited to Green Banking Guidelines, quarterly bank reporting on Environmental & Social Risk Management (ESRM) Manual, Green Taxonomy as part of reforms committed under IMF's RSF, and Draft Guidelines on Climate Stress Testing for Banks, and others.[76]

However, there is a need to further strengthen climate integration by improving analytical capability in macroeconomic modelling and forecasting for monetary policy (IMF, 2021) and accustoming economic actors to the risk of climate change and transition policies through central bank's communication (NGFS, 2020). Moreover, improvements in the quality of data that feeds climate analysis is important to advance the precision of the policy decision. Furthermore, tracking new climate-related risk indicators, such as carbon footprint of financial institutions' portfolios (and collaterals) and exposure to climate-related physical risk etc. can improve supervisory framework (IMF, 2021).

Trade policy: Despite having a comprehensive climate change policy in place, the Strategic Trade Policy Framework (STPF) 2020-25 did not explicitly prioritise climate concerns in trade. As a result, the average tariff on imports of environmental goods (EG) remains elevated compared to that on non-environmental goods. Import tariffs on EGs are also higher compared to Bangladesh, China, India and Vietnam, and thus discouraging adoption of green supply chain. Moreover, Pakistan applies non-tariff measures to very few categories of EGs, due to which EG import quality assurance remains challenging. (Iqbal et al., 2024). The STPF have also not conceptualised exports of green manufacturing as potential opportunities (Sohail, 2025a), nor the need to adequately facilitate trade through digitisation of trade documents and reduction of trucks' waiting time, which can significantly reduce GHG emissions (Iqbal et al., 2024).

Industry: Mitigation policies are weakly integrated at the sectoral level in manufacturing. The absence of mandatory reporting by industrial units on emissions makes it difficult to regulate emissions. In the absence of strong regulatory framework, the impetus for green innovation; disclosure of climate related risk; and ESG compliance remain either low, slow, or voluntary (Sohail, 2025b; Bashir, 2025). While green industrialisation, which refers to a set of processes aiming to decouple economic growth from GHG emissions, is building momentum, reliable data to evaluate progress is rather scant.
Under the FICCP, industry is not listed among the sectors in need of climate adaptation but only of mitigation, signalling a narrow conceptualisation of climate strategy. Even the most recent NAP 2023 does not assign green manufacturing as a priority in terms of adaptation, when in fact industrial adaptive measures, such as supply chain resilience, heat-resilient factor design and cooling systems, are common practices in other countries (MoCC&EC, 2023).

[76] SBP (2022); SBFN & IFC (2025)

Transport: The bulk of passenger and goods cargo in Pakistan uses road transport rather than public or rail transport as mass transport can help mitigate some emissions. Both the trucking fleet as well as buses and other passenger transport mainly rely on outdated technologies (Hasan, 2025). There is also a lack of harmony between different transport modes; assigning agency-specific tasks to reduce emissions; and the absence of National Transport Masterplan, as envisioned in National Transport Policy 2018, which further slows the greening of transport sector.

Similarly, instead of creating incentives for the use of public transport, the country's auto policies, such as 2021-26, incentivise manufacturing and import of fossil fuel light vehicles through reduction in duties and taxes. Such incentives were not only environmentally unfriendly but altered land use through urban sprawl and increased emission through road congestion (Hasan, 2025). Moreover, whilst New Energy Vehicle (NEV) policy, and the reforms under IMF's RSF—including introduction of EV subsidy and internal combustion engine vehicle tax —are catalysing the transition to clean passenger cars, the incentive for electrifying commercial fleets, which have no emission standards, is minimal in the NEV Policy.

** The contribution of Abdul Jabbar is acknowledged in writing this box.*

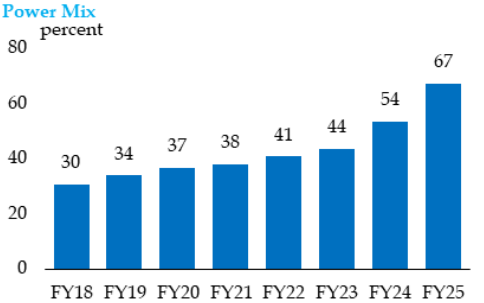
Box 6.4: Renewable Energy (RE) Transition in Pakistan: Phenomenal Growth Facing Headwinds

The phenomenal transition to RE in Pakistan during the last four years is good for climate change mitigation and for the economy. Like recent global trends, Pakistan's RE transition is mainly led by solar energy, amid expectations that solar power will continue to drive the global RE transition in the foreseeable future. This Box sheds light on recent growth in solar power, its main drivers, as well as the key challenges to its continued growth in Pakistan.

Rapid adoption of solar power in Pakistan: RE has a sizable share in grid capacity in Pakistan. In FY25, 35 percent of installed capacity was from on-grid renewable energy, up from 30.3 percent in FY10.[77] Official numbers show that a major source of RE in Pakistan has been hydel, with a 28 percent share equalling 11.5 GW in FY25. However, in terms of the total power mix (in terms of capacity), decentralised solar capacity—including off-grid and behind-the-meter (BTM) installations—has the largest share.

The measurement of decentralised solar energy is a challenge in Pakistan. Except for net-metered systems, no official measures exist for decentralised solar energy. This lack of data is due to the bottom-up nature of these installations, with no exact figures available for BTM and off-grid installations. However, estimates based on China's solar panel exports to Pakistan (which constitutes around 99 percent of Pakistan's total solar panel imports) suggest that the quantum of decentralised solar power capacity in FY25 was around 40.8 GW.[78,79] As a result, total RE (including estimated decentralised

Total RE Capacity* as percent of Total Power Mix **Figure 6.4.1**



*Includes decentralised solar RE based on SBP staff calculations

Sources: SBP staff calculations based on Ember, NEPRA & Stakeholder consultations

[77] Includes Hydel, Wind, Solar, Bagasse energy as a percent of total grid capacity as of June 2025. Source: NEPRA (2025)
[78] SBP Staff calculations based on import data from Ember, NEPRA, and stakeholder consultations.
[79] This 40.8 GW is around 99 percent of total grid capacity. Even conservative estimate of decentralised power puts the number at around 27.5 GW or 67 percent of grid capacity. Source: TZ (2025) based on satellite imagery.

capacity) was around 67 percent of total power mix (in terms of capacity) **(Figure 6.4.1)**. Moreover, with an estimated installation of 9.2 GW of decentralised solar capacity during H1-FY26, total decentralised solar capacity could be around 50 GW. This is expected to further improve Pakistan's already leading position among countries with high share of solar in total power generation mix (**Figure 6.4.2**).

