State Bank of Pakistan

# Annual Report

2025-26

## The State of Pakistan's Economy



# The State of Pakistan's Economy 2025-26

November 16, 2026



State Bank of Pakistan

# The State of Pakistan's Economy

## Annual 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 FY26 and finalized in the fourth week of October 2026, using data and information as of then.*

© State Bank of Pakistan, 2026

Economic Policy Review Department

Published with two volumes

Annual Report on The State of Pakistan's Economy

The State of Pakistan's Economy Statistical Supplement

Printed at Pakistan Security Printing Corporation (Pvt.) Limited, Publications Section, Karachi

Print Quantity: 650

No. of Pages: 220

Web link



Date of Printing: November 13, 2026

Reproduction for educational and non-commercial purpose is permitted provided that source is acknowledged.

# Board of Directors



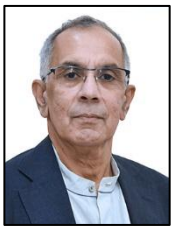
Mr. Jameel Ahmad (Chairperson)
Governor, SBP



Mr. Imdad Ullah Bosal
Secretary, Finance Division,
Government of Pakistan



Dr. Ali Cheema
Non - Executive Director



Dr. Syed Akbar Zaidi
Non - Executive Director



Mr. Najaf Yawar Khan
Non - Executive Director



Mr. Fawad Anwar
Non - Executive Director



Mr. Zahid Ebrahim
Non - Executive Director



Mr. Mahfooz Ali Khan
Non - Executive Director



Mr. Muhammad Ali Latif
Non - Executive Director



Ms. Tahira Raza
Non - Executive Director

# LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
November 16, 2026

**Dear Mr. Chairman,**

In terms of Section 39(2) of the State Bank of Pakistan Act, 1956, the Annual Report of the Board of Directors of State Bank of Pakistan on the State of Pakistan's Economy for the financial 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

# LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
November 16, 2026

**Dear Mr. Speaker,**

In terms of Section 39(2) of the State Bank of Pakistan Act, 1956, the Annual Report of the Board of Directors of State Bank of Pakistan on the State of Pakistan's Economy for the financial 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

**Sardar Ayaz Sadiq**
Speaker
National Assembly of Pakistan
Islamabad

# LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
November 16, 2026

**Dear Mr. Finance Minister,**

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

With warm regards,

Yours sincerely,



**(Jameel Ahmad)**
Governor
Chairperson, Board of Directors

**Mr. Muhammad Aurangzeb**
Federal Minister for Finance and Revenue
Islamabad

# Acknowledgements


**Analysts:**

| | |
|---|---|
| *Chapters:* | |
| 1. Economic Review | Sabina Khurram Jafri |
| 2. Economic Growth | Muhammad Mazhar Khan; Ravi Kumar; Almas Karim; Saad Ali |
| 3. Monetary Policy and Inflation | Sabina Khurram Jafri; Syed Hamza Ali; Abdul Basit Alias Shahzad; Mehreen Tariq Ghani; Muhammad Zuhaib |
| 4. Fiscal Policy and Public Debt | Amjad Ali; Shah Hussain; Ali Ahmad Shah; Muhammad Musab Imran |
| 5. Balance of Payments | Muhammad Akmal; Muhammad Nafees; Ana Khattak; Hafiza Bismah Qadoos |
| 6. Structural Challenges to Job Creation in Pakistan | Sohaib Jamali; Syed Qamar Hussain; Ali Ahsan; Romaisa Batool; Talha Ali Madni |
| *Editing:* | Shah Hussain; Syed Hamza Ali; Muhammad Musab Imran; Saad Ali; Ali Ahsan |
| *Formatting:* | Ravi Kumar; Muhammad Nafees; Romaisa Batool; Muhammad Zuhaib; Talha Ali Madni |
| **Publication Manager:** | Sabina Khurram Jafri |
| **Director:** | Fida Hussain |

**Publication Review Committees:**

| | |
|---|---|
| *Publication Review Committee of the Management* | Muhammad Amin Khan Lodhi (Chairman); Mahmood ul Hassan Khan; Ghulam Muhammad Abbasi; Aniq Aziz; Akhtar Javed; Syed Jahangir Shah; Farooq Pasha; Waqas Ahmed; and Fida Hussain |
| *Research and Publication Review Committee of the Board* | Syed Akbar Zaidi (Chairman); Ali Cheema; Zahid Ebrahim; and Tahira Raza |

The feedback and data support from Financial Stability; Monetary Policy; Research; Statistics & Data Services; Domestic Markets & Monetary Management; SME, Housing & Sustainable Finance; Payment Systems Policy Oversight; and logistics support by Corporate Services & Strategic Planning; External Communications departments; and SBP Library are also appreciated.

# Chapters


| | | | |
|---|---|---|---|
| 1 | **1** | **Economic Review** | **1** |
| | 1.1 | Overview | 3 |
| | 1.2 | Economic Outlook | 9 |
| 2 | **2** | **Economic Growth** | **13** |
| | 2.1 | GDP Growth | 15 |
| | 2.2 | Agriculture | 16 |
| | 2.3 | Industry | 24 |
| | 2.4 | Services | 31 |
| | 2.5 | Labour Market | 33 |
| 3 | **3** | **Monetary Policy and Inflation** | **47** |
| | 3.1 | Policy Review | 49 |
| | 3.2 | Monetary Aggregates | 50 |
| | 3.3 | Private Sector Credit | 56 |
| | 3.4 | Inflation | 60 |
| 4 | **4** | **Fiscal Policy and Public Debt** | **79** |
| | 4.1 | Fiscal Trends and Policy Review | 81 |
| | 4.2 | Revenue | 83 |
| | 4.3 | Expenditure | 87 |
| | 4.4 | Public Debt | 90 |
| 5 | **5** | **Balance of Payments** | **103** |
| | 5.1 | Global Economic Review | 105 |
| | 5.2 | Pakistan's Balance of Payments | 107 |
| | 5.3 | Current Account Balance | 107 |
| | 5.4 | Financial Account | 120 |
| | 5.5 | Exchange Rate and FX Reserves | 122 |
| 6 | **6** | **Structural Challenges to Job Creation in Pakistan** | **135** |
| | 6.1 | Introduction | 137 |
| | 6.2 | Job Creation: A Macroeconomic Perspective | 139 |
| | 6.3 | Labour Market Issues | 146 |
| | 6.4 | Future of Job Creation | 154 |
| | 6.5 | Summary and Conclusion | 160 |

6A GDP Growth, Per Capita Income, and their Coefficients of Variations for Selected Peer Economies during 1990-2025 175

**Annexure A: Data Explanatory Notes** 185

**List of Abbreviations** 187

## *Box Items*

Box 2.1 Reviving Investment in Productive Sectors of Pakistan 34

Box 2.2 El Niño Risks to Pakistan's Agriculture and the Case for Preparedness 37

Box 2.3 Integrating Next Generation of Solar Energy Strategies (Agrivoltaics, Ecovoltaics, and Floatovoltaics) into Pakistan's Agricultural Landscape 39

Box 2.4 Zarkhez-e: Developing an Integrated Agriculture Ecosystem 42

Box 2.5 Economic Policy Uncertainty and Manufacturing Activity in Pakistan 43

Box 3.1 Monetary Policy Response to Energy Price Shocks 65

Box 3.2 Assessing Second Round Effects of Global Energy Price Shock in Pakistan 67

Box 3.3 Drivers of Fixed Investment Loans 69

Box 3.4 Tracing the Auto Sector's Response to Monetary Policy 71

Box 3.5 Daily Fuel Price Adjustments and its Pass-through to Inflation 72

Box 3.6 Household Exposure to Energy Price Shock 73

Box 3.7 Decomposition of Core Inflation into Common and Transitory Components 76

Box 4.1 Composition of Government Spending and Employment Generation in Pakistan 97

Box 4.2 Expanding the Pool of Public Debt Instruments and Diversifying the Sources of Financing 98

Box 4.3 Pakistan's Prosumer Regulations 2026 – Global Precedent, Cross-Subsidy Reform, and Power Sector Implications 100

Box 5.1 India-EU Free Trade Agreement: Implication for Pakistan and the Way Forward 124

Box 5.2 Beyond Export Entry: Scaling Pakistan's ICT Exporting Firms 126

Box 5.3 Decomposing Pakistan's Interest Payments on Public External Debt: Implications for Balance of Payments 130

Box 5.4 Transforming Remittances into Financial and Development Capital 131

Box 6.1 Premature Deindustrialisation in Pakistan: Causes, Implications and the Prospects of Reversibility 162

Box 6.2 Analysing the Growth–Employment Nexus in Pakistan 165

Box 6.3 Decent Work Deficit in Pakistan 167

Box 6.4 Education-Skill Mismatch in the Context of Job Creation in Pakistan 170

Box 6.5 Gig Economy and Future of Employment 173

**List of Figures**


| | | |
|---|---|---|
| Figure 1.1 | Contribution of Important Crops to GDP Growth | 4 |
| Figure 1.2 | Contribution of Crops to GDP Growth | 4 |
| Figure 1.3 | Distribution of LSM Sectors - FY26 | 4 |
| Figure 1.4 | Composition of Change in Imports | 5 |
| Figure 1.5 | Inflation Contributions: Pre-conflict versus Post-conflict - Urban | 6 |
| Figure 1.6 | Government Spending and Revenue Trends | 6 |
| Figure 1.7 | Real GDP Growth | 8 |
| Figure 1.8 | Tax-to-GDP Ratio | 8 |
| Figure 1.9a | Sovereign CDS Spread | 10 |
| Figure 1.9b | Selected Economic Indicators | 10 |
| Figure 1.10 | High Frequency Indicators | 10 |
| Figure 2.1 | Contribution to GDP Growth | 15 |
| Figure 2.2a | Growth in Demand Indicators | 16 |
| Figure 2.2b | GDP Growth Quarterly Trend | 16 |
| Figure 2.3 | Crop Yield Distribution: Top 16 Producing Economies | 17 |
| Figure 2.4a | Rainfall Deviation from Normal - FY26 | 18 |
| Figure 2.4b | Temperature Deviation from Normal - FY26 | 18 |
| Figure 2.5 | Irrigation Water Releases | 19 |
| Figure 2.6 | Tubewells and Lift Pumps by Power Source | 19 |
| Figure 2.7 | Fertilizer Offtake and Prices | 20 |
| Figure 2.8a | Days with Max Temperature >32°C | 21 |
| Figure 2.8b | Days with Concurrent Gust and Rainfall | 21 |
| Figure 2.9 | Kharif Root-Zone Soil Moisture Change (FY26 vs FY25) | 22 |
| Figure 2.10 | Area and Production CAGR of Major and Selected Minor Crops, FY17–FY26 | 22 |
| Figure 2.11 | Contribution to Industrial Growth | 24 |
| Figure 2.12a | Distributed Solar Indicators | 25 |
| Figure 2.12b | Installed Capacity by Source | 25 |
| Figure 2.13 | Sector-wise Consumption of Coal | 26 |
| Figure 2.14a | Construction Inputs - YoY Growth | 26 |
| Figure 2.14b | Cumulative Federal PSDP Expenditure | 26 |
| Figure 2.15 | Quarterly Trend of LSM Growth | 27 |
| Figure 2.16 | Sectoral Performance of LSM in FY26 | 27 |
| Figure 2.17 | Production and Sales of Automobiles | 28 |
| Figure 2.18 | Contribution to Growth in Consumption of Petroleum Products | 29 |

| | | |
|---|---|---|
| Figure 2.19 | Cement Dispatches | 29 |
| Figure 2.20 | Contribution to Growth in Iron and Steel Output | 30 |
| Figure 2.21 | Electricity Rates for Businesses in Selected Countries | 30 |
| Figure 2.22 | Reported Drug Recalls | 30 |
| Figure 2.23 | Trend in Teledensity and Cellular Mobile Subscriptions | 32 |
| Figure 2.24a | Digital Payment Channel Users and Instruments | 32 |
| Figure 2.24b | Digital Payment Volume and Value | 32 |
| Figure 2.25 | Growth in Industrial Employment - Punjab | 33 |
| Figure 2.26 | Job Postings and Employment Conditions | 34 |
| Figure 2.27 | Average Wage Growth in Services Sector | 34 |
| Figure 2.1.1a | Gross Fixed Capital Formation | 35 |
| Figure 2.1.1b | Changes in Sectoral Investment in Pakistan in the Last Two Decades | 35 |
| Figure 2.2.1a | El Niño Strength Probabilities | 37 |
| Figure 2.2.1b | Temperature-Rainfall Stress Index across Pakistan | 37 |
| Figure 2.2.2 | El Niño Years vs Pakistan Crop Yields (5-Year Centred Trend) | 38 |
| Figure 2.4.1 | Financing Process and Digital Lending Journey under Zarkhez-e | 43 |
| Figure 2.5.1 | Average LSM Growth by EPU Regime | 44 |
| Figure 3.1a | Frequency Distribution of Urban CPI Inflation | 50 |
| Figure 3.1b | Frequency Distribution of Rural CPI Inflation | 50 |
| Figure 3.2 | Currency in Circulation - Flows | 51 |
| Figure 3.3 | Bank Deposits - Flows | 52 |
| Figure 3.4 | T-Bill Auction Summary - FY26 | 53 |
| Figure 3.5 | 1-Month T-Bill Auction Summary – FY26 | 54 |
| Figure 3.6 | Cut-Off Rates | 54 |
| Figure 3.7 | Secondary Market Yield Curve | 55 |
| Figure 3.8 | Interbank Liquidity Indicators | 55 |
| Figure 3.9 | Average WAONR Deviations from Policy Rate | 56 |
| Figure 3.10 | Private Sector Credit-to-GDP Ratio | 56 |
| Figure 3.11 | Private Sector Credit Growth | 56 |
| Figure 3.12 | Credit to Private Sector Businesses - Flows | 56 |
| Figure 3.13 | Major Sub-Sectors Availing Working Capital Loans - Flows | 57 |
| Figure 3.14 | Major Sub-Sectors Availing Fixed Investment Loans - Flows | 59 |
| Figure 3.15 | Consumer Financing - Flows | 60 |
| Figure 3.16 | WALR - Auto and Housebuilding Loans | 60 |
| Figure 3.17 | Breakup of Banks' Gross Advances - Stocks | 60 |
| Figure 3.18a | Urban CPI Inflation Composition | 61 |