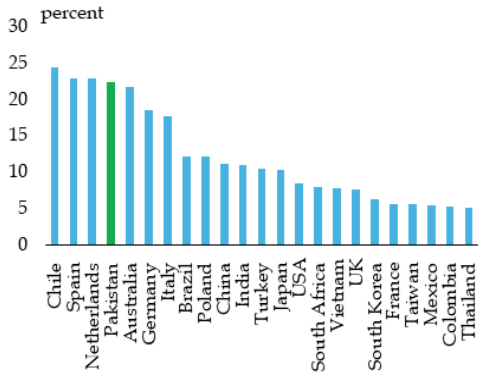
This transition to solar power has led to a gradual but consistent increase in gross foreign exchange savings on account of lower energy imports, cumulatively estimated to be around US$ 7.1 billion in last six years.[80] SBP staff estimates suggest that the estimated installed solar capacity as of December 2025 will reduce annual energy import bill by around US$ 5.2 – 7.8 billion in 2026. Overall, SBP staff calculations suggest that the cumulative solar panel import in dollar terms is now broadly offset by the resulting foreign exchange savings in fuel imports from solar-based electricity generation in recent years and is likely to generate net FX savings going forward.

Drivers of solar power boom: According to a survey, the residential sector leads Pakistan's decentralised solar adoption, accounting almost for 50 percent of total installed capacity. This is followed by the industrial, agriculture and commercial sectors, reflecting a broad-based adoption and a move towards self-generation.[81] A combination of four key factors are behind Pakistan's solar growth. First, Pakistan has a natural endowment for solar energy because of high solar irradiance along with low seasonality. Some estimates hold that the country can generate more than 100,000 MW of electricity,[82] which positions Pakistan among the top countries with RE potential.

Second, to capitalise on this potential, Pakistan introduced the Policy for Development of Renewable Energy (DRE) in 2006 to create an initial policy framework for wind and solar energy, followed by the Distributed Generation and Net Metering Regulations (DGNMR 2015). DGNMR allowed households and businesses to monetise surplus solar generation. The Alternative and Renewable Energy (ARE) Policy 2019 further mainstreamed renewables by shifting policy from fixed tariffs to competitive auctions and least-cost procurement, embedding RE within national planning targets. Till June 2025, total net metered capacity was 6.5 GW, equalling 16 percent of total decentralised solar power.

Third, a lack of access to grid and weaknesses in Pakistan's grid infrastructure accelerated decentralised solar adoption, as an underfunded and outdated transmission and distribution system faces high losses, congestion, and creates unreliability of grid energy. Fourth, and the single biggest reason of decentralised solar power growth is the declining

Estimated Share of Solar in Total Power Generation Mix in 2025* - Selected Economies** **Figure 6.4.2**



* Data for El Salvador is available up to Jun 2025; data for other countries are available till Oct 2025 or Dec 2025.

** Economies with less than 80 twh of total electrcity generation and less than 5 percent share of solar power have been excluded from the list of countries

Source: Ember

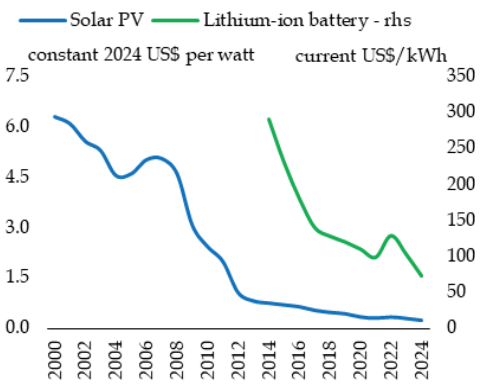
[80] SBP Staff estimates based on estimates of annual increases in installed solar capacity.

[81] Sectoral adoption studies categorise sectors based on scale which follows a pattern with solar adoption. For instance, the solar adoption in Pakistan is strongest amongst high-income households, medium scale business, large scale industries, particularly textile, and medium farm, driven by affordability, grid unreliability and greater capital. Source: PRIED, 2025; Shah, 2025.

[82] Mirza et al. (2011); Muhammadi et al. (2024)

costs of solar infrastructure, which has fallen sharply worldwide. Moreover, global prices for battery and storage technology have also been declining **(Figure 6.4.3)**, making solar energy cheaper and more reliable than before.

Solar Panel & Battery Prices **Figure 6.4.3**



Source: Our World in Data

Challenges to RE transition in Pakistan: The continued growth in distributed and utility-scale solar power faces a range of structural and policy challenges.

Capacity purchase price (CPP): The growth in the adoption of solar power has created the conditions of a utility death spiral (UDS), reducing grid consumption and further increasing idle capacity (Shah, 2025). This translates into higher electricity cost for grid-reliant consumers. The policies to mitigate the challenge of UDS, such as net billing, and removal of GST exemption on import and sales, etc., are expected to discourage decentralised solar adoption, as already evident by a 40 percent reduction in solar capacity imports from China in 8M-FY26. However, rising fuel prices due to the war in the Middle East, declining battery costs and gradual behavioural change are expected to continue decentralised solar uptake, leading to continued UDS and further increase in CPP. Consequently, the government may be forced to frequently revise decentralised solar regulations to address UDS, translating into policy confusion, and deterring smooth growth in decentralised solar.

Grid and transmission readiness: The existing infrastructure was not planned for a massive decentralised RE network. Grid stability issues and technical constraints lead to reverse power flows and transformer overloading, thus limiting the growth of solar in absence of advanced technologies, such as smart transformers, automated control centres and real-time monitoring systems (SDPI, 2024).

Moreover, transmission bottlenecks and insufficient evacuation capacity limit integration of utility scale RE generation (RF, 2024). Pakistan's utility-scale renewable energy potential is geographically concentrated in the southern region, whereas demand hubs are concentrated in the central region. In addition, poor grid connectivity and inadequate transmission infrastructure has left substantive electricity potentially unutilised (NEPRA, 2026).

The grid is also insufficiently equipped to manage the variability of solar and wind energy, due to inflexible grid infrastructure; lack of utility scale storage to save excess energy; absence of advanced technologies, such as smart transformers, automated control centres and real-time monitoring systems; and demand-side tools to shift consumption (SDPI, 2024). In contrast, higher reliance on thermal plant, outdated dispatch protocols and baseload centric planning has limited operational flexibility.[83]

Institutional factors: From the perspective of utility-scale RE projects, overlapping mandates, delayed tariff approvals, and weak inter-agency accountability are considered primary barriers to scaling

[83] Baseload power refers to the minimum level of electricity demand that must be met consistently to ensure the reliability and stability of the grid. Traditional baseload demand is met by plants that can operate continuously, such as coal, oil, or nuclear plants.

renewable deployment (Elahi et al, 2024). The bidding process for utility-scale RE faces poorly defined criteria, lack of standardisation, and opaque evaluation mechanisms, creating inefficiencies and deterring investment (SDPI, 2024).

From the perspective of decentralised solar, official planning frameworks have chronically understated actual market activity, particularly the surge in distributed and off-grid solar installations. With the surge in solar decentralisation, power sector planning needs to evolve from old era of power shortages to new era of surplus capacity, which requires change in tariff design; demand volatility management; and adoption of large-scale Battery Energy Storage system (BESS). Another challenge remains unnecessary delays in the approval of net metering applications by DISCOs, even when applications have met all requirements.

Financing constraints: Utility scale RE projects are inherently capital-intensive, with majority expenditure incurred upfront and recovered over time. However, these projects face acute financing challenges as the cost of capital in EMDEs has doubled compared to that in AEs (RF, 2024). In addition, limited technical expertise and dealing with disruptions often leads to cost and schedule overrun, leading to significant delays in utility scale solar and wind project (IEEFA, 2022). Financing of decentralised solar power is also limited due to low bank credit, amid concerns of collateral and recoverability (RF, 2025). The recently proposed transition to net-billing can affect bank financing because lower export rate lengthens the payback period, raising loan premium. Moreover, continued fossil fuel subsidies distort pricing signals by reducing the relative cost of thermal generation, weakening RE competitiveness and transition (Black et al., 2025). Instead of subsidizing fossil fuel consumption, such fiscal allocations can be used for the development of a cleaner energy mix.

**The contribution of Ali Ahsan, Ali Ahmed Shah, Abdul Jabbar and Umar Mashood is acknowledged in writing this box.*

Box 6.5: Developing Carbon Markets (CM) in Pakistan

Amid the growing importance of carbon markets for climate action, Pakistan issued the 'Policy Guidelines on Trading in Carbon Markets' in 2024. However, a variety of policy, institutional and capacity challenges must be addressed to develop the market. This Box outlines how carbon markets enable climate action, the challenges in developing one in Pakistan and its broad solutions.
Background: Originating in 1997, CM emerged as a market-based mechanism for issuing tradable carbon credits against GHG emission reductions. Carbon credits — are independently verified, aligned with recognised standards (either international, national or independent) and then retired to meet voluntary or mandatory climate obligations.[84] Typically, one carbon credit represents one tonne of CO_2 equivalent emission reduced (offset),[85] or permitted (allowance) in some systems.

How CMs function: CM are regulatory or voluntary. Regulatory markets impose binding emission limits through carbon pricing instruments, such as emissions trading systems (ETS), output-based benchmarks, or carbon taxes (**Table 6.5.1**). These markets generate fiscal revenues, transmit carbon pricing signals and create binding incentives for firm-level decarbonisation. Globally, the value of traded credits in compliance markets was US$ 947 billion in 2024 – with the EU ETS representing 84 percent of this value (ICMA, 2025). While the EU remains the largest CM by transacted value, China operates the largest ETS

[84] Carbon credit retirement is the permanent removal of a carbon credit from circulation, ensuring that it cannot be reused or resold after it has already been used to offset emissions.
[85] For e.g. through emissions reduction activities, such as transitioning to green energy, or destroying methane generated at landfills.

Instruments of Carbon Markets **Table 6.5.1**

Instrument	Mechanism	Market type
Cap-and-trade Emissions Trading System (ETS)	Sets an emissions cap and then tradable allowances are sold by a public authority. Allowances represent an emissions quota. Emission caps are gradually reduced every year.	Regulatory
Rate-based/ Output-based	Regulate emissions per unit of output rather than setting an absolute cap, incentivises production efficiency	Regulatory
Carbon Tax	Government levy per tonne CO_2e emitted	Regulatory
Carbon Credits	Credits from GHG reduction projects, representing carbon offsets. Credits can be verified by either international, independent or domestic crediting bodies.	Regulatory and/or voluntary

Source: World Bank (2025)

by coverage, while several EMDEs such as Indonesia, Türkiye and are accelerating the development of national regulatory markets (LRI, 2025).

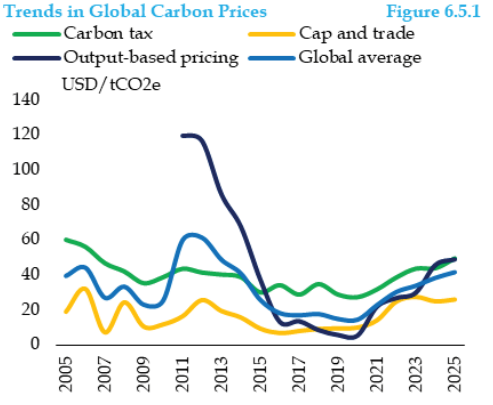
In contrast, voluntary markets enable firms and governments to finance mitigation projects - generating carbon credits that can be sold for revenue or utilised to meet climate commitments. For firms, voluntary markets monetise emission reductions and attract private climate finance. Internationally, voluntary credits may be authorised for country-to-country transfers under the Paris Agreement (OIES, 2022).

In practice, voluntary and regulatory markets increasingly overlap, as some regulatory systems allow the use of credits for meeting compliance obligations and crediting mechanisms are often used to build MRV capacity ahead of market deployment. Regulatory markets establish explicit carbon pricing signals that drive demand for carbon credits both globally and domestically. Formal pricing instruments also help firms internalise the carbon cost which can support future decarbonisation decisions. Global carbon prices have been steadily rising since 2020 and are expected to continue rising as more national regulatory markets are established (Investcorp, 2024) (**Figure 6.5.1**).

Challenges & way forward for Pakistan: Pakistan's 2024 Policy Guidelines on Trading in CM demonstrate intent to deepen participation in voluntary markets while laying the foundation for a future regulatory market, supported by the establishment of a Carbon Market Working Group and plans for a national carbon registry (MOCC&EC, 2024c). Pakistan's has previously participated in international CM; notably through the Sindh Delta Blue Carbon Project from which Pakistan has earned approximately US$ 40 million from selling carbon credits and is expected to earn US$ 50 million annually (MoIB, 2025). The KP Billion Tree Tsunami Project is also designed to generate carbon credits for revenue purposes. Some assessments place Pakistan's carbon market earning potential at US$ 400 million to US$ 2.25 billion (TIP, 2025).

However, several constraints remain regarding Pakistan's CM readiness. These include the absence of a national emissions baseline; lack of formal MRV guidelines for carbon market participation; limited carbon accounting capacity; low private sector awareness; lack of domestic pricing signals and trading infrastructure. In the absence of binding carbon costs and emission caps, private firms face limited incentives to participate (TIP, 2025).

Trends in Global Carbon Prices **Figure 6.5.1**



Source: WB carbon pricing dashboard

While it is important to urgently address these issues, the transition to CM needs to be phased out through sectoral pilots on emission-intensive industries to ease the transition to nation-wide deployment through a regulatory CM. Sudden introduction of emission targets or pricing instruments can lead to market distortions and price volatility, and undermine business confidence especially in a weak institutional setting like in Pakistan. International experiences offer some lessons in terms of building market readiness, institutional capacity and price discovery mechanisms to pave the way for an active CM in the future. China first piloted its ETS on the power sector, distributing emission allowances with output-based benchmarks adjusted to different types of power plants (CFAI, 2024). The pilot has since been expanded to include other sectors, such as cement, transport, and waste management. Similarly, South Korea is also implementing its national ETS in gradual phases, expanding sectoral coverage with each phase.