| | | |
|---|---|---|
| Figure 3.18b | Rural CPI Inflation Composition | 61 |
| Figure 3.19 | Wheat Consumption and Production | 62 |
| Figure 3.20 | Growth in Input Prices | 62 |
| Figure 3.21a | Contribution to Energy Inflation - Urban | 63 |
| Figure 3.21b | Contribution to Energy Inflation - Rural | 63 |
| Figure 3.22 | Composition of Motor Fuel Prices | 64 |
| Figure 3.23a | Contribution to Core Inflation - Urban | 64 |
| Figure 3.23b | Contribution to Core Inflation - Rural | 64 |
| Figure 3.24 | Top Contributors to Core Inflation – Urban FY26 | 65 |
| Figure 3.25 | Uncertainty and Precious Metal Prices | 65 |
| Figure 3.1.1a | Monetary Policy Response Post 2022-23 Commodity Shock | 66 |
| Figure 3.1.1b | Monetary Policy Response Post Middle East Conflict | 66 |
| Figure 3.2.1 | Cumulative Response of CPI Inflation to a 10 percent Shock to Global Energy Price | 68 |
| Figure 3.2.2 | Cumulative Response of Food Inflation to a 10 percent Shock to Global Energy Price | 68 |
| Figure 3.2.3 | Cumulative Response of Core Inflation to a 10 percent Shock to Global Energy Price | 68 |
| Figure 3.3.1 | Fixed Investment Loans to GDP Ratio | 69 |
| Figure 3.3.2 | Fixed Investment Loans and Business Confidence | 69 |
| Figure 3.3.3 | Fixed Investment Loans and Real Interest Rate | 70 |
| Figure 3.3.4 | Fixed Investment Loans and LSM Growth | 70 |
| Figure 3.3.5 | Fixed Investment Loans and Operating Profit | 70 |
| Figure 3.4.1 | Real Auto Finance and Auto Sales | 71 |
| Figure 3.4.2 | Real Auto Finance and Lending Rate | 71 |
| Figure 3.6.1 | Household Exposure to Energy Price Shocks | 74 |
| Figure 3.6.2a | Energy Exposure by Consumption | 74 |
| Figure 3.6.2b | Monthly Cost of Energy Price Shocks by Consumption Quintile | 74 |
| Figure 3.6.3 | Household Energy Exposure by Source | 75 |
| Figure 3.6.4 | Share of Households with High Energy Exposure | 75 |
| Figure 3.7.1 | Core Inflation vs Persistent Component of Core Inflation | 76 |
| Figure 4.1a | Fiscal Balance | 81 |
| Figure 4.1b | Primary Balance | 81 |
| Figure 4.2 | Provincial Balance | 81 |
| Figure 4.3 | Breakdown of Total Revenue | 83 |
| Figure 4.4 | Breakdown of FBR Taxes | 83 |
| Figure 4.5 | Contribution to Growth in FBR Taxes | 83 |
| Figure 4.6 | FBR Taxes (Actual vs. Revised Target) | 84 |
| Figure 4.7 | Share of Direct and Indirect Taxes in FBR Taxes | 84 |

| | | |
|---|---|---|
| Figure 4.8 | Components of Direct Taxes | 84 |
| Figure 4.9a | Contribution to Growth in WHT by Top 15 Spinners in FY25 | 85 |
| Figure 4.9b | Contribution to Growth in WHT by Top 15 Spinners in FY26 | 85 |
| Figure 4.10 | Breakdown of Provincial Own Revenue | 86 |
| Figure 4.11 | Breakdown of Federal NTR | 87 |
| Figure 4.12 | Total Expenditure | 87 |
| Figure 4.13 | Interest and Non-interest Expenditure | 87 |
| Figure 4.14 | Change in Domestic Mark-up Payments | 87 |
| Figure 4.15 | Provincial Disaggregated Expenditures | 90 |
| Figure 4.16a | Gross Public Debt - Stock | 90 |
| Figure 4.16b | Gross Public Debt - Flow | 90 |
| Figure 4.17 | Major Factors Contributing to Change in Gross Public Debt to GDP | 91 |
| Figure 4.18 | Institution-wise Flow of Domestic Debt | 92 |
| Figure 4.19 | National Savings Schemes - Flow | 92 |
| Figure 4.20 | Share in Government Securities | 92 |
| Figure 4.21 | Average Yield on Government Securities | 93 |
| Figure 4.22 | Average Time to Maturity of Domestic Debt | 93 |
| Figure 4.23 | Interest Payments on Domestic Debt | 93 |
| Figure 4.24 | Repayment Capacity of the Government | 94 |
| Figure 4.25 | External Debt (end June Stock) | 94 |
| Figure 4.26 | Disbursements for Budgetary Support in FY26 | 95 |
| Figure 4.27 | Debt Servicing of PEDL | 95 |
| Figure 4.28 | Change in Debt Servicing of PEDL | 96 |
| Figure 4.29 | Effective Interest Rates on Public External Debt | 96 |
| Figure 4.30a | TEDL as percent of GDP | 96 |
| Figure 4.30b | EDS as percent of EE | 96 |
| Figure 4.30c | EDS as percent of FEE | 96 |
| Figure 4.2.1 | Trend in Debt Servicing Expenditure of Pakistan | 98 |
| Figure 5.1 | Real GDP Growth | 105 |
| Figure 5.2 | Global Shipping Cost | 105 |
| Figure 5.3 | Global Trade Volumes | 105 |
| Figure 5.4 | Global Commodity Prices | 106 |
| Figure 5.5 | Headline Inflation | 106 |
| Figure 5.6 | Changes in Central Banks' Policy Rates | 106 |
| Figure 5.7 | Global Financial Conditions Index | 106 |
| Figure 5.8 | CAB and SBP's FX Reserves | 107 |

| | | |
|---|---|---|
| Figure 5.9 | Pakistan's Terms of Trade (2017-18 = 100) | 108 |
| Figure 5.10 | Contribution to Export Growth | 109 |
| Figure 5.11 | Exports Unit Value and Quantity Growth | 109 |
| Figure 5.12 | Economic Complexity Ranking of Exports Basket (Average 2020-2024) | 110 |
| Figure 5.13 | Change in Rice Exports | 110 |
| Figure 5.14 | Pakistan's Rice Exports: Markets Lost vs Gained | 111 |
| Figure 5.15 | Contribution to Textile Exports | 111 |
| Figure 5.16 | Merchandise Imports | 113 |
| Figure 5.17 | Contribution to Import Growth | 114 |
| Figure 5.18a | Impact of Conflict on Import Volume of Petroleum Crude | 114 |
| Figure 5.18b | Impact of Conflict on Import Volume of Petroleum Products | 114 |
| Figure 5.19a | Impact of Conflict on Import Value of Petroleum Crude | 115 |
| Figure 5.19b | Impact of Conflict on Import Value of Petroleum Products | 115 |
| Figure 5.20 | Energy Generation by Source | 115 |
| Figure 5.21 | Pakistan's ICT Exports | 118 |
| Figure 5.22 | Primary Income Account - Major Payments | 118 |
| Figure 5.23 | Sector Wise Repatriation of Profit - FY26 | 119 |
| Figure 5.24 | Workers' Remittance Inflows | 119 |
| Figure 5.25 | Skill Composition of Registered Workers Going Abroad | 119 |
| Figure 5.26 | Roshan Digital Accounts | 120 |
| Figure 5.27 | Foreign Direct Investment | 121 |
| Figure 5.28 | FX Reserves and Exchange Rate | 123 |
| Figure 5.29 | Forwards/Swap Liabilities and Import Cover | 123 |
| Figure 5.30 | Exchange Market Pressure Index | 123 |
| Figure 5.31 | REER, NEER and RPI | 123 |
| Figure 5.1.1 | Trade Complementarity Index | 124 |
| Figure 5.1.2 | Export Portfolio Diversification Matrix | 125 |
| Figure 5.2.1a | ICT Firms Size Distribution - FY21 | 127 |
| Figure 5.2.1b | ICT Firms Size Distribution - FY26 | 127 |
| Figure 5.3.1 | Interest Payments on External Debt | 130 |
| Figure 5.4.1a | Top 5 Workers' Remittance Receiving Countries in 2025 | 131 |
| Figure 5.4.1b | Pakistan's Goods Exports and Workers' Remittances | 131 |
| Figure 6.1 | Unemployment Rate, Working Age Population, and Real GDP Growth | 137 |
| Figure 6.2 | Working Age Population (WAP) | 138 |
| Figure 6.3 | Female Population and Labour Force Participation | 138 |
| Figure 6.4 | Working Poverty Rate | 139 |

| | | |
|---|---|---|
| Figure 6.5 | Annual Flow of Emigrants | 139 |
| Figure 6.6a | Average GDP Growth in Selected Economies (1990-2025) | 140 |
| Figure 6.6b | GDP Growth Volatility in Pakistan | 140 |
| Figure 6.6c | Per Capita Income difference between Pakistan and LICs | 140 |
| Figure 6.7 | Share in GDP and Employment – Pakistan | 141 |
| Figure 6.8 | Decomposition of Growth in GDP per Capita | 141 |
| Figure 6.9 | Labour Productivity | 142 |
| Figure 6.10a | Labour Productivity - High-tech Services | 142 |
| Figure 6.10b | Labour Productivity - Low-tech Services | 142 |
| Figure 6.11a | Share of High-tech Services in Total Output: | 143 |
| Figure 6.11b | Share of Low-tech Services in Total Output | 143 |
| Figure 6.12 | Share of Employment in Services | 143 |
| Figure 6.13 | Inflation and GFCF in Pakistan (FY01-FY26) | 144 |
| Figure 6.14 | Labour Productivity, Economic Complexity Index (ECI), and Manufacturing Exports | 145 |
| Figure 6.15 | GVC related Output as percent of Total Output (FY20-24) | 145 |
| Figure 6.16 | PSDP Expenditure as percent of GDP | 145 |
| Figure 6.17 | Labour Force Participation Rate - Average (2016-25) | 146 |
| Figure 6.18a | Labour Force Participation Rate and Gender Gap - Average (2016-25) | 146 |
| Figure 6.18b | Pakistan's Unemployment Rate | 146 |
| Figure 6.19a | Pakistan's Labour Force Participation Rate - by Gender and Level of Education (2024-25) | 147 |
| Figure 6.19b | Pakistan's Unemployment Rate - by Gender and level of Education (2024-25) | 147 |
| Figure 6.20 | Pakistan’s Labour Force Participation Rate - by Area | 148 |
| Figure 6.21 | Female Labour Force Participation Rate and Fertility Rate - Average (2021-25) | 148 |
| Figure 6.22 | Share of Persons Engaged in Domestic and Care Activities in Pakistan (2024-25) | 148 |
| Figure 6.23 | Gender Wage Inequality and Female Labour Force Participation Rate | 149 |
| Figure 6.24 | Pakistan's Nature of Employment Composition (2024-25) | 149 |
| Figure 6.25 | Size of Informal Economy and Informal Employment | 150 |
| Figure 6.26 | Share of Formal and Informal Employees - by Major Industries in Pakistan (2024-25) | 150 |
| Figure 6.27 | Distribution of Informal Employment in Pakistan’s Non-agriculture Employment | 151 |
| Figure 6.28 | Distribution of Informal Sector Employment - by Major Industry Divisions in Pakistan (2024-25) | 151 |
| Figure 6.29 | Distribution of Informal Workers - by Employment Status in Pakistan | 151 |
| Figure 6.30 | Employment by Sex, Education and Nature of Formality | 152 |
| Figure 6.31 | Youth Population and Youth Labour Force Participation Rate (Age 15-24) | 152 |
| Figure 6.32 | Share of Youth in Pakistan’s Working-Age Population | 152 |

| | | |
|---|---|---|
| Figure 6.33 | Unemployment Rates - by Age and Sex (2024-25) | 153 |
| Figure 6.34 | NEET Rate - Average (2021-25) | 154 |
| Figure 6.35 | Operational Stock of Industrial and Service Robots | 155 |
| Figure 6.36 | Innovation and Investment in AI | 155 |
| Figure 6.37 | Green Growth Index | 158 |
| Figure 6.38 | Non-green Workers by Transition Category | 158 |
| Figure 6.39 | Trade-weighted Average Tariff on Goods Exported | 159 |
| Figure 6.40 | B-READY Indicators | 159 |
| Figure 6.41 | GVC Readiness Index - Top 15 and Bottom 15 Economies | 160 |
| Figure 6.1.1 | Share of Industry in GDP and Employment | 163 |
| Figure 6.1.2a | Manufacturing Value Added | 164 |
| Figure 6.1.2b | Manufacturing Exports | 164 |
| Figure 6.1.2c | Manufacturing Employment | 164 |
| Figure 6.1.3 | Share of Manufacturing | 164 |
| Figure 6.2.1a | Trend Real GDP and Employment Growth | 166 |
| Figure 6.2.1b | Cyclical Deviations in Employment and Real GDP from Trends | 166 |
| Figure 6.3.1 | The Four Pillars of Decent Work | 167 |
| Figure 6.3.2 | Pakistan's Ranking and Score in Fundamental Labour Rights Sub-Index | 169 |
| Figure 6.3.3 | B-READY Labour Regulatory Score | 169 |
| Figure 6.3.4 | Trade Union Density | 169 |
| Figure 6.3.5 | Expenditure on Social Assistance (SA) | 169 |
| Figure 6.4.1 | Types of Skills Mismatch | 170 |
| Figure 6.4.2 | QS World Future Skills Index - 2027 | 171 |
| Figure 6.4.3 | GTCI Country Profiles 2025 - by Pillar | 171 |
| Figure 6.4.4 | Unemployment Rate - by Level of Education | 172 |
| Figure 6.4.5 | Share of Unemployed - by Level of Past Work Experience | 172 |
| Figure 6.5.1 | Pakistan's Freelancing Exports | 174 |