In parallel to this, transparent price discovery mechanisms should be developed to ensure market stability and maturity. For example, shadow carbon prices (reference prices published by a regulator) can help firms to factor in the carbon cost. This can serve as a price signalling tool without imposing compliance obligations and prepare markets in advance before formal pricing instruments are imposed (WB,2025). As markets mature, auction-based allocation of carbon credits, such as those used in the EU, can allow competitive price setting. Additionally, the establishment of a centralised carbon registry or trading platform can help in tracking the issuance and retirement of credits and support secondary market trading. To this end, the carbon trading market may be set up at a national stock exchange, as done by Egypt since August 2024 (FRA, 2024).

Pakistan has made meaningful strides towards carbon market development; however, broadening private sector participation, designing price discovery mechanisms and building readiness for a CM through phased pilots will be essential to ensure a smooth transition. A sequenced approach along with clearer policy signals, and gradual introduction of sectoral benchmarks can minimise market distortions while positioning carbon markets as a credible tool for mobilizing climate finance. This needs to be anchored in the development of national MRV guidelines and reporting standards, similar to those introduced in other regulatory markets.

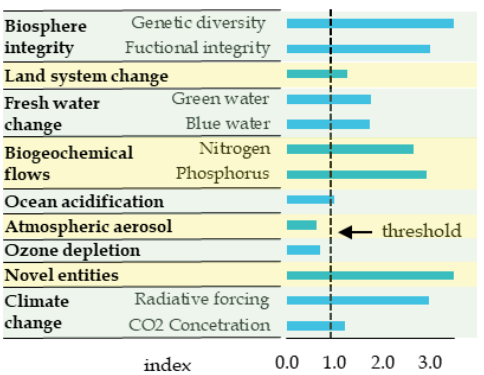
**The contribution of Mehreen Tariq Ghani is acknowledged in writing this box.*

Appendix 6A: Planetary Boundaries (PB) and Risks to Global and Domestic Economy

The PBs refer to the environmental limits within which humanity can safely operate while maintaining the balance of earth's ecosystem (Rockström et al., 2009). The PBs are interlinked and driven by local stressors, such as burning fossil fuel; untreated waste; and pollution. Transgression of one PB can worsen the impact on other PBs (Gerten et al., 2025). For instance, climate change accelerates biodiversity loss, while land degradation can trigger droughts and heatwaves. As of 2025, human activities have pushed seven out of nine boundaries (including climate change) beyond safe limits **(Figure 6.A.1)**. Although the transgression of these seven PBs does not imply immediate system collapse, it materially increases systemic risk with non-linear and cascading impacts. Continued pressure on the PBs increases the risk for the earth to cross the tipping points, causing irreversible damage to earth's ecosystem.[86] The monitoring of PB markers remains sparse in Pakistan (Ali, 2020), leading to material knowledge gaps about the pace of change, and its exact economic impact. This Appendix serves as a primer on the PBs that have been breached,[87] and its consequent risks to global and Pakistan's economy.

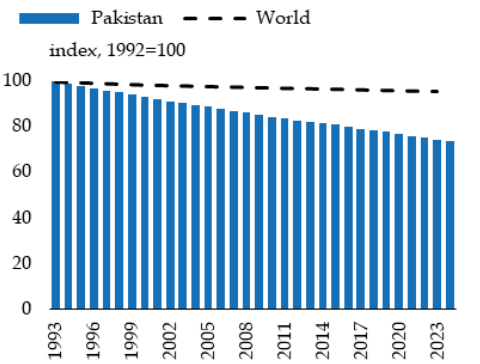
Freshwater Change: The increase in global GHG emissions, excessive water withdrawals, and expansion of agricultural land, have altered freshwater flows and stocks across land and atmosphere (PHC, n.d.a). As of 2025, more than one-fifth of global land area experienced significant dry and wet deviations in both blue and green water,[88] breaching the safe limits of freshwater change by 9.7 and 9.6 percentage points, respectively. This has led to increased frequency of droughts and disruption of river flows to oceans (PB Science, 2025). These deviations are far more pronounced in major river basins, such as the Indo-Gangetic Plain,[89] particularly in Pakistan where overextraction of ground water is depleting water resource at an alarming rate (Mohan et al., 2022). Since 1970, the world has lost around one-third of its wetlands, contributing to increase in water shortages and food insecurities; decline in freshwater biodiversity; and aggravating economic pressures (WWF,2023). Similarly, changes in water flows have impacted agricultural productivity in Pakistan (Naeem and Sulehri, 2019).

Status of Planetary Boundaries in 2025 Figure 6.A.1



Source: SBP staff calculations based on PBScience

Forest Cover Figure 6.A.2



Source: CID, IMF

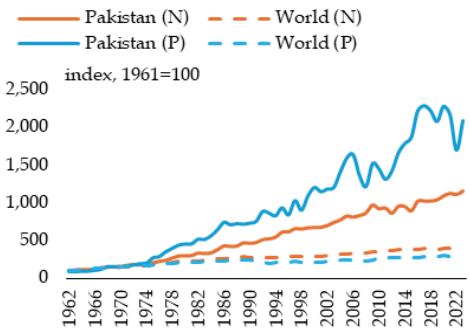
[86] Tipping points are the threshold beyond which the earth system changes irreversibly. For example, if Amazon rainforest crosses the threshold, it would lead to extreme weather patterns (IPCC, 2022; Germanwatch, n.d)
[87] This excludes climate change, which is already covered in detail in this chapter.
[88] Blue water refers to river, lakes, and underground aquifers; green water refers to soil moisture.
[89] Includes regions of Pakistan, India, Nepal, and Bangladesh

Land System Change (LSC): Driven primarily by expansion of agriculture land and urbanisation, alteration in LSC increases the risk of irrevocable environmental shifts and triggers adverse impacts across multiple PBs, such as climate change and freshwater change. The transgression of these PBs in turn impact LSC as increasing warming and alteration in rainfall patterns strain forest ecosystems and reduce their resilience. LSC is mainly measured through forest cover,[90] which is approximately 59 percent at global level, well below the safe threshold of 75 percent **(Figure 6.A.2)**. In absolute terms, global forest cover has declined by approximately 4.2 percent in 2023 compared to 1992, whereas Pakistan experienced a far more severe loss of 26.4 percent**.** Deforestation has intensified Pakistan's environmental degradation (Hashmi and Asif, 2025), reducing land's capacity to absorb and regulate water runoff. The impact of the three recent floods in Pakistan—in 2010, 2022, and 2025 —was intensified due to changes in Pakistan's LSC (Khan, 2025).

Biogeochemical Flows (BF): Modification of BF refers to the alteration of natural nutrient cycles mainly due to application of mined phosphorus and industrially fixed nitrogen as fertilizers. Since only a fraction of these nutrients are absorbed by crops, a large amount accumulates in soil, discharges in surface water, and remains in the atmosphere. Therefore, breaching of this PB has extensive impact on marine life, terrestrial ecosystem, human health, alongside impact on agriculture and tourism. As of 2025, the total amount of anthropogenic nitrogen has exceeded that from all its natural sources, whereas growing demand for food has accelerated the phosphorus cycle two to three times beyond natural rates (PBScience, 2025). Cropland nitrogen and phosphorus use is rising globally, with Pakistan exhibiting a notably steeper rise **(Figure 6.A.3).** Low fertilizer-use efficiency in Pakistan, particularly nitrogen, directly impacts the water and air quality (Raza et al., 2018), whereas phosphorus fertilizer has led to nutrient overload in aquatic systems harming marine biodiversity (Ogwu et al., 2025).

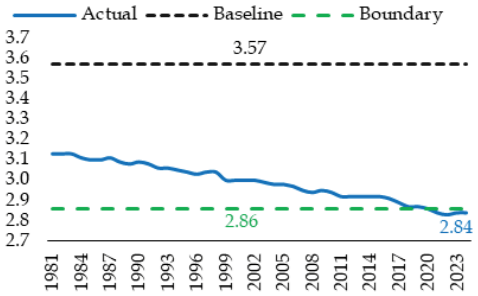
Ocean Acidification (OA): OA is the increase in acidity of seawater due to absorption of anthropogenic CO_2 from the atmosphere. Acidic seawater reduces the amount of carbonate in seawater, which is measured by aragonite saturation level **(Figure 6.A.4)**.[91] This affects calcifiers and coral reefs, that are integral to the sustainability of marine ecosystem (IPCC, 2021). Global assessments conclude that OA is

Cropland Nitrogen (N) and Phosphorus (P) Balance — Figure 6.A.3



Source: FAO

Aragonite Saturation State* — Figure: 6.A.4



*Aragonite Saturation State is a dimensionless ratio and has no units.

Source: Planetary Health Check

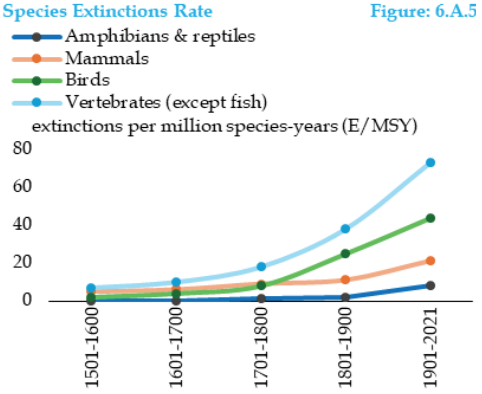
[90] Existing forest area as a ratio of original forest cover, which would exist in the absence of anthropogenic LSC.
[91] Aragonite saturation state is a measure of the availability of carbonate ions in seawater for calcifying marine organisms (called Calcifiers) to build their shells and skeletons. It is a geochemical index of whether aragonite will precipitate or dissolve in seawater.

still ongoing, pushing ocean chemistry beyond safe levels (Findlay et al., 2025). Pakistan's coastal waters are exposed to global OA trend as well as local stressors, such as nutrient loading, turbidity and thermal stress that together exacerbate reef vulnerability (Ali, 2020; Sreeush et al., 2019). This puts the country's seafood export potential at risk and exposes the country's mainly artisanal[92] fisheries sector to income and poverty shocks. Reduced catch also risks further reducing seafood consumption, which is already significantly lower in Pakistan than global average, affecting public health and nutrition outcomes (HL, n.d; Andreoli et al., 2025).

Biosphere Integrity (BI): BI depends on health, diversity, and interactions of the organisms that make up Earth's ecosystems. Globally, human activities are putting increasing pressure on BI through land use changes, such as deforestation for urban expansion and agriculture amid population growth, and industry's overexploitation of natural resources, leading to habitat loss for species. The last century has seen a significant increase in the extinction rate of species across the animal kingdom **(Figure 6.A.5)**.[93] Pakistan's land-use change, irrigation expansion and unsustainable extraction contribute to local BI erosion. For example, freshwater systems in Pakistan, Indus Basin in particular, have experienced species decline and altered flow because of water abstraction, dams, pollution and habitat conversion (Zahra et al., 2023). Biodiversity loss undermines the natural capital that supports agriculture, forestry and fisheries, leading to a variety of macroeconomic impacts, such as declining crop yields, food price volatility, and export losses to fisheries sector.[94]

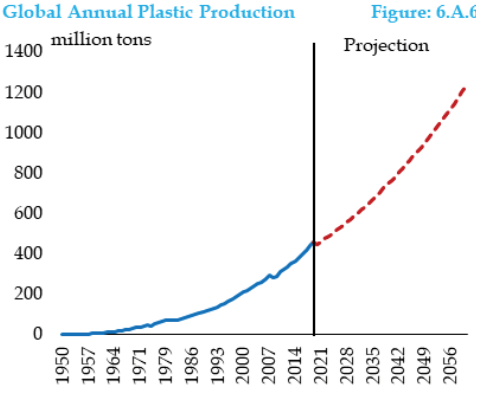
Novel Entities (NE): NE boundary covers a wide class of substances and materials including human-made materials, synthetic chemicals, heavy metals, plastics, radioactive materials and genetically modified organisms. Scientists measure NE boundaries through various proxies, such as plastics, whose increasing production **(Figure 6.A.6)** has had a ubiquitous impact on global environment (Persson et al., 2022). Pakistan is a significant generator of plastic waste and faces high rates of mismanaged plastics with an estimate of around 2 million tons of annual plastic waste, 86 percent of which is not managed properly. This mismanagement harms human health and marine species, with over 1.7 million tons ending up in landfills, open dumping sites, waterways and food systems, placing Pakistan among the top 10 plastic-

Species Extinctions Rate — Figure: 6.A.5



Source: Planetary Health Check

Global Annual Plastic Production — Figure: 6.A.6



Source: Our World in Data

[92] Artisanal fishing refers to small scale, traditional fishing practices carried out by households or local communities rather than large commercial companies. Pakistan's fisheries continue to be predominantly artisanal (FAO, 2009).
[93] PHC, n.d.b
[94] IPBES, 2019; Brander et al., 2014

polluting countries globally (WWFP, 2025). Pakistan also faces the challenge of pesticide and industrial chemical released into rivers and soils, impacting riverine ecology and soil degradation (Abbas et al., 2024). The economic risk from NE transgression is two-fold; direct costs from health impacts and indirect longer run costs from altered ecosystem function such as soil contamination impacting agriculture and bioaccumulation harming fishing industry.