**List of Tables**


| | | |
|---|---|---|
| Table 1.1 | Selected Economic Indicators | 3 |
| Table 1.2 | Macroeconomic Targets and Projections for FY27 | 11 |
| Table 2.1 | Real GDP Growth | 15 |
| Table 2.2 | Composition of Aggregate Demand | 16 |
| Table 2.3 | Agriculture, Forestry and Fishing | 17 |
| Table 2.4 | Availability of Certified Seeds | 19 |
| Table 2.5 | Agriculture Credit Disbursement | 20 |
| Table 2.6 | Important Crops | 21 |
| Table 2.7 | Other Crops | 23 |
| Table 2.8 | Livestock Population and Production | 23 |
| Table 2.9 | Industrial Activities | 24 |
| Table 2.10 | Large Scale Manufacturing | 28 |
| Table 2.11 | Services Sector | 31 |
| Table 2.12 | Finance and Insurance Services | 33 |
| Table 2.1.1 | A Comparison of Industrial Policy Instruments in Selected Asian Economies | 36 |
| Table 2.2.1 | Estimated Crop-yield Losses under El Niño-like Conditions | 38 |
| Table 2.2.2 | Early Action that Helped Vietnam Limit Crop Losses in 2019–20 | 39 |
| Table 2.3.1 | Smart Ways to Utilize Area Under Solar Panels | 40 |
| Table 2.3.2 | Important Considerations for Implementing Agrivoltaics, Ecovoltaics and Floatovoltaics | 40 |
| Table 2.5.1 | Uncertainty and Manufacturing Activity | 44 |
| Table 2.5.2 | Long-run Results | 44 |
| Table 3.1 | Monetary Aggregates – FY26 | 51 |
| Table 3.2 | Auction Summary – FY26 | 53 |
| Table 3.3 | Auctions of Pakistan Investment Bonds | 54 |
| Table 3.4 | Underlying Factors of Private Sector Credit | 57 |
| Table 3.5 | Loans to Private Sector Businesses | 58 |
| Table 3.6 | Average CPI Inflation | 61 |
| Table 3.4.1 | ARDL Results (Dep. Variable Automobile Sales) | 71 |
| Table 4.1 | Consolidated Fiscal Operations | 82 |
| Table 4.2 | Breakdown of FBR Taxes | 85 |
| Table 4.3 | Spinners of Customs Duty | 86 |
| Table 4.4 | Breakdown of Tax Expenditure | 86 |
| Table 4.5 | Breakup of Consolidated Expenditure | 88 |
| Table 4.6 | Breakup of Subsidies and Grants | 89 |

| | | |
|---|---|---|
| Table 4.7 | Summary of Pakistan's Debt and Liabilities | 91 |
| Table 4.8 | Purpose of External Disbursements | 95 |
| Table 4.9 | Liquidity Indicators | 97 |
| Table 4.1.1 | The Impact of 1 percent Increase in Government Spending on Employment | 97 |
| Table 4.3.1 | Estimated Cross-Subsidy Savings | 101 |
| Table 5.1 | Pakistan's Balance of Payments | 108 |
| Table 5.2 | Pakistan's Merchandise Exports | 110 |
| Table 5.3 | Textile Imports by US and EU for the Period FY25 vs FY26 | 112 |
| Table 5.4 | Pakistan's Merchandise Imports | 113 |
| Table 5.5 | Import Savings Due to Solarisation – FY26 | 116 |
| Table 5.6 | Trade in Services | 117 |
| Table 5.1.1 | India–EU FTA and Pakistan's Competitive Position in the EU Market | 125 |
| Table 5.2.1 | Distribution of Firms by Size of Annual Export Receipts - FY26 | 127 |
| Table 5.3.1 | Decomposition of Interest Payments on External Debt | 130 |
| Table 6.1 | Mean Hours Worked by Major Occupational Groups | 149 |
| Table 6.2 | Major Theories Explaining Informal Employment | 150 |
| Table 6.2.1 | Johansen Cointegration Trace and Maximum-eigen Value Tests | 166 |
| Table 6.2.2 | Employment Elasticity with respect to GDP: 1972-2000 | 166 |
| Table 6.2.3 | Employment Elasticity with respect to GDP: 2000-2025 | 167 |
| Table 6.3.1 | Major Labour Legislations in Pakistan | 168 |
| Table 6A.1 | GDP Growth and Per Capita Income during 1990-2025 | 175 |



# 1

# Economic Review

# 1 Economic Review

## 1.1 Overview

Pakistan's economy demonstrated resilience to domestic and global economic shocks, amid an increasingly uncertain geopolitical environment during FY26. The uncertainty about the US trade tariffs, monsoon floods at the start of the year, and outbreak of the Middle East conflict in late February 2026 created severe headwinds for the hard-earned macroeconomic stability. The coordinated macroeconomic policies helped to navigate the challenging domestic and global economic environment. This, together with economic reforms under the IMF program yielded improvements across key macroeconomic indicators in FY26. The real GDP growth maintained an uptrend; inflation remained contained; SBP's FX reserves, supported by significant SBP purchases, comfortably surpassed target; and fiscal deficit more than halved as a percent of GDP compared to last year (**Table 1.1**).

Although the Middle East conflict disrupted some of these favourable trends, the stronger fiscal and external buffers helped maintain overall macroeconomic stability (**Table 1.1**). SBP continued with a prudent monetary policy stance and maintained adequately positive real policy rate on forward looking basis to keep inflation within the medium-term target range. At the same time, the federal government continued its fiscal consolidation efforts for the fourth consecutive year.

Moreover, the government implemented a series of targeted austerity measures and passed on the surge in global oil prices to domestic fuel prices. These measures aided in containing the adverse impact of the external shock on both the fiscal and external accounts. The sustained improvement in key economic indicators prompted upgrade in Pakistan's sovereign credit ratings during FY26, which further supported favourable macroeconomic outcomes.

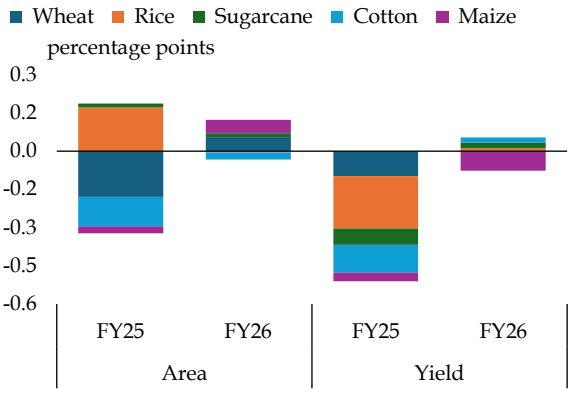
**Selected Economic Indicators** **Table 1.1**

| | FY25 | FY26 | FY26 | |
|---|---|---|---|---|
| | | | Jul-Feb | Mar-Jun |
| *Growth rate* (percent)* | | | | |
| Real GDP [a,*] | 3.1 | 3.7 | 4.2 | 2.0 |
| Agriculture* | 1.3 | 3.5 | 3.4 | 3.7 |
| Industry* | 5.5 | 3.3 | 6.4 | -4.7 |
| o/w LSM* | -0.7 | 5.0 | 6.5 | 0.4 |
| Services* | 3.1 | 3.8 | 3.9 | 3.6 |
| National CPI (period average) [a] | 4.5 | 7.1 | 5.5 | 10.2 |
| Private sector credit [b'^] | 12.2 | 14.7 | 14.8 | 14.7 |
| Money supply (M2) [b'^] | 12.9 | 14.7 | 17.5 | 14.7 |
| Exports [b] | 4.4 | -4.7 | -5.3 | -3.3 |
| Imports [b] | 11.3 | 9.1 | 9.2 | 8.9 |
| Tax revenue – FBR [c] | 26.1 | 10.8 | 10.6 | 11.1 |
| Exchange rate (end-period) (+app/dep%) [b] | -1.9 | 2.0 | 1.5 | 0.5 |
| *End period* | | | | |
| Exchange rate | 283.8 | 278.2 | 279.5 | 278.2 |
| Policy rate [b] | 11.0 | 11.5 | 10.5 | 11.5 |
| *million US$* | | | | |
| SBP's reserves (end-period) [b] | 14,506 | 18,378 | 16,299 | 18,378 |
| Workers' remittances [b] | 38,300 | 41,585 | 26,488 | 15,097 |
| Current account balance [b] | 1,838 | -391 | -800 | 409 |
| *percent of GDP* | | | | |
| Fiscal balance [c,*] | -5.4 | -2.6 | -0.7 | -1.9 |
| Primary balance* | 2.4 | 2.9 | 3.2 | -0.4 |
| Gross public debt ^ | 70.5 | 68.6 | - | 68.6 |
| Current account balance | 0.4 | -0.1 | -0.2 | 0.1 |
| Investment [a] | 14.4 | 14.5 | - | - |

For real GDP, FY25 and FY26 estimates are revised and provisional, respectively. *sub-periods refer to Jul–Mar and Apr–Jun. ^sub-periods indicate end-period stock.
Sources: [a] PBS; [b] SBP; [c] MoF

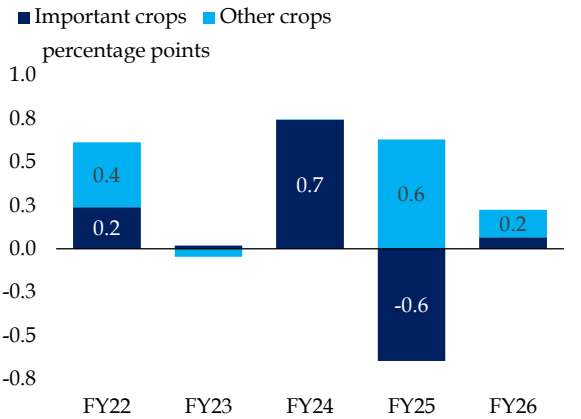
The combined impact of policy rate reduction in the previous year, lower input costs as reflected by deceleration in wholesale price index during Jul-Feb FY26, positive business sentiments and recovery in domestic demand supported expansion in economic activity in FY26. The real GDP growth edged up, with the major impetus coming from a rebound in large scale manufacturing (LSM) output having strong linkages with agriculture and services sectors. However, the momentum of economic activity

**Contribution of Important Crops to GDP Growth** **Figure 1.1**




Sources: MNFSR; SBP staff calculations

**Contribution of Crops to GDP Growth** **Figure 1.2**




Sources: MoF; SBP staff calculations

slowed in the last quarter due to increase in input costs, government austerity measures, and rising uncertainty in the aftermath of the Middle East conflict.

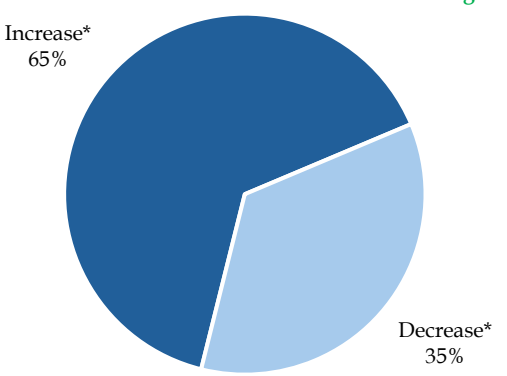
Agriculture growth improved on account of a slight recovery in important crops, though livestock continued to remain the dominant contributor to agriculture sector value addition. The recovery in important crops from last year's contraction was on account of increase in production of wheat, rice and sugarcane that outweighed the decline in the production of cotton and maize. Better flood management through timely rescue and relief measures, sufficient water availability and improved access to agriculture credit (**Box 2.4**) supported the recovery in output of important crops.

Yields of all important kharif crops, except for maize, recovered in FY26 (**Figure 1.1**). Post flood soil improvement supported yield gains in rice and sugarcane, while cotton benefitted from early sowing and improved availability of inputs. However, unfavourable weather conditions – high temperature at the time of sowing and winds during harvest – constrained a notable improvement in wheat yields. Meanwhile, other crops maintained the trend observed over the past few years, benefitting from increased area under cultivation (**Figure 1.2**).

The growth in industry slowed in FY26, dragged by contraction in electricity, gas and water supply, largely due to reduction in power subsidies. However, the LSM output recovered after a lacklustre performance in the preceding three years. Growth in LSM was driven by an uptick in domestic demand that led to increase in production of various sub-sectors, including automobile and allied sectors, food and beverages, petroleum products and cement.

However, performance of export-oriented sectors including textiles, wearing apparel, and pharmaceuticals remained subdued. Notwithstanding the recovery, output of around 35 percent of the LSM sub-sectors remained below the past five-year averages for FY21-25 (**Figure 1.3**). This indicates economic slack alongside the presence of persistent structural impediments, including declining investment and low productivity in manufacturing sector. Moreover,

**Distribution of LSM Sectors - FY26** **Figure 1.3**




* Compared to FY21-25 average.
Source: SBP staff calculations

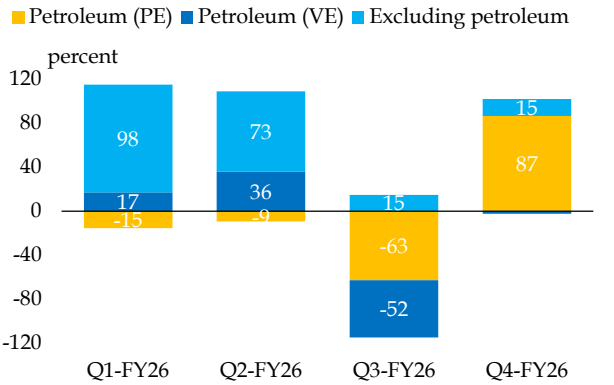
the real GDP measured from the expenditure side shows that consumption remained the primary driver, while investment-to-GDP ratio increased marginally. The investment, in terms of GDP, needs to be increased for the country to achieve and sustain higher growth, enhance exports and generate higher employment.

The recovery in economic activity drove a volume-led expansion in imports during FY26, reinforced by tariff rationalisation under the National Tariff Policy 2025–2030. Non-energy imports explained this growth, led primarily by the transport sector, while food imports rose due to persistent reliance on edible oil imports and to meet domestic sugar shortages during the year. Furthermore, a surge in energy prices, following the Middle East conflict, inflated the energy import bill in Q4-FY26 (**Figure 1.4**).