Appendix 6B: Policy Framework and Institutionalisation of Climate Action in Pakistan

The institutionalisation of climate change in Pakistan reflects a gradual but uneven progress. It is characterised by the chronological expansion of institutions, policy layering, and periods of institutional restructuring. Early efforts were targeted towards environment protection in general, following international commitments, such as the Stockholm Declaration. This policy framework was followed by dedicated climate governance structure. However, as the table below suggests, the timeline exhibits implementation lag as indicated by delayed emergence of operational frameworks and enforcement mechanism of policies. The intensification of climate-related disasters, along with the Paris Agreement, has since accelerated transition from policy formulation toward implementation, giving renewed attention to climate action even as it remains inadequate.

History of Policy Framework and Institutionalisation of Climate Action in Pakistan **Table 6.B.1**

Year	Accomplishment	Year	Accomplishment
1974	Environmental and Urban Affairs Division established at the Federal Level following Stockholm Declaration	2012	National Disaster Management Plan approved
1983	Pakistan Environmental Protection Ordinance enacted, first comprehensive environment specific legislation	2012	National Sustainable Development Strategy
1989	Environmental and Urban Affairs Division upgraded to the Federal Ministry of Environment, Forestry and Wildlife	2013	Ministry of Climate Change downgraded to Division of Climate Change
1991–93	National Conservation Strategy prepared; National Environmental Quality Standards adopted in 1993		Global Change Impact Studies Centre granted autonomous status
1995	Cabinet Committee on Climate Change established, as policy coordination forum	2014	Framework for Implementation of Climate Change Policy adopted
1997	Pakistan Environmental Protection Act enacted	2015	Division of Climate Change upgraded to Ministry of Climate Change
2002	GCISCC, first research centre on CC, established	2016	NDC 1.0 in line with Paris Agreement
2004–05	PMM Committee on CC convenes National Environmental Policy	2016-18	National Forest Policy; National Water Policy of Pakistan
2006	National Energy Conservation Policy, National renewable Energy Policy, CDM implementation framework	2017-18	Climate Change Act was passed
2010	18th Amendment to the 1973 Constitution led to devolution of climate change policy implementation and related sectoral policies	2019	Clean Green Pakistan Movement (CGPM) launched
2011	Ministry of Environment ceases to exist	2021	Revised National Climate Change Policy of Pakistan
2012	The New Ministry of Disaster Management established; Ministry of Disaster Management renamed to the Ministry of Climate Change	2022	National Hazardous Waste Management Policy
2012	National Climate Change Policy approved by Federal Cabinet	2022	Implementation Framework reporting for NCCP
2012	Punjab and Balochistan Environmental Protection Acts prepared and enacted	2023	Progress on National Adaptation Plan (NAP)
2012	Green Benches established in all High Courts and the Supreme Court of Pakistan	2025	Pakistan Third National Communication; Third NDC Submission (NDC 3.0); Draft Pakistan Green Taxonomy; First Climate Budget
	Institutional Development		Legal Development
	Policy Formulation		Policy Implementation

Sources: MoCC&EC (2025a); Mumtaz (2023)

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Annexure A: Data Explanatory Notes

1) **GDP:** In case of an ongoing year, for which the actual GDP data for full fiscal year is not yet available, SBP uses the GDP target given in the Annual Plan by the Planning Commission in order to calculate the ratios of different variables with GDP, e.g., fiscal deficit, public debt, current account balance, trade balance, etc. SBP uses its own projections in outlook section of Chapter 1 of the report.

2) **Inflation:** There are three numbers that are usually used for measuring inflation: (i) *period average* inflation; (ii) YoY or *yearly* inflation; and (iii) MoM or *monthly* inflation. *Period average* inflation is the percent change of the *average* CPI (national, urban, or rural) from July to a given month of the year over the corresponding period of last year. *YoY* inflation is percent change in CPI of a given month over the same month last year; and *monthly* inflation is percent change of CPI of a given month over the previous month. The formulae for these definitions of inflation are given below:

$$\text{Period average inflation} = \left(\frac{\sum_{i=0}^{t-1} I_{t-i}}{\sum_{i=0}^{t-1} I_{t-12-i}} - 1 \right) \times 100$$

$$\text{YoY inflation} = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

$$\text{Monthly inflation} = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Where I_t is consumer price index in t^{th} month of the year. The CPI can be national, urban or rural.

For detailed information on the methodology, please see:
www.pbs.gov.pk/sites/default/files/price_statistics/methodology_price.pdf

3) **Change in debt stock vs financing of fiscal deficit:** The change in stock of gross public debt does not correspond with the fiscal financing data provided by the Ministry of Finance. This is because: (i) the stock of debt takes into account the gross value of government borrowing, whereas financing is calculated by adjusting the government borrowing with its deposits held with the banking system; and (ii) changes in the stock of debt also occur due to movements in exchange rates, both PKR and other currencies against US Dollar.

4) **Government borrowing:** Government borrowing from the banking system has different forms and every form has its own features and implications, as discussed here:

   (a) Government borrowing for budgetary support:

Borrowing from State Bank: According to Section 9C (1) of the SBP Act (as amended up to 28 January 2022), the SBP "shall not extend any direct credits to or guarantee any obligations of the Government, or any government owned entity or any other public entity." According to this amendment, borrowing from State Bank shows the stock of government securities held by SBP, after the re-profiling of stock of Market Related Treasury Bills (MRTBs) into PIBs since June 2019. The change in net borrowings from SBP mainly reflects change in stock of government securities, changes in government (central and provincial) deposits with SBP, and accrued profits on government securities, etc.

Borrowing from scheduled banks: This is mainly through (i) fortnightly auction of 1, 3, 6 and 12-month Market Treasury Bills (MTBs); (ii) monthly auction of 2, 3, 5, 10, 15, 20 and 30 year fixed rate Pakistan Investment Bonds (PIBs); (iii) fortnightly auctions of 2, 3, 5, 10 year floating rate PIBs; (iv) Sukuk and (v) Bai Muajjal of Sukuk (on deferred payment basis). However, provincial governments are not allowed to borrow directly from scheduled banks for deficit financing.

(b) *Commodity finance:* Both federal and provincial governments borrow from scheduled banks through respective institutions to finance their purchases of commodities e.g., wheat, sugar, etc.

5) Differences in different data sources: SBP data for a number of variables, such as government borrowing, foreign trade, etc. – often do not match with the information provided by MoF and PBS. This is because of differences in data definitions, coverage, etc. Some of the typical cases are discussed below.

(a) **Financing of budget deficit (numbers reported by MoF vs SBP):** There is often a discrepancy in the financing numbers provided by MoF in its quarterly tables of fiscal operations and those reported by SBP in its monetary survey. This is because MoF reports government bank borrowing on a cash basis, while SBP's monetary survey is compiled on an accrual basis, i.e., by taking into account accrued interest payments on T-bills.