Exports, on the other hand, were constrained by subdued global demand amid uncertainty about the US trade tariffs, closure of country's Western borders, falling commodity prices, and supply chain disruptions following the Middle East conflict. The major drag came from food group and other manufactures including cement and pharmaceuticals. In food group, India's re-entry in global rice trade that intensified competition amid substantial increase in global rice stocks weighed negatively on Pakistan's rice export volumes and unit values. Meanwhile, textile exports posted a marginal increase, driven primarily by a favourable price-effect in wearing apparel. Similarly, export of petroleum products, specifically furnace oil, increased on account of surplus amid enhanced domestic refining and reduced domestic demand from power sector.

Against widening of merchandise trade deficit, the services trade deficit narrowed considerably. This mainly reflected the momentum in export of information and communication technology (ICT) services. ICT emerged as Pakistan's second-largest export sector after knitwear in FY26, driven by various supportive measures by the government and SBP. However, the sector remains constrained by a low firm size, primarily because of lack of skilled labour force with required technical and

**Composition of Change in Imports** **Figure 1.4**




Note: PE = price-effect; VE = volume-effect
Sources: PBS; SBP staff estimates

managerial capabilities (**Box 5.2**). This challenge points to the urgent need for reforming education, with broadening policy focus beyond basic enrolment metrics.

Furthermore, primary income deficit edged down due to lower interest payments (**Box 5.3**). This improvement was on account of relatively lower global interest rates. Moreover, workers' remittances posted strong growth underpinned by targeted policy measures by the government and the SBP to promote receipts via formal channels, low kerb premium, and increase in labour emigration. Aside from supporting external account and reserve build-up, remittances may also contribute to capital formation through financial deepening, especially by increasing households' access to saving and investment products (**Box 5.4**). The robust workers' remittances nearly financed the combined deficit in primary income and the trade in goods and services balances. Consequently, the current account recorded a marginal deficit equivalent to 0.1 percent of GDP in FY26.

Furthermore, ample inflows from official multilateral and bilateral creditors, successful Eurobond and Panda bond issuances, and steady inflows in Roshan Digital Accounts supported FX buffers during FY26. This, alongside significant FX purchases by SBP shored up SBP's foreign exchange reserves to US$ 18.4 billion by the end of FY26, up from US$ 14.5 billion at the end of FY25, which continued supporting exchange rate

stability. Besides, SBP reduced its forward liabilities by US$ 1.6 billion during FY26. This together with reserve build-up via purchases points to improved quality of FX buffers.

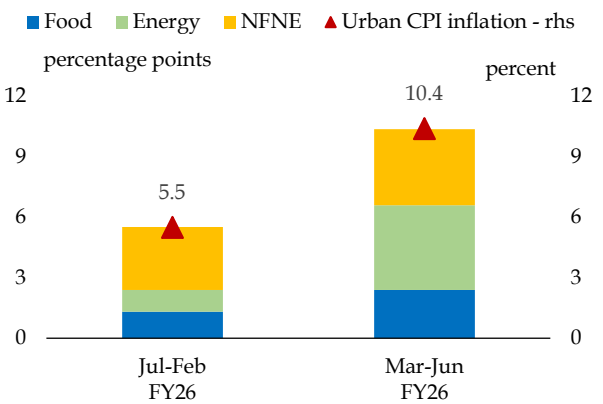
The prudent monetary and fiscal policies helped contain the average national CPI (NCPI) inflation at 7.1 percent, close to the upper bound of the medium-term target range of 5.0 – 7.0 percent during FY26, despite global oil price shock and domestic food supply frictions. However, the direct and indirect effects of the energy price shock pushed the year-on-year inflation above the upper bound of the target range from March 2026 onward. The average inflation nearly doubled from 5.5 percent during Jul-Feb FY26 to 10.4 percent in the urban regions in Mar-Jun FY26. Similarly, contribution of energy to urban inflation rose from one-fifth in Jul–Feb FY26 to two-fifth in Mar–Jun FY26 (**Figure 1.5**). Moreover, the general increase in price pressures following the Middle East conflict also impacted consumer and business inflation expectations, which had previously improved during Jul–Feb FY26.

Food inflation was primarily driven by sharp increase in prices of wheat and its products. Several factors explain wheat price surge in FY26. These include reduced production in the preceding year amid transitional impact of market deregulation, flood-related stock losses and shortages due to market uncertainty regarding wheat supply. However, softening prices of perishables partly offset the impact of price increases in non-perishables. The core inflation, though moderated further across urban and rural baskets particularly in H1-FY26, it remained elevated, signalling persistence of underlying price pressures (**Box 3.7**).

The monetary policy committee (MPC) maintained status quo in six out of eight monetary policy meetings in FY26. This measured approach was based on careful assessment of key macroeconomic trends and inflation outlook. In December 2025, the improved inflation outlook provided room for 50 basis points (bps) reduction in the policy rate to 10.5 percent to support economic activity. However, the committee proactively raised the policy rate by 100 bps to 11.5 percent in April 2026 to limit the potential second round effects from the energy price shock following the Middle East conflict (**Box 3.1 & 3.2**).

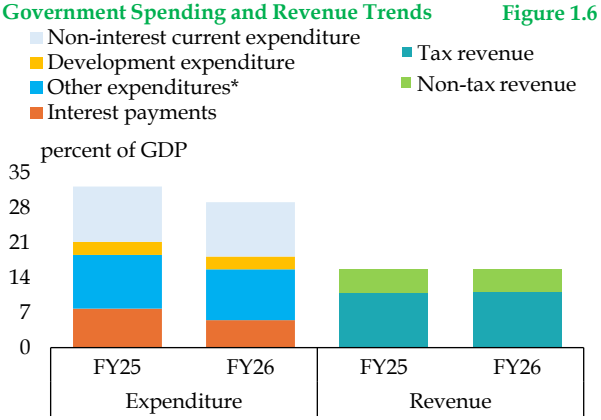
The government's continued fiscal consolidation efforts and a substantial drop in interest payments contributed to a considerable improvement in fiscal outcomes in FY26, even as total revenue declined slightly in terms of GDP (**Figure 1.6**). Fiscal deficit more than halved, whereas both fiscal and primary balances outperformed the budget estimates by wide margins. A sizeable provincial surplus also contributed to these gains. The reduction in interest payments reflected the combined impact of lower interest rates and better cash flow management by the government.

**Inflation Contribution: Pre-conflict versus Post-conflict - Urban** **Figure 1.5**




Source: PBS

**Government Spending and Revenue Trends** **Figure 1.6**




* This includes statistical discrepancy

Source: MoF

In addition, a major reduction in power subsidies, resulting from energy sector reforms (**Box 4.3**) and circular debt restructuring further contained spending. The government partly used the fiscal space created from lower subsidies and interest payments for increasing grants for Benazir Income Support Program (BISP) and spending on education. Meanwhile, provinces made notable increase in development spending focusing mainly on housing and community amenities.

On the revenue side, as a percent of GDP, while the tax revenues increased marginally, non-tax revenue declined. The modest increase in tax revenues stemmed from incremental gains in provincial taxes ratio, whereas FBR taxes remained stagnant in terms of GDP. Within FBR taxes, a slowdown in indirect taxes primarily dragged the overall tax collection, whereas direct taxes increased as a percent of GDP. The decline in non-tax revenue was on account of relatively subdued SBP profit due to lower interest rates. Nonetheless, the overall SBP profit transfers were still substantial and exceeded the budget target in FY26.

The reduction in interest rates also constrained withholding tax collection from interest earning on bank deposits. Additionally, negative quarterly adjustments in electricity prices and import tariff rationalisation measures adversely affected energy-related taxes and custom duties. Aside from these factors, the slowdown in economic activity due to the Middle East conflict weighed on tax collection during Q4-FY26. Nonetheless, the stagnation in tax-to-GDP ratio poses risks to the sustainability of fiscal consolidation, going forward.

The fiscal consolidation and improved macroeconomic fundamentals translated into a reduction in public debt-to-GDP ratio in FY26. In terms of composition, both domestic and external debt contributed to the slowdown. Moreover, the government improved the domestic debt profile by raising funds through fixed-rate, medium- to long-term instruments. Further, to broaden the investor base, the government also introduced various specialised instruments in FY26 (**Box 4.2**).

The decline in interest payments, improved maturity profile, higher foreign exchange earnings, and continued build-up of FX reserves also strengthened country's debt repayment capacity in FY26.

However, due to limited availability of non-bank financing and retirement of SBP debt, the government continued to rely primarily on scheduled banks to finance the fiscal deficit. The uptick in budgetary borrowing from scheduled banks, along with increase in credit to private sector (PSC) and loans to public sector enterprises (PSEs) drove expansion in Net Domestic Assets (NDA) of the banking system in FY26. This, together with continued expansion in Net Foreign Assets (NFA) of the banking system, aided by the build-up of foreign exchange reserves, led to an increase in broad money growth during FY26.

The growth in PSC was contributed by both working capital and fixed investment loans supported by expanding economic activity, easing financing conditions, rising input costs linked to the Middle East conflict, and strong deposit growth. On the liabilities side, strong deposit mobilisation mainly explains the uptick in M2 growth, while currency-in-circulation (CiC) slowed compared to the previous year.

While Pakistan's macroeconomic conditions have improved over the last three years, sustaining these gains requires implementing deep-rooted structural reforms. The policy efforts are also needed to put country on a sustainable high-growth path to absorb the expanding working-age population. In this context, **Chapter 6** of the report explores key structural challenges to job creation in Pakistan. In the macroeconomic context, weak and volatile GDP growth, and slow pace of structural transformation amid signs of premature deindustrialisation have been the key impediments to job creation in the country over the past few decades (**Box 6.1**). The impact of these factors is compounded by labour market challenges including low female labour force participation, high youth unemployment and sizeable informal employment amid relatively low decent work opportunities (**Box 6.3**) and

education-skill mismatch (**Box 6.4**). In addition, emerging trends – such as Industry 4.0, the green transition, and geoeconomic fragmentation—are adding to the challenges of job creation by widening technological gaps, increasing reskilling needs, constraining investment, and intensifying global competition.

The country's inability to address structural weaknesses has consistently constrained its capacity to generate high economic growth on a sustainable basis over the last two decades (**Figure 1.7**), which has also weighed negatively on employment prospects. This weakness stems from a range of various interlinked structural issues including persistently narrow tax base, weak export earnings, low saving and investment levels, and low productivity of human and physical capital. Specifically, Pakistan's tax-to-GDP ratio has remained stagnant, only slightly exceeding double digits in the past two decades (**Figure 1.8**).

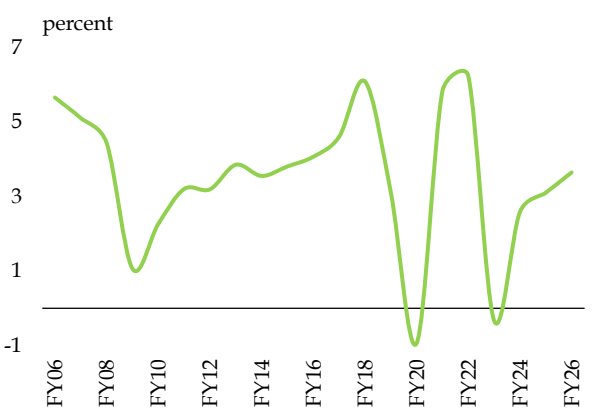
This has particularly hampered country's economic growth through two compounding factors. First, to mitigate revenue shortfalls, the government frequently implements discretionary revenue measures and ad hoc tax rate increases. This unpredictable policy environment undermines investor confidence, negatively impacting their production and investment decisions (**Box 2.5 & 3.3**). Second, insufficient tax collection compresses the fiscal space required for expanding public investment on infrastructure, education and health.

At the same time, the bank financing of large budget deficit crowds out the private sector. This subsequently erodes the country's long-term growth potential by inhibiting productivity gains due to slow technological adoption. The absence of rapid innovation and product and market diversification, a narrow industrial base and persistent reliance on imported raw materials have also constrained the country's export earnings.

Over the years, the combined impact of credit constraints, low productivity levels, economic policy uncertainty and distorted incentive structure has discouraged private investment in Pakistan, especially in LSM (**Box 2.1**). Private sector can serve as a catalyst for sustained high growth and an engine for employment generation due to its better allocative efficiency of resources. However, unlocking its potential requires supportive policy measures and a favourable economic environment.

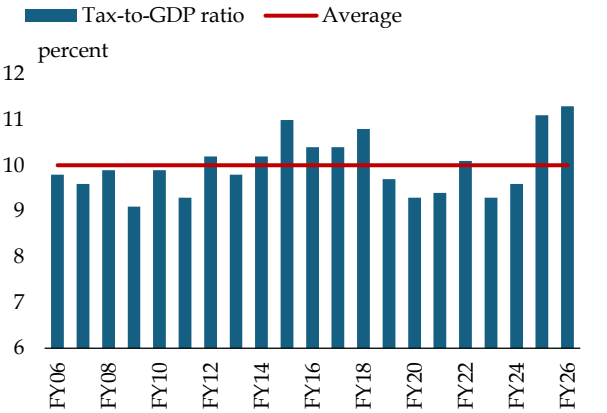
This entails ensuring consistency in economic policies by adopting credible fiscal framework, predictable energy policy, strong legal and regulatory frameworks, better access to finance and provision of necessary infrastructure. Adopting a resilient fiscal consolidation framework requires comprehensive reforms across revenue and expenditure management. While the government has already initiated measures to expand tax collection, there is a need to broaden the scope of these efforts to achieve a

**Real GDP Growth** **Figure 1.7**




Source: MoF

**Tax-to-GDP Ratio** **Figure 1.8**




Source: MoF

sustainable increase in revenues. Key priorities include improving tax administration efficiency and expanding the tax net to under-taxed sectors, such as agriculture, real estate, and retail.

On the expenditure side, improving public financial management and government's spending efficiency will further aid in achieving sustainable fiscal balance. Similarly, governance reforms in both energy and non-energy sector State-Owned Enterprises (SOEs) and expeditious privatisation are also critical. Restructuring these entities will mitigate financial losses, reduce the burden on public resources, and help build essential fiscal buffers for productivity-enhancing investment. The resulting increase in public investment will not only crowd-in private sector but also support job creation. The empirical analysis confirms that development expenditures have relatively greater impact on job creation than current expenditures in Pakistan (**Box 4.1**).

Some recent policy interventions and structural reforms, such as import tariff rationalisation, have improved the domestic business sentiments. At the same time, strengthening the overall business environment also requires comprehensive institutional reforms to judicial and financial frameworks. This includes enhancing judicial efficiency by lowering the time and cost for litigation and enhancing alternate dispute resolution mechanisms to build investor confidence. Addressing these impediments will also enhance foreign direct investment (FDI) as well as unlock the country's export potential by driving competitiveness and product diversification.

Moreover, rising frequency of climate shocks and extreme weather events have affected agriculture productivity, besides creating volatility in farmers' income in the past few years. In pursuit of stable economic returns, growers are increasingly adopting short-cycle alternative crops. Although this transition reflects a degree of crop diversification, it presents risks to domestic food security, industrial output, and external sector stability. This underscores the importance of prioritising development of climate-change resistant seed varieties and balancing renewable energy generation with environmental sustainability (**Box 2.3**).

Addressing these structural challenges will unlock public, private, and foreign investment, driving productivity by enhancing human and physical capital. This will foster long-term economic stability, support job creation, and reduce country's vulnerability to global supply chain disruptions.

## 1.2 Economic Outlook

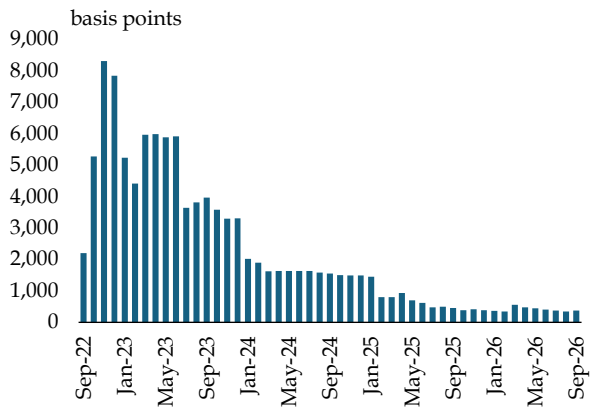
Pakistan entered FY27 on a relatively stronger macroeconomic footing, despite Middle East conflict-related supply disruptions and resultant spike in input costs. So far, the economy has proved to be more resilient than at the time of Russia-Ukraine conflict in FY22, positioning the country to better absorb global supply shocks. Further, the country's continued engagement with the IMF, alongside strengthened fiscal and external buffers, has lowered its risk premium (**Figure 1.9a**). This is also reflected in recent upgrading of country's sovereign credit ratings by major credit rating agencies (**Figure 1.9b**).[1]

In this backdrop, the economic momentum is expected to continue in FY27, aided by the lagged impact of earlier monetary easing, recovery in domestic demand, and recent fiscal support measures to expand industrial activities. This improvement is reflected by a recovery in high-frequency indicators, including automobile sales, cement dispatches, electricity generation, and consumer financing (**Figure 1.10**).

The government has introduced various tax incentives in FY27 budget to stimulate economic

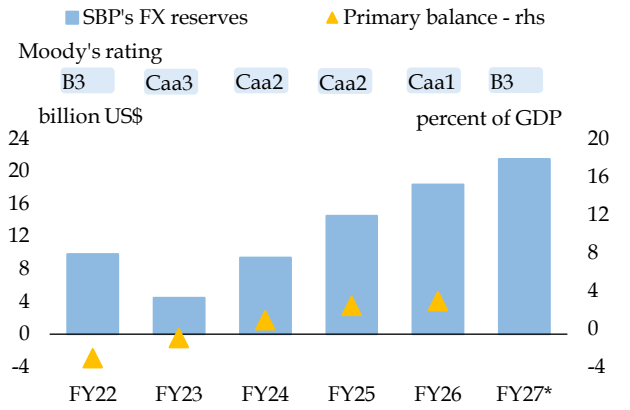
[1] Moody's upgraded Pakistan's sovereign rating from Caa1 to B3 on 24 August 2026. Earlier, S&P Global raised the rating from B− to B on 22 July 2026, while Fitch upgraded it from CCC+ to B− on 15 April 2025. Each agency maintains a stable outlook. Sources: Moody's, S&P Global Ratings and Fitch Ratings.

**Sovereign CDS Spread** **Figure 1.9a**




Sources: Bloomberg; Moody's; MoF; SBP

**Selected Economic Indicators** **Figure 1.9b**




* till end-September 2026

activity. These include reduction in super tax, import tariffs, tax on sale and purchase of property, and export proceeds. Further, the government also rationalised tax for the salaried class. These measures are expected to support expansion in economic activity in FY27.

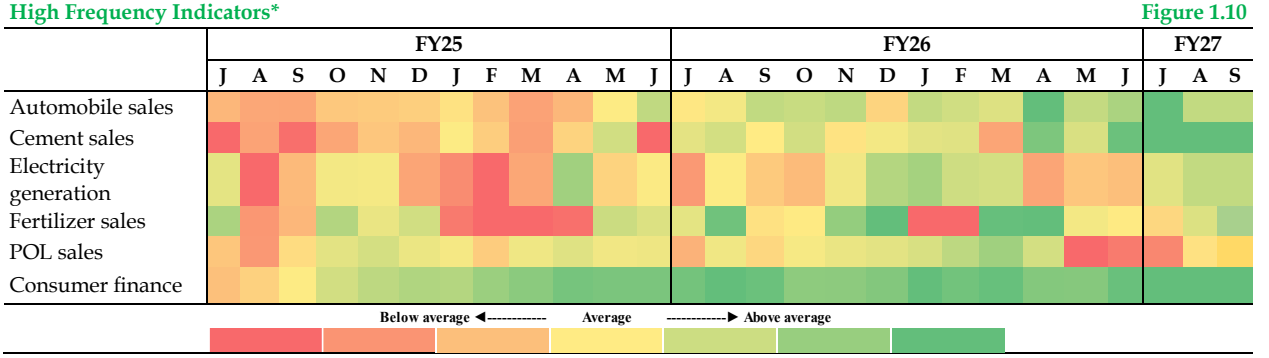
Although, the worsening El-Nino conditions (extreme weather events) pose risks to agriculture sector outlook, latest information indicates increase in output of key kharif crops including sugarcane, rice and maize, compared to last year. The improvement in commodity producing sectors is expected to have knock-on effect on services. Accounting for these trends, SBP projects real GDP growth in the range of 3.5 – 4.5 percent in FY27 (**Table 1.2**).

The expansion in economic activity, tariff rationalisation measures, and higher global energy and non-energy prices are expected to drive a corresponding increase in imports during FY27. On the other hand, exports are expected to recover moderately, supported by policy incentives and a slight rise in global demand. Moreover, remittances are expected to continue the momentum. Incorporating these trends, SBP projects current account deficit to remain in the range of 0 – 1.0 percent of GDP in FY27.

Furthermore, the upward revision of the sovereign credit rating facilitated mobilisation of US$ 3 billion through Eurobond issuance in September 2026. This, combined with SBP's FX purchases and projected official inflows, is expected to support further reserve build-up toward four-month import cover.

The direct and indirect impact of the global energy price shock is anticipated to exert upward

**High Frequency Indicators*** **Figure 1.10**




* Deviation from monthly average during FY22-26

Sources: APCMA; OCAC; NFDC; PAMA; NEPRA

**Macroeconomic Targets and Projections for FY27** **Table 1.2**

| | Target | SBP Projections |
|---|---|---|
| *Growth rate (percent)* | | |
| Real GDP [a] | 4.0 | 3.5 – 4.5 |
| National CPI inflation (average) [b] | 5.0 – 7.0 | 5.5 – 7.5 [e] |
| *billion US$* | | |
| Remittances [a] | 42.4 | 44.5 – 45.5 |
| Exports (fob) [a] | 32.9 | 32.0 – 33.0 |
| Imports (fob) [a] | 70.0 | 70.5 – 71.5 |
| SBP FX reserves [c] | 23.0* | 25.0 |
| *percent of GDP* | | |
| Fiscal deficit [d] | 3.6 | 3.0 - 4.0 |
| Current account deficit [a] | 0.7 | 0 – 1.0 |

* End-December 2026

Sources: [a] Annual Plan 2026-27; [b] Annual Plan 2020-21; [c] SBP; [d] MoF; [e] July's projections, based on oil price of US$ 80/bbl., as per practice, projection range will be revised in January 2027 to account for higher oil prices and other key developments.

pressure on inflation. To manage heightened global commodity price volatility, the government has revised the petroleum pricing mechanism, moving from fortnightly reviews to weekly reviews in March 2026, and subsequently introducing daily price adjustments from July 2026 onward (**Box 3.5**). This may help in a smooth pass-through of changes in international oil prices in a more predictable manner, rather than abrupt and, sometimes, large adjustments.

Moreover, to mitigate food supply constraints, the government has allowed wheat import. While the rising input costs may induce some rigidity in core inflation, continuation of prudent monetary policy stance is expected to keep inflation expectations anchored. In view of these developments, the SBP expects inflation to remain above the medium-term target range in FY27.

Government's fiscal consolidation measures and power sector reforms are expected to keep government expenditures at moderate levels in FY27 as well. On the revenue side, efforts to improve tax enforcement and broadening the tax net are expected to support tax collection in FY27. Considering these trends, SBP projects fiscal deficit to range between 3.0 – 4.0 percent of GDP in FY27.

This macroeconomic outlook, however, is susceptible to risks, particularly emanating from the ongoing Middle East conflict, new trade blocks and climate change. A protracted conflict—and the resulting upward pressure on energy prices—may weigh on domestic economic activity via supply chain disruptions and rising input costs. Furthermore, the economic conditions within the GCC region could impact remittance inflows. Similarly, the regional tensions risk dampening global economic growth prospects, thereby suppressing external demand for exports. Moreover, the recent India-EU FTA may have implications for Pakistan's exports (**Box 5.1**). Higher energy costs may also stoke domestic inflationary pressures due to its both direct and indirect impact on prices.

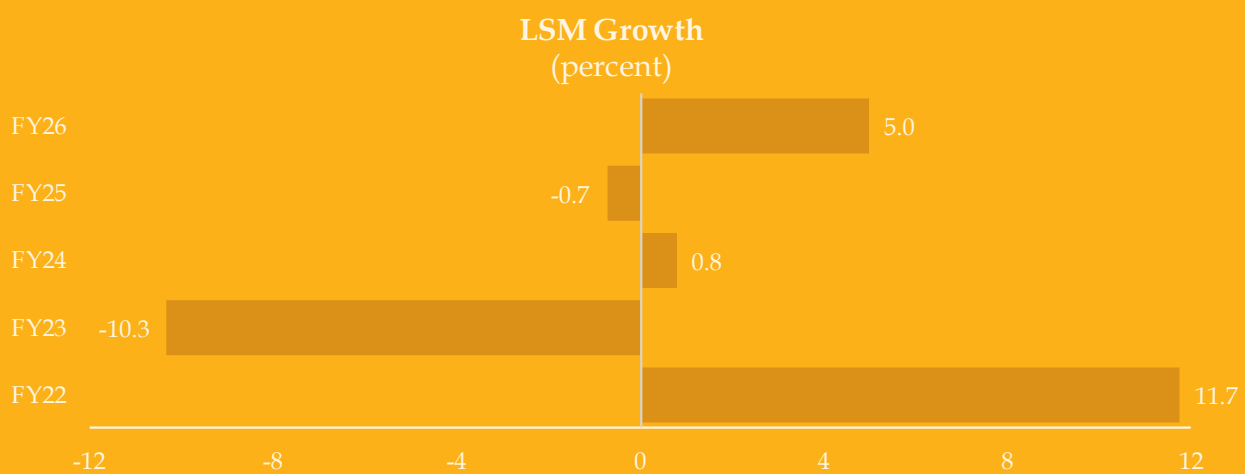
The impact of these risks could be amplified by the domestic economic vulnerabilities. Particularly, weak investment trends in productive, export-oriented sectors may have implications for sustaining economic growth momentum, enhancing exports and creating employment opportunities. Moreover, El Nino related weather anomalies may impact agriculture output, exert pressures on food prices and increase imports. The mitigation of these risks requires implementation of early preparedness measures (**Box 2.2**). In this volatile macroeconomic environment, SBP remains committed to its objective to preserve price stability, safeguard financial system and support sustainable economic growth through prudent, data-driven policy interventions.



# 2

# Economic Growth

*Real GDP growth has gradually picked up pace over the last three years, after witnessing a contraction in FY23. In FY26, real GDP grew by 3.7 percent despite floods in the start of the year, and the Middle East conflict related disruptions in the later part. The major impetus to growth in FY26 came from a strong recovery in large scale manufacturing having strong forward and backward linkages. The LSM benefitted from growing domestic demand amidst easing financial conditions and improving business and consumer confidence. However, the overall industrial sector growth moderated due to sharp decline in value addition of electricity, gas & water supply, mainly reflecting reduced power sector subsidies. The labour market performance remained mixed with Punjab industrial employment and online job postings showing a decline, while trends in newspaper-based job postings (mostly services) remained broadly unchanged.*



# 2 Economic Growth

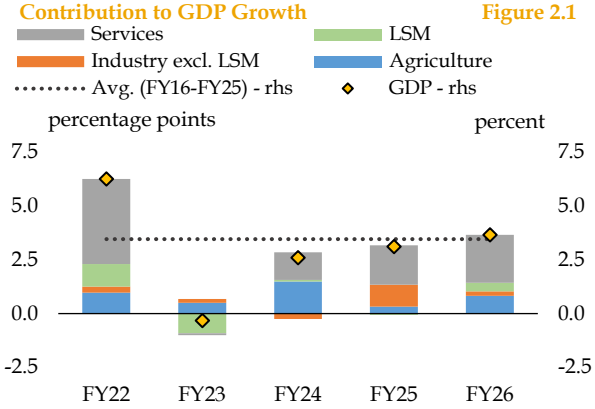
## 2.1 GDP Growth

Real GDP grew by 3.7 percent in FY26, marking a moderate but steady improvement since FY23 (**Figure 2.1**). The major impetus came from the rebound in large scale manufacturing (LSM), despite trade-related uncertainty and the Middle East conflict that weighed on growth momentum. Nonetheless, the growth was broad-based with major contribution from services sector, followed by agriculture and industry (**Table 2.1**).

The environment underpinning this performance was broadly supportive for most of the year. This is attributable to ease in financial conditions, pick-up in domestic demand, improvement in external account, better availability of imported inputs, low and stable inflation, except for the post-conflict months, and improving business and consumer sentiments. Moreover, the impact of floods on agriculture output and domestic supply chain turned out to be less severe than initially anticipated.