(b) **Foreign trade (SBP vs PBS):** The trade figures reported by SBP in the *balance of payments* do not match with the data published by Pakistan Bureau of Statistics. This is because the trade statistics compiled by SBP are based on actual receipts and payments of foreign exchange by banks, whereas the PBS records data on the physical movement of goods (customs record).

List of Abbreviations

A

APCMA	All Pakistan Cement Manufacturers Association
ACCA	Association of Chartered Certified Accountants
AD	Anno Domini
ADB	Asian Development Bank
ADR	Advances to Deposit Ratio
AEs	Advanced Economies
AFOLU	Agriculture, Forestry and Other Land Use
AI	Artificial Intelligence
AJK	Azad Jammu and Kashmir
API	Active Pharmaceutical Ingredients
APTMA	All Pakistan Textile Mills Association
ARE	Alternative and Renewable Energy Policy

B

BAU	Business-as-Usual
BCS	Business Confidence Survey
BF	Biogeochemical Flows
BI	Biosphere Integrity
BISP	Benazir Income Support Programme
BoE	Bank of England
BOS	Bureau of Statistics
bps	basis points
BRT	Business Roundtable
BSC	Behbood Savings Certificate
BTM	Behind-The-Meter

C

°C	Centigrade
CA&EE	Central Asia and Eastern Europe
CAB	Current Account Balance
CAGR	Cumulative Annual Growth Rate
CBAM	Carbon Border Adjustment Mechanism
CBT	Climate Budget Tagging
CBU	Completely Built Unit
CC	Climate Change
CCA	Pakistan Climate Change Act
CCP	Competition Commission of Pakistan

	CDM	Clean Development Mechanism
	CDP	Climate Disclosure Project
	CDPR	Consortium For Development Policy Research
	CFAI	Chartered Financial Analyst Institute
	CFP	Climate Finance Pakistan
	CFU	Climate Fund Update
	CGPM	Clean Green Pakistan Movement
	CH_4	Methane
	CiC	Currency in Circulation
	CID	Climate Change Indicators Dashboard
	CIM	Clean Investment Monitor
	CKD	Completely Knocked Down
	CM	Chief Minister
	CM	Carbon Markets
	CO_2	Carbon Dioxide
	CPI	Consumer Price Index
	CPI	Climate Policy Initiative
D		
	DAP	Diammonium Phosphate
	DC	District of Columbia
	DFIs	Development Finance Institutions
	DGNMR	Distributed Generation and Net Metering Regulations
	DIP	Domestic Interest Payments
	DISCOs	Distribution Companies
	DPP	Digital Product Passport
	DRE	Policy for Development of Renewable Energy
	DRM	Disaster Risk Management
	DSC	Defense Saving Certificates
E		
	EA&P	East Asia and Pacific
	ECs	Exchange Companies
	EDB	Engineering Development Board
	EDGAR	Emissions Database for Global Atmospheric Research
	EDS	External Debt Servicing
	EE	Exports Earning
	EFF	Extended Fund Facility
	EG	Environmental Goods
	EGD	European Green Deal

EM-DAT	Emergency Events Database
EMDEs	Emerging Market and Developing Economies
EMIs	Electronic Money Institutions
EPA	Environmental Protection Agency
EPD	Exchange Policy Department
e-PRC	electronic Proceed Realisation Certificate
ER	Exchange Rate
ESG	Environment, Social and Governance
ESPR	Environmental Science and Pollution Research, Ecodesign for Sustainable Products Regulation
ESRM	Environmental and Social Risk Management
ETS	Emissions Trading System
EU	European Union
EV	Electric Vehicles

F

FAO	Food and Agriculture Organisation
FBR	Federal Bureau of Revenue
FCA	The Federal Committee on Agriculture
FCA	Fuel Charge Adjustment
FDI	Foreign Direct Investment
FEE	Foreign Exchange Earning
FI	Fixed Investment
FICCP	Framework for Implementation of Climate Change Policy
FO	Furnace Oil
FOB	Free on Board
FPI	Foreign Portfolio Investment
FRA	Financial Regulatory Authority
FX	Foreign Exchange
FY	Fiscal Year

G

GCC	Gulf Cooperation Council
GCISCC	Global Climate-Change Impact Studies Centre
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GLOF	Glacial Lake Outburst Flood
GoP	Government of Pakistan
GP	Gallup Pakistan
GSDRC	Governance and Social Development Resource Centre

	GST	General Sales Tax
	GVA	Gross Value Added
	GW	Gigawatt
H		
	H1	First Half
	H2	Second Half
	ha.	Hectare
	HBL	Habib Bank Limited
	HCH	Human Climate Horizon
	HD	Historical Decomposition
	HIES	Household Integrated Economic Survey
	HL	Helgi Library
	HRBDF	Human Right and Business Dilemmas Forum
	HS	Harmonised System
	HSD	High Speed Diesel
	HVA	High Value Added
I		
	IBA	Institute of Business Administration
	IBIs	Islamic Banking Institutions
	ICE	Internal Combustion Engine
	ICMA	Institute of Cost and Management Accountants
	ICT	Information and Communication Technology
	IEA	International Energy Agency
	IFC	International Finance Corporation
	IFRS	International Financial Reporting Standards
	IGC	International Growth Centre
	ILO	International Labour Organisation
	IMF	International Monetary Fund
	IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
	IPCC	Intergovernmental Panel on Climate Change
	IPP	Independent Power Producer
	IRs	Impulse Responses
	IRSA	Indus River System Authority
	ISO	International Organisation for Standardisation
	IT	Information Technology
K		
	kg	kilogram
	KIBOR	Karachi Interbank Offer Rate

	KP/KPK	Khyber Pakhtunkhwa
	KSE	Karachi Stock Exchange
L		
	L&C	Latin and Caribbean
	LDCs	Least Developed Countries
	LFS	Labour Force Survey
	LNG	Liquified Natural Gas
	LP	Local Projections
	LPG	Liquefied Petroleum Gas
	LRI	Legal Response International
	LSC	Land System Change
	LSM	Large Scale Manufacturing
	LVA	Low Value Added
M		
	M&E	Monitoring and Evaluation
	M2	Broad Money
	MAF	Million Acre Feet
	MDBs	Multilateral Development Banks
	MENA	Middle East and North Africa
	MFBs	Microfinance Banks
	mm	Millimetre
	MT	Metric Ton
	MMT	Million Metric Ton
	MNFSR	Ministry of National Food Security & Research
	MoCC	Ministry of Climate Change
	MoCC&EC	Ministry of Climate Change and Environmental Coordination
	MoF	Ministry of Finance
	MoFA	Ministry of Foreign Affairs
	MoIB	Ministry of Information and Broadcasting
	MoITT	Ministry of Information Technology and Telecommunication
	MoPD&SI	Ministry of Planning, Development and Special Initiatives
	MPC	Monetary Policy Committee
	MRV	Monitoring, Reporting, and Verification
	MS	Motor Spirit
	MSP	Minimum Support Price
	MtCO2 eq.	Million Tonnes of Carbon Dioxide Equivalent
	MTDS	Medium-Term Debt Management Strategy