Growth remained higher in the first three quarters compared to FY25. However, it moderated in fourth quarter in the wake of the Middle East conflict. The growth momentum in first three quarters, along with the trends in high-frequency demand indicators (**Figure 2.2a & b**), suggested that outcome in Q4-FY26 would have been even better in the absence of conflict-related disruptions.[1]

**Contribution to GDP Growth** **Figure 2.1**




Note: FY26 numbers are provisional estimates
Source: PBS

Further, reduction in power subsidies substantially lowered the gross value addition (GVA) of electricity, gas, and water supply, dragging the overall growth of the industry (by 1.5 percentage points) and GDP (by 0.3 percentage points). Nonetheless, all other segments of the industry recorded expansion. LSM witnessed a sharp turnaround; construction activity remained strong; and mining & quarrying recovered after showing contraction consecutively in the previous four years.

Agriculture sector performed better compared to the previous year with recovery in crops and

**Real GDP Growth** **Table 2.1**

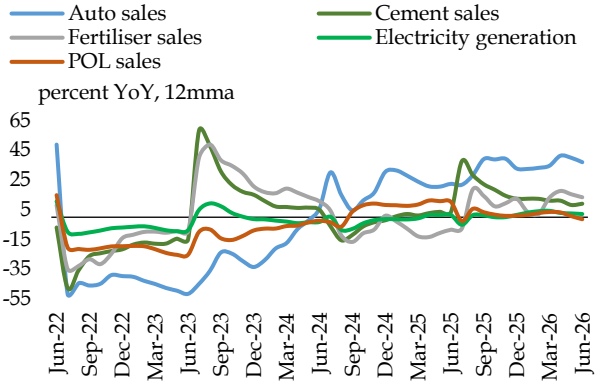
growth in percent, contribution in percentage points

| | Growth in FY25R | | | | | Growth in FY26P | | | | | Contribution | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Year | Q1 | Q2 | Q3 | Q4 | Year | FY25R | FY26P |
| **GDP** | **1.5** | **2.4** | **2.5** | **6.1** | **3.1** | **3.9** | **4.3** | **4.4** | **2.0** | **3.7** | **3.1** | **3.7** |
| Agriculture | 1.0 | 1.5 | 2.1 | 0.6 | 1.3 | 3.2 | 3.3 | 3.8 | 3.7 | 3.5 | 0.3 | 0.8 |
| Important crops | -12.7 | -12.7 | -9.4 | -17.8 | -13.0 | -0.5 | 2.1 | 2.6 | 2.2 | 1.6 | -0.6 | 0.1 |
| Industry | 0.2 | 1.7 | 0.5 | 20.0 | 5.5 | 7.8 | 6.6 | 4.9 | -4.7 | 3.3 | 1.0 | 0.6 |
| LSM | -0.9 | -2.6 | -2.0 | 3.0 | -0.7 | 3.9 | 5.7 | 9.6 | 0.4 | 5.0 | -0.1 | 0.4 |
| Services | 2.0 | 3.0 | 3.2 | 4.2 | 3.1 | 3.0 | 4.0 | 4.5 | 3.6 | 3.8 | 1.8 | 2.2 |

R: Revised, P: Provisional
Source: PBS

[1] Pakistan did relatively well as literature shows that shocks are absorbed with less output loss by the economies having strong fiscal and external buffers. For details, see Blanchard, O., Dell'Ariccia, G. and Mauro, P. (2010), "Rethinking Macroeconomic Policy", *Journal of Money, Credit and Banking*, Vol. 42, Supplement 1, pp. 199-215.

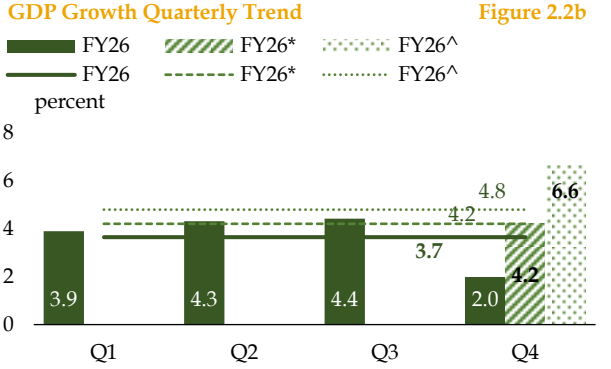
**Growth in Demand Indicators** **Figure 2.2a**




12mma = 12-month moving average

Sources: NEPRA; APCMA; OCAC; PAMA; NFDC

**GDP Growth Quarterly Trend** **Figure 2.2b**




* Based on the trend continuing till Q3

^ Based on the average of years between FY17-FY25, where GDP growth has increased in the last quarter

Sources: PBS; SBP staff calculations

strong growth of livestock. With the exception of few crops, the recovery in farming output, largely owes to improved yields amid adequate soil moisture, sufficient water availability and increased access to farm credit. Moreover, forestry and fishing continued to contribute positively in FY26.

Reflecting the performance of commodity-producing sectors, the services sector growth moderately accelerated in FY26. The strong performance of commodity producing sectors particularly facilitated wholesale and retail trade, transport and storage, and information and communication services.

On the demand side, consumption remained the dominant contributor to real GDP growth in FY26. The share of consumption increased in FY26 compared to last year. This was because of higher government spending while private consumption remained close to the last year's level. At the same time, investment-to-GDP ratio remained low at 14.5 percent, marginally increasing from the previous year **(Table 2.2)**. Moreover, the trade gap widened as exports fell more than imports as percent of GDP.

Taken together, these trends highlight the importance of strengthening investment and exports for supporting sustainable growth and job creation in Pakistan. Historical data shows that the decline in investment has been more pronounced in sectors such as LSM and ICT, which are important for productivity growth and export expansion. In this context, **Box 2.1** examines the factors underlying these investment patterns and draws lessons from economies that have successfully directed investment towards productive and export-oriented activities.

**Composition of Aggregate Demand** **Table 2.2**

percent of GDP

| | FY22 | FY23 | FY24 | FY25 | FY26 |
|---|---|---|---|---|---|
| Total consumption | 96.4 | 93.5 | 93.6 | 92.9 | 93.5 |
| Household* | 85.9 | 83.2 | 84.8 | 83.5 | 83.8 |
| Government | 10.5 | 10.3 | 8.8 | 9.4 | 9.7 |
| Investment | 15.5 | 14.0 | 13.2 | 14.4 | 14.5 |
| Net exports | -11.9 | -7.5 | -6.8 | -7.3 | -7.9 |
| Exports | 10.5 | 10.5 | 10.4 | 10.0 | 9.1 |
| Imports | 22.5 | 18.0 | 17.1 | 17.2 | 17.0 |
| *Memorandum item* | | | | | |
| National savings** | 10.9 | 13.0 | 12.6 | 14.9 | 14.1 |

* Including non-profit institutions serving households

** Annual Plan 2026-27 estimates

Sources: PBS

## 2.2 Agriculture

Higher growth in agriculture sector in FY26 was underpinned by recovery in crops and stronger growth in livestock (**Table 2.3**). Within crops, the major contribution came from other crops, while output of important crops witnessed a turnaround. Moreover, the contribution of livestock also increased, accounting for approximately two-third of agriculture growth in FY26.

**Agriculture, Forestry and Fishing** **Table 2.3**

growth in percent, contribution in percentage points

| | Growth in FY25[R] | | | | | Growth in FY26[P] | | | | | Contribution | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Year | Q1 | Q2 | Q3 | Q4 | Year | FY25 | FY26 |
| **Agriculture** | **1.0** | **1.5** | **2.1** | **0.6** | **1.3** | **3.2** | **3.3** | **3.8** | **3.7** | **3.5** | **1.3** | **3.5** |
| Crops | -0.1 | -2.6 | 1.9 | -2.4 | -0.9 | 1.2 | 3.6 | 3.4 | 2.6 | 2.8 | -0.3 | 1.0 |
| Important crops | -12.7 | -12.7 | -9.4 | -17.8 | -13.0 | -0.5 | 2.1 | 2.6 | 2.2 | 1.6 | -2.7 | 0.3 |
| Other crops | 20.6 | 19.9 | 19.4 | 19.1 | 19.7 | 4.3 | 6.1 | 4.0 | 2.6 | 4.3 | 2.6 | 0.7 |
| Cotton ginning | -3.1 | -20.3 | -26.6 | -24.3 | -19.0 | -11.5 | -0.6 | 6.4 | 7.8 | 0.0 | -0.3 | 0.0 |
| Livestock | 2.0 | 5.5 | 2.6 | 2.1 | 2.9 | 4.2 | 2.9 | 3.7 | 3.9 | 3.7 | 1.8 | 2.3 |
| Forestry | -9.7 | -9.9 | -7.8 | -3.1 | -7.7 | 4.4 | 10.2 | 13.7 | 15.0 | 10.8 | -0.2 | 0.2 |
| Fishing | 1.0 | 1.2 | 2.4 | 1.3 | 1.4 | 0.9 | 1.2 | 2.5 | 1.3 | 1.4 | 0.0 | 0.0 |

R: Revised, P: Provisional

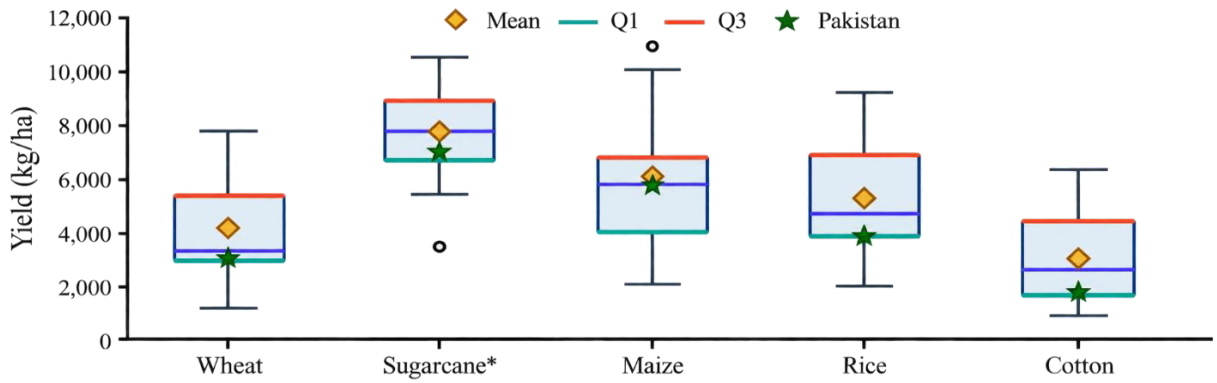
Source: PBS

Among important crops, higher output of wheat, rice and sugarcane offset the decline in production of cotton and maize. Wheat benefitted from a larger cultivated area, rice from better yields, and sugarcane from improvements in both. Maize recorded another year of lower production as floods affected the crop during the growing stage, while cotton continued its downtrend as farmers shifted area towards more profitable and alternative *Kharif* crops.

The recovery in crops was despite the floods during Jul–Sep 2025, which affected standing crops in several areas but had a limited overall impact. Rather, improved post-flood water availability and soil moisture had a favourable impact on crop yields, barring maize and to some extent wheat. The yield of the wheat crop remained stagnant due to higher temperature at sowing time and rains and wind at the harvest time, while floods had unfavourable impact in the case of maize. Further, timely rescue and relief operations helped protect livestock and supported the resumption of farm activities, and improved access to agricultural credit eased pressures on affected farmers.

Despite the improvement in FY26, agriculture still faces a severe productivity challenge. Among major crop-producing countries, Pakistan's yields lie at the lower end of the distribution for all important crops except maize (**Figure 2.3**).[2] This yield gap reflects persistent constraints: poor seed quality, suboptimal fertiliser application, inefficient water use, and outdated farm practices. Concurrently, climate change is causing extreme

**Crop Yield Distribution: Top 16 Producing Economies** **Figure 2.3**




* Yield of sugarcane is in 10kg/hectare

Source: FAO

[2] Yield estimates reported by FAO may not be directly comparable with those of the PBS due to differences in data sources, coverage, estimation methodologies, reference periods, and subsequent revisions to production and area estimates.

heat, uneven rainfall and recurring floods, adding further stress on agricultural production. In this context, achieving and sustaining higher agricultural growth requires enhancing productivity and building resilience to climate shocks.

**Climatic Conditions**

Weather conditions were mostly challenging in FY26, marked by erratic rainfall and above-normal temperatures through much of the crop calendar (**Figure 2.4a and 2.4b**). The Apr–Jun 2025 period began with weak precipitation, as rainfall was below its historical average, increasing irrigation requirements early in the season. The monsoon then intensified during Jul–Sep 2025, with heavy rainfall causing flash floods across several agricultural districts.[3]

Conditions were also not favourable for Rabi crops as reflected by below-average precipitation and above-normal temperatures during Oct-Mar FY26. Temperatures were particularly higher during wheat sowing and there were strong winds and rainfall around the harvest period.[4] Looking ahead, emerging El Niño conditions pose an additional risk to crop performance in FY27 **(Box 2.2)**. Besides the immediate need to prepare for worsening El Niño conditions, Pakistan must also address the longer-term challenge of adapting agriculture to climate change, while using its land and water resources more efficiently **(Box 2.3)**.