	MW	Mega Watt
	m3/inhab	Cubic meters per inhabitant
N		
	NAP	National Adaptation Plan
	NCCP	National Climate Change Policy
	NCCPL	National Clearing Company of Pakistan Limited
	NCPI	National Consumer Price Index
	NDA	Net Domestic Assets
	NDC	Nationally Determined Contribution
	ND-GAIN	Notre Dame Global Adaptation Initiative
	NDMA	National Disaster Management Authority
	NE	Novel Entities
	NEER	Nominal Effective Exchange Rate
	NEPRA	National Electric Power Regulatory Authority
	NER	Nominal Exchange Rate
	NEV	New Energy Vehicle
	NEVC	New Energy Vehicles Centre
	NFA	Net Foreign Assets
	NFC	National Finance Commission
	NFDC	National Fertilizer Development Centre
	NFNE	Non-Food Non-Energy
	NFTP	. National Freelancing Training Program
	NGFS	Network For Greening the Financial System
	NPC	Naya Pakistan Certificate
	NPD	Net Proceed Differential
	NPPMCL	National Power Parks Management Company Limited
	NSS	National Savings Scheme
	NTBs	Non-Tariff Barriers
	NTMs	Non-Tariff Measures
	NTR	Non-Tax Revenue
	N2O	Nitrous Oxide
O		
	o/w	of which
	OA	Ocean Acidification
	OCAC	Oil Companies Advisory Council
	OECD	Organisation For Economic Co-operation and Development
	OIES	Oxford Institute for Energy Studies
	OMC	Oil Marketing Companies

	OMO	Open Market Operations
P		
	PACRA	Pakistan Credit Rating Agency
	PAMA	Pakistan Automotive Manufactures Association
	PARCO	Pak-Arab Refinery Limited
	PASSCO	Pakistan Agricultural Storage and Services Corporation Limited
	PB	Planetary Boundaries
	PBA	Pensioners' Benefit Account
	PBS	Pakistan Bureau of Statistics
	PBScience	Planetary Boundaries Science
	PC-1	Planning Commission Form-1
	PCCA	Pakistan Climate Change Authority
	PCCC	Pakistan Climate Change Council
	PDL	Petroleum Development Levy
	PE	Price Effect
	PED	Public External Debt
	PEDL	Public external debt and liabilities
	PFLs	PIBs - Floating
	PGT	Pakistan Green Taxonomy
	PHC	Planetary Health Check
	PIBs	Pakistan Investment Bonds
	PID	Pakistan Information Department
	PIDE	Pakistan Institute of Development Economics
	PKR	Pak Rupee
	PM	Prime Minister
	PM2.5	Fine Particulate Matter
	PMD	Pakistan Meteorological Department
	PMI	Purchasing Managers' Index
	POL	Petroleum, Oil & Lubricants
	PR	Policy Rate
	PRI	Pakistan Remittance Initiative
	PRIED	Policy Research Institute for Equitable Development
	PSBs	Private Sector Businesses
	PSDP	Public Sector Development Program
	PSEB	Pakistan Software Export Board
	PSEs	Public Sector Enterprises
	PV	Photovoltaic
	PVC	Polyvinyl Chloride

Q

Q1	First Quarter
Q2	Second Quarter
Q3	Third Quarter
Q4	Fourth Quarter
QNA	Quarterly National Accounts
QTA	Quarterly Tariff Adjustment

R

R&D	Research And Development
RCP	Representative Concentration Pathways
RDA	Roshan Digital Account
RE	Renewable Energy
REER	Real Effective Exchange Rate
RF	Renewables First
RGDP	Real Gross Domestic Product
rhs	right hand side
RIC	Regular Income Certificate
RM	Malaysian Ringgit
RPI	Relative Price Index
RSF	Resilience Sustainability Facility

S

S.R.O.	Statutory Regulatory Order
SAR	Saudi Riyal
SBFN	Sustainable Banking and Finance Network
SBP	State Bank of Pakistan
SCTS	Sustainable and Circular Textiles Strategy
SD	Standard Deviation
SDG	Sustainable Development Goals
SDPI	Sustainable Development Policy Institute
SECP	Securities and Exchange Commission of Pakistan
SKD	Semi Knocked Down
SMEP	Sustainable Manufacturing and Environmental Pollution
SMEs	Small and Medium Enterprises
S-PRCs	Statement of Proceed Realisation Certificate
SSA	Sub-Saharan Africa
SSM	Small Scale Manufacturing
STPED	Short-term Public External Debt

	STPF	Strategic Trade Policy Framework
	SUPARCO	Pakistan Space and Upper Atmosphere Research Commission
	SUV	Sport Utility Vehicle
	SVAR	Structural Vector Autoregression
T		
	T-Bills	Treasury Bills
	tCO2e	tonnes of carbon dioxide equivalent
	TCP	Trading Corporation of Pakistan
	TEDL	Total External Debt and Liabilities
	TES	Total Energy Supply
	TIP	Transparency International Pakistan
	TPU	Trade Policy Uncertainty
	TL	Total Loans
	TZ	TransitionZero
U		
	UA	Urban Agriculture
	UAE	United Arab Emirates
	UK	United Kingdom
	UKID	United Kingdom Aid Direct
	UN	United Nations
	UNCCA	United Nations Common Country Analysis
	UNCTAD	United Nations Conference on Trade and Development
	UNDP	United Nations Development Program
	UNDRR	United Nations Office for Disaster Risk Reduction
	UNFCCC	United Nations Framework Convention on Climate Change
	UN-Habitat	United Nations Human Settlements Programme
	US (A)	United States (of America)
	US$/ USD	United States Dollar
	US$/m3	US dollars per cubic metre
	USDA	United States Department of Agriculture
V		
	VE	Volume Effect
W		
	WAONR	Weighted Average Overnight Rate
	WAPDA	Water & Power Development Authority
	WB	World Bank
	WC	Working Capital
	WE	Western Europe

	WGMS	World Glacier Monitoring Service
	WHO	World Health Organisation
	WHT	Withholding Tax
	WIPO	World Intellectual Property Organisation
	WPI	Wholesale Price Index
	WRI	World Resources Institute
	WRT	Wholesale & Retail Trade
	WTO	World Trade Organisation
	WWF	World Wildlife Fund for Nature
	WWFP	World Wildlife Fund for Nature Pakistan
Y		
	YoY	Year-on-Year
Z		
	ZTBL	Zarai Taraqiati Bank Limited