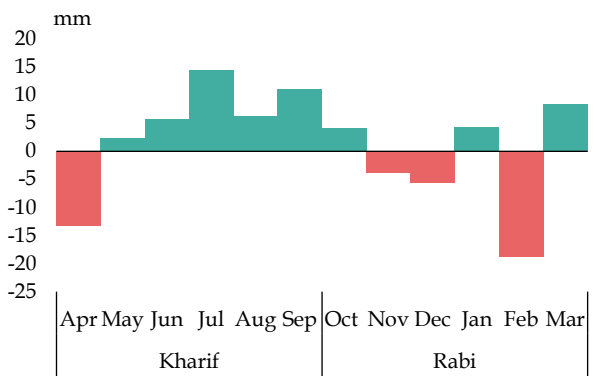
**Inputs**

***Water***

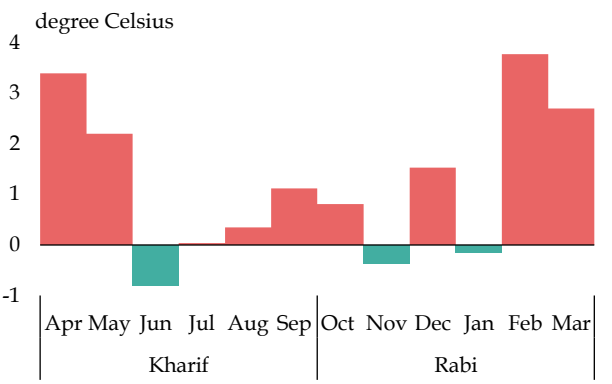
Canal-water availability improved but remained below the average system availability.[5] *Kharif* water supply stood at 60.6 million acre-feet (MAF), almost unchanged from last year, while availability for *Rabi* rose slightly. Combined availability of 92.0 MAF, however, remained 11.1 percent below the average system use (**Figure 2.5**). Heavy monsoon rainfall reduced canal-water demand in parts of Punjab, whereas improved *Rabi* releases supported wheat and other crops.

Tubewells and lift pumps have become a supplementary source of irrigation.[6] The number of installed tubewells and lift pumps rose from 0.9 million in 2004 to around 1.9 million in 2026, driven by the rapid adoption of solar-powered pumps and a decline in diesel-powered units (**Figure 2.6**). While this expansion improved

**Rainfall Deviation from Normal* - FY26** **Figure 2.4a**




**Temperature Deviation from Normal - FY26** **Figure 2.4b**

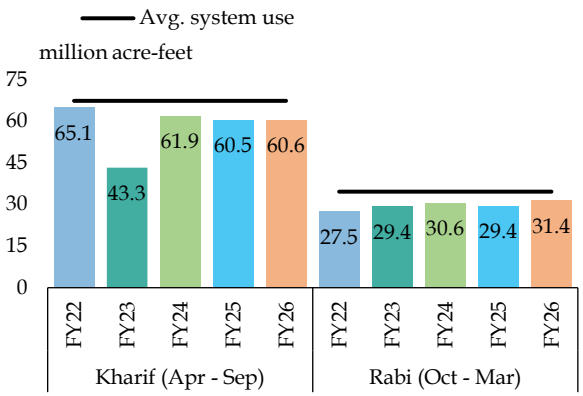



* Normal period of respective months is for 1961-1990

Source: PMD

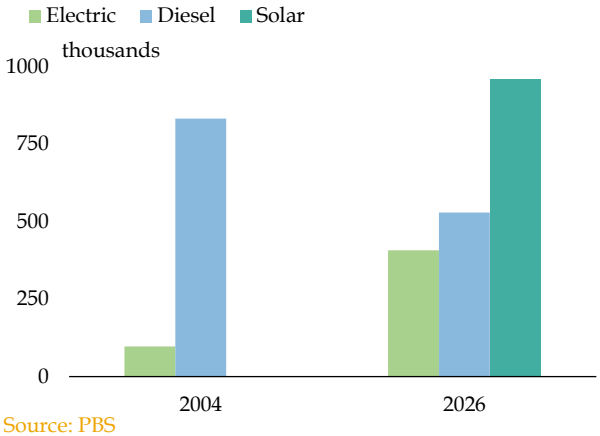
[3] Dera Ghazi Khan and Rajanpur were exposed to monsoon flooding from hill torrents along the Sulaiman Range, while Jhang, Multan, Muzaffargarh and Kasur were among the rural districts affected by the monsoon floods. NDMA, *Post-Monsoon Review 2025*.
[4] USDA Foreign Agricultural Service, Pakistan: Grain and Feed Annual, April 2026.
[5] The reference period for average system use is 1977–82, as specified in paragraph 14(b) of the 1991 Water Apportionment Accord.
[6] The country receives, on average, 138.4 MAF of water annually from its western and eastern rivers, while the total groundwater contribution stands at approximately 50 MAF annually, extracted through tubewells and lift pumps. Source: Pakistan Economic Survey (2025-26).

**Irrigation Water Releases** **Figure 2.5**




Source: IRSA

**Tubewells and Lift Pumps by Power Source** **Figure 2.6**




Source: PBS

irrigation access, it has also added to pressure on groundwater. The concern is greatest in Punjab, where groundwater reserves are estimated to have declined by around two percent a year as extraction exceeds recharge from rainfall and surface-water.[7]

**Seed**

In FY26, supply of certified seed stayed below the requirements for most of the major crops, except for paddy (**Table 2.4**). Seed availability improved for wheat and cotton but remained below requirements. In contrast, maize seed availability declined. These gaps left farmers to rely on farm-saved and other non-certified seeds, a practice that has implications for crop yields.

To address these gaps, the recently submitted National Seed Policy aims to improve access to quality seed by expanding domestic production, strengthening testing and certification, and introducing digital traceability. It also calls for better federal–provincial coordination and greater private-sector participation.[8] In this regard, effective implementation will be key to improving certified seed supply.

**Availability of Certified Seeds** **Table 2.4**

| | FY25 | | FY26 | |
|---|---|---|---|---|
| | Availability (MT) | % of Req. | Availability (MT) | % of Req. |
| Cotton | 16,717 | 27.1 | 20,872 | 52.7 |
| Paddy | 68,319 | 114.2 | 68,767 | 127.8 |
| Maize | 29,420 | 78.8 | 22,906 | 62.6 |
| Wheat | 569,761 | 46.3 | 592,213 | 51.8 |

Source: FSC&RD

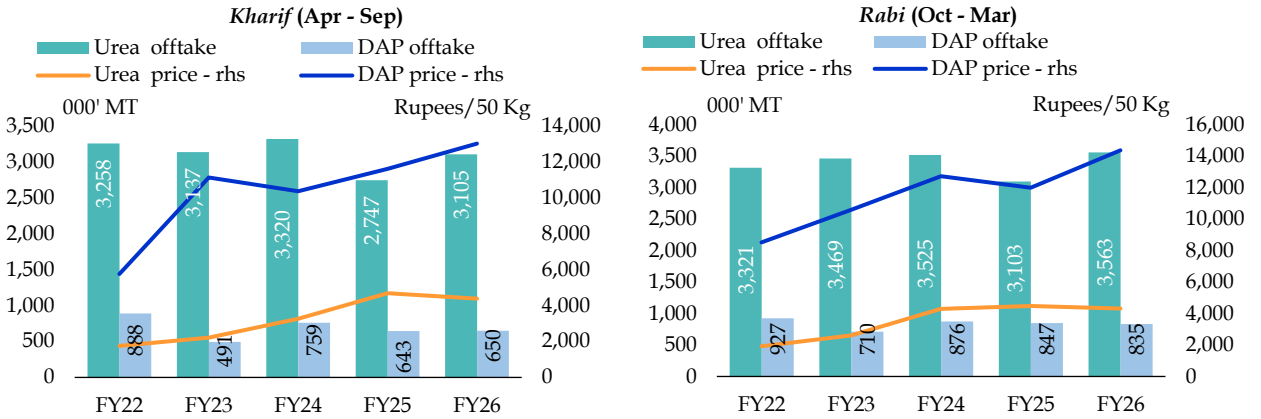
**Fertiliser**

Fertiliser offtake rose in both *Kharif* and *Rabi* FY26, as reflected by higher urea sales (**Figure 2.7**). Stable prices through most of the year, strong domestic production and large carryover stocks supported greater use of urea during both seasons.[9] DAP sales also edged up in *Kharif* but declined in *Rabi* as higher prices weighed on farmers' purchasing decisions. The increase in domestic DAP prices partly reflected higher international prices, as Pakistan relies on imports to meet about half of its demand.[10]

Fertiliser prices in Pakistan remained elevated during FY26, particularly for DAP. The relatively high cost of phosphate fertiliser, alongside the continued use of urea, contributed to a widening imbalance in nutrient application. Consequently, the nitrogen-to-phosphate ratio increased to around 5:1 in FY26, more than twice the recommended 2:1.[11] This imbalance can reduce

[7] Government of Punjab, Environment Protection Department, State of Environment Report 2023.
[8] Source: National Seed Policy, MNFSR. https://mnfsr.gov.pk/SiteImage/Misc/files/NSPolicyProvince.pdf
[9] National Fertiliser Development Centre, Fertiliser Review, September 2025.
[10] World Bank, Fertiliser Prices Gain Momentum amid Strong Demand and Geopolitical Tensions, July 2025.
[11] The nitrogen-to-phosphate ratio is estimated from FY26 urea and DAP offtake, based on nutrient contents of 46 percent nitrogen in urea while 18 percent nitrogen and 46 percent phosphate ($P_2O_5$) in DAP.

**Fertiliser Offtake and Prices** **Figure 2.7**




Sources: NFDC; PBS

fertiliser-use efficiency and affect crop yields.[12]

### Agriculture Credit

Agriculture credit grew significantly across all major categories in FY26 (**Table 2.5**). Farm-sector lending was driven by higher financing for crop production, tractors, and farm machinery, while corporate farming credit declined.[13] In the non-farm sector, growth came from working-capital loans for livestock and dairy, whereas poultry financing remained weak. The rise in crop production and livestock lending was also consistent with post-flood financing needs, as farmers required funds to purchase inputs and resume farming activities.[14]

Several measures led to the rise in agriculture credit during FY26. These included: (i) the risk coverage scheme for small farmers and underserved areas, which lowered credit risk for banks and created an incentive to bring new farmers into formal credit;[15] (ii) the launch of SBP's Zarkhez-e scheme, which allowed subsistence farmers and tenants to apply digitally for collateral-free loans **(Box 2.4)**;[16] (iii) a higher

**Agriculture Credit Disbursement** **Table 2.5**

billion Rupees

| | FY24 | FY25 | FY26 |
|---|---|---|---|
| **Farm Sector (Production)** | | | |
| All crops | 483.0 | 538.6 | 723.8 |
| Corporate farming | 155.5 | 254.1 | 157.6 |
| Others | 438.2 | 513.2 | 719.1 |
| **Subtotal** | **1,076.7** | **1,305.9** | **1,600.6** |
| **Farm Sector (Development)** | | | |
| Tractor | 48.3 | 17.8 | 54.3 |
| Farm machinery | 16.1 | 10.6 | 20.8 |
| Others | 69.5 | 109.6 | 135.9 |
| **Subtotal** | **133.9** | **138.0** | **211.1** |
| **Non-Farm Sector (Working Capital)** | | | |
| Livestock/Dairy | 486.7 | 602.6 | 733.1 |
| Poultry | 313.8 | 332.3 | 324.0 |
| Others | 131.1 | 116.7 | 238.1 |
| **Subtotal** | **931.6** | **1,051.6** | **1,295.2** |
| **Non-Farm Sector (Fixed Investment)** | | | |
| Livestock/Dairy | 42.3 | 51.6 | 54.6 |
| Poultry | 21.3 | 20.1 | 26.4 |
| Others | 9.9 | 10.1 | 20.9 |
| **Subtotal** | **73.5** | **81.8** | **101.9** |
| **Grand Total** | **2,215.7** | **2,577.3** | **3,208.7** |

Source: SBP

[12] Using Pakistan's 2010 fertiliser-use data and assumptions about nutrient recycling, Akram et al. (2018) estimated that phosphorus supply was 58 percent below estimated crop needs. Experimental evidence indicates that phosphorus raised wheat yield by 21.9 percent over the control group (Khan et al., 2007), while phosphorus deficiency reduced paddy production by 35.3–44.2 percent across two rice cultivars in a pot experiment (Irfan et al., 2020).

[13] Corporate farming credit had increased sharply in the preceding two years, reaching Rs 254.1 billion in FY25. Its decline in FY26 may be because of a high base effect and the timing of a few large, project-based disbursements.

[14] Finance Division, Monthly Economic Update & Outlook, September 2025, p. 1. The report notes flood damage to crops and livestock and a 19.5 percent increase in overall agricultural credit disbursements during Jul–Aug FY26.

[15] The Risk Coverage Scheme provides banks with first-loss coverage of up to 10 percent and an incentive for each additional borrower. Zarkhez-e was launched in October 2025, while Punjab's mechanization programme offers interest-free financing of up to Rs 30 million. Sources: SBP and Punjab Agriculture Department

[16] After Zarkhez-e scheme was launched in October 2025, it reached 4,416 borrowers with disbursements of Rs 1.7 billion.

**Important Crops** **Table 2.6**

production in 000 metric tons, area in 000 ha., yield in kg/ha, change in percent

| | Production | | | Area | | | Yield | | | Change | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FY24 | FY25R | FY26P | FY24 | FY25R | FY26P | FY24 | FY25R | FY26P | Prod. | Area | Yield |
| Wheat | 31,814 | 28,477 | 29,739 | 9,734 | 9,074 | 9,466 | 3,268 | 3,138 | 3,142 | 4.4 | 4.3 | 0.1 |
| Cotton* | 10,223 | 7,084 | 7,052 | 2,424 | 2,043 | 2,012 | 717 | 589 | 596 | -0.5 | -1.5 | 1.2 |
| Rice | 9,859 | 9,723 | 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 | 8,900 | 1,641 | 1,588 | 1,643 | 5,935 | 5,691 | 5,417 | -1.5 | 3.5 | -4.8 |
| Sugarcane | 87,638 | 84,238 | 89,450 | 1,180 | 1,193 | 1,222 | 74,269 | 70,610 | 73,200 | 6.2 | 2.4 | 3.7 |

* Production and yield in 000 bales
R: Revised, P: Provisional
Source: PBS

financing allocation under the Prime Minister's Youth Business and Agriculture Loan Scheme; (iv) Kissan Card;[17] and (v) Punjab's High-Tech Farm Mechanization Financing Program, which provided interest-free loans for modern agricultural machinery.[18]

## Outputs

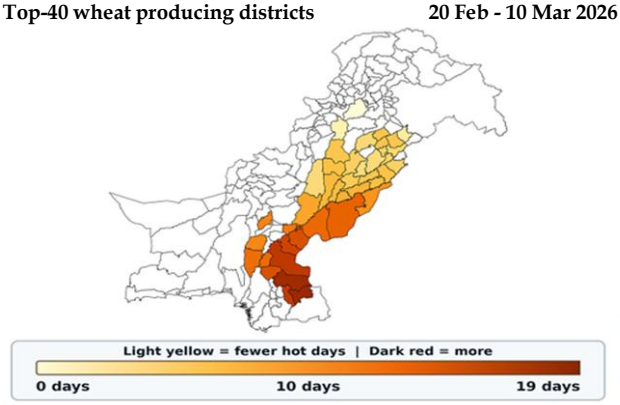
### Wheat

Wheat production rose in FY26, driven mainly by increased area under cultivation, while yield remained broadly stagnant (**Table 2.6**). The announcement of the Interim National Wheat Policy ahead of the sowing season, together with improved credit and input availability, supported an increase in area under cultivation of wheat.

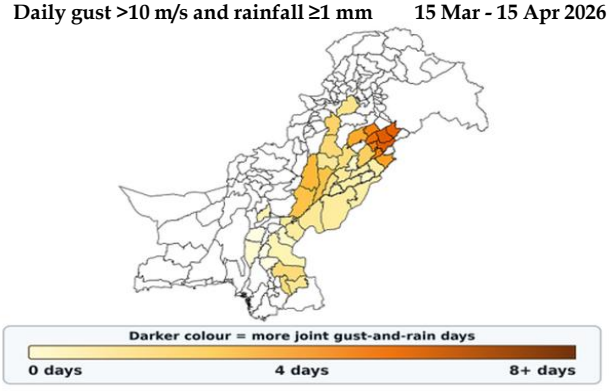
However, the *Rabi* season remained largely dry, with episodes of high temperatures during the later growth stages, followed by strong winds and rainfall around harvest. These conditions constrained the improvement in yields, as indicated by district-level analysis using ERA5-Land data produced by the European Centre for Medium-Range Weather Forecasts (**Figure 2.8a and 2.8b**).[19]

Moreover, the implementation risk associated with the interim wheat policy also materialised, as highlighted in **Box 3.3** of the State of Pakistan's Economy Half Year Report 2025-26. While the announcement of indicative price reduced uncertainty and supported planting decisions, actual procurement remained below the plan due

**Days with Max Temperature >32°C** **Figure 2.8a**
**Top-40 wheat producing districts** **20 Feb - 10 Mar 2026**



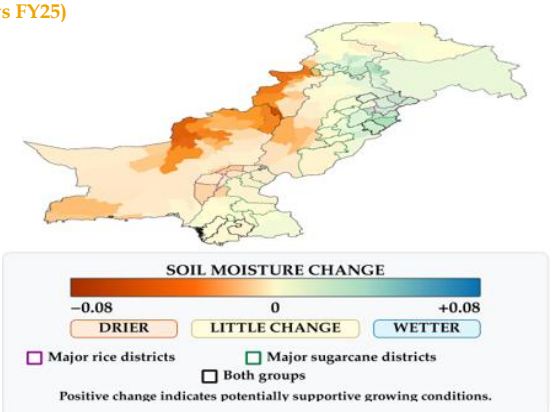

**Days with Concurrent Gust and Rainfall** **Figure 2.8b**
**Daily gust >10 m/s and rainfall ≥1 mm** **15 Mar - 15 Apr 2026**




Source: SBP staff estimates based on ERA 5 land analysis

[17] Kissan Card borrowers increased from 491,099 at end-June 2025 to 758,925 at end-June 2026, while disbursements rose from Rs 60.0 billion to Rs 110.1 billion.
[18] Punjab's High-Tech Farm Mechanization Financing Program provides interest-free financing of up to Rs 30 million for modern agricultural machinery. Source: Punjab Agriculture Department.
[19] ERA5-Land is an hourly land-surface reanalysis produced by ECMWF under the Copernicus Climate Change Service at a spatial resolution of about 9 km. The analysis covers Pakistan's 40 largest wheat-producing districts, ranked by production, and uses grid-level data within their boundaries to assess 2-metre air temperature, 10-metre wind speed and total rainfall during the crop stages.

Kharif Root-Zone Soil Moisture Change (FY26 vs FY25) Figure 2.9




Source: SBP staff estimates based on ERA 5 land analysis

to differing provincial arrangements and limited participation by private buyers.

**Rice**

The increase in rice production in FY26, despite a decline in area, was driven by improved yield (**Table 2.6**). Better post-flood soil moisture in major rice growing areas benefitted the crop. SBP staff estimates based on ERA5-Land analysis show that average root-zone soil moisture across thirteen major rice districts was 2.3 percent higher during Apr–Sep 2025, with wetter conditions recorded in most districts (**Figure 2.9**). The decline in area was due to expectations of lower prices in view of falling exports amid increased competition in the international market.[20]

**Sugarcane**

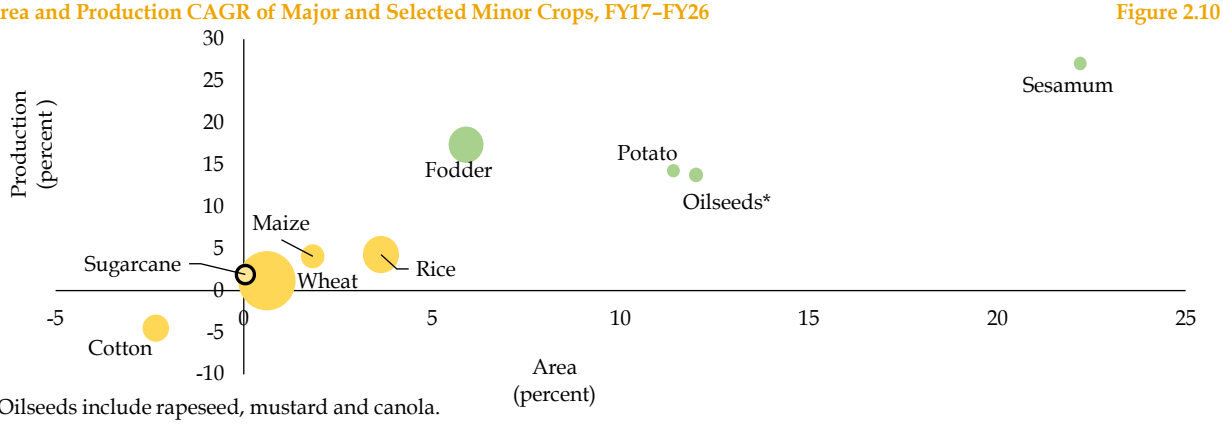
Higher sugarcane production, with a rise in both area and yield, drove the increase in important crops (**Table 2.6**). The expansion in area was mainly on the back of better returns compared to cotton and maize. The soil conditions also contributed positively as SBP staff estimates based on ERA5-Land show that average root-zone soil moisture across twenty-three major sugarcane districts was higher during Apr–Sep 2025 than last year (**Figure 2.9)**.

**Cotton**

Cotton production fell slightly in FY26 as cultivated area declined, with farmers continuing to favour competing *Kharif* crops that offer better returns (**Table 2.6**). Encouragingly, yield improved despite weather variations, poor seed quality and severe pest attacks in South Punjab. The increase in yield reflects early sowing by farmers and improved availability of farm inputs.

As shown in **Figure 2.10**, cotton was the only major crop to record a decline in both cultivated area and production over the last decade. Rice has been an exception, which recorded a substantial increase in cultivated area. Growth in area under

Area and Production CAGR of Major and Selected Minor Crops, FY17–FY26 Figure 2.10




* Oilseeds include rapeseed, mustard and canola.

The size of the bubble represents cultivated area of respective crop. yellow colour = important crops; green colour = minor crops.

Source: PBS

[20] India lifted its ban on non-basmati white rice in September FY25 and removed minimum export prices and duties on major rice categories in October FY25. India's rice exports reached an estimated record 23.0 million tonnes in FY25, increasing competition for Pakistani rice and weakening growers' price expectations. Sources: Glauber and Mamun (2024), USDA FAS India: Grain and Feed Update, June 18, 2026

the remaining important crops was comparatively moderate. In contrast, selected minor crops such as sesamum, fodder, potato and oilseeds expanded at a relatively faster pace. These trends suggest that increase in acreage of other crops has come mainly at the cost of reduced area under cotton.

**Maize**

Maize production declined in FY26 despite an increase in area, as the floods weighed on yields (**Table 2.6**). Excessive rainfall raised river flows and inundated cropland in Punjab and Sindh.[21] Although flooding was limited to areas near rivers, the damage lowered maize yields and extended the crop's decline for the third consecutive year.

**Other Crops**

Other crops subsector recorded an improvement in FY26, growing by 4.3 percent (**Table 2.7**). Higher production of canola and rapeseed & mustard was driven mainly by an expansion in area under cultivation, while yields remained broadly unchanged. Similarly, mung benefitted from increased sowing area and a slight improvement in yield. In contrast, green fodder and onion recorded declines in both area and production, while mash output fell due to lower area under cultivation.

Production of potato rose sharply as farmers increased area and achieved better yields. Better prices and higher export earnings in the previous year incentivised farmers. However, increase in production and closure of the western border resulted in a surplus that led to a substantial drop in domestic prices during FY26. Government's efforts helped in opening Central Asian markets, which partially addressed the excess supply.[22]

**Livestock**

Growth in livestock value addition accelerated to 3.7 percent in FY26, with all major animal

**Other Crops** **Table 2.7**

area in 000'ha.; production in 000' MT; change in percent

| | FY25 | | FY26* | | Change | |
|---|---|---|---|---|---|---|
| | Area | Prod. | Area | Prod. | Area | Prod. |
| Cottonseed | 5,048 | 2,024 | 5,049 | 2,016 | 0.0 | -0.4 |
| Canola | 69 | 104 | 85 | 128 | 23.3 | 23.2 |
| Fodder | 3,695 | 203,597 | 3,524 | 201,532 | -4.6 | -1.0 |
| Potato | 387 | 10,010 | 476 | 12,776 | 23.1 | 27.6 |
| Onion | 166 | 2,747 | 164 | 2,647 | -1.4 | -3.7 |
| Rapeseed & mustard | 425 | 521 | 490 | 603 | 15.4 | 15.8 |
| Mung | 185 | 131 | 211 | 151 | 14.0 | 15.2 |
| Mash | 8 | 6 | 7 | 6 | -9.3 | -5.1 |

* Provisional

Source: PBS

categories showing increase (**Table 2.8**). The increase in cattle and buffalo herds also contributed to rise in milk production. Pakistan continues to rank among the world's leading milk producers, only after India and USA. This, however, is largely attributed to the size of dairy herd and not high milk and meat yield.

Average milk yield remains very low at around 1,195 litres per lactation for cows and 1,800 litres per lactation for buffaloes.[23] This suggests that raising the productivity of existing herds through better breeding, feeding, disease control and veterinary care can help increase milk production in the country.

**Livestock Population and Production** **Table 2.8**

population in millions, production in 000' tonnes, change in percent

| | FY25 | FY26[P] | Change |
|---|---|---|---|
| **Livestock population** | | | |
| Goats | 89.4 | 91.8 | 2.7 |
| Cattle | 59.7 | 62.0 | 3.8 |
| Buffaloes | 47.7 | 49.1 | 3.0 |
| Sheep | 33.1 | 33.5 | 1.2 |
| Others* | 7.8 | 8.0 | 1.7 |
| **Poultry population** | | | |
| Broilers | 2,061.1 | 2,267.2 | 10.0 |
| Desi poultry | 97.0 | 98.5 | 1.6 |
| Layers | 83.9 | 89.8 | 7.0 |
| Others** | 17.8 | 18.6 | 4.8 |
| **Livestock products** | | | |
| Milk production | 72,343 | 74,689 | 3.2 |
| Meat production | 5,967 | 6,314 | 5.8 |

* Includes camels, horses, mules, and asses

** Includes breeding stock, ducks, drakes and ducklings

Source: PBS

[21] USDA Foreign Agricultural Service, *World Agricultural Production*, July 2026.

[22] Press Information Department, Government of Pakistan, "Pakistan Explores Central Asian Markets to Boost Potato Exports," February 27, 2026

[23] Source: FAO, Dairy Development in Pakistan. Litres/lactation refers to the total volume of milk produced by an animal over one full lactation cycle typically around 300 days in Pakistan.

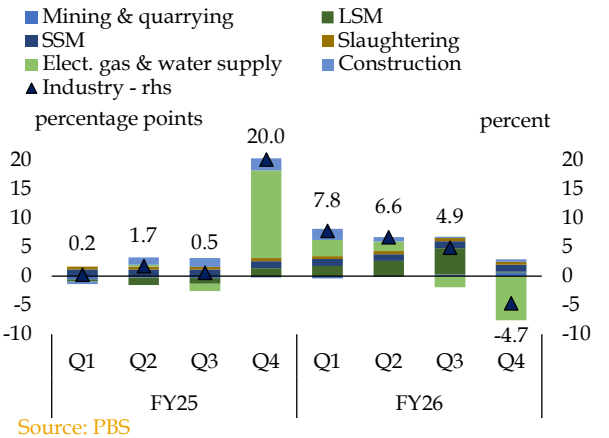
Poultry continued to support a steady increase in meat production in FY26, accounting for about 43 percent of domestic output. This reflects the impact of various government initiatives, including disease-free zones, animal traceability, modern slaughterhouses, commercial feedlots and improved cold-chain facilities.[24]

## 2.3 Industry

Growth in industrial output moderated from 5.5 percent in FY25 to 3.3 percent in FY26, primarily due to contraction in GVA of electricity, gas and water supply. Manufacturing remained a key driver of industrial growth, followed by construction and mining and quarrying. Specifically, LSM witnessed a sharp turnaround in FY26 after contraction in the last year (**Table 2.9**).

The improvement is attributed to easing financial conditions, improving external account, and positive business sentiments. This is evident from quarterly production trends, outperforming the previous year levels till Q3-FY26. However, the momentum weakened towards the end of FY26. In Q4-FY26, industrial output saw a contraction of 4.7 percent, primarily due to 33.2 percent decline in GVA of electricity, gas and water supply, while manufacturing and construction broadly maintained the momentum albeit at a slower pace (**Figure 2.11**). Nevertheless, monthly LSM data

**Contribution to Industrial Growth** **Figure 2.11**




Source: PBS

reveal a contraction in May and June 2026, indicating that the impact of Middle East conflict did begin to weigh on industrial output towards the end of the fiscal year.[25]

The contraction in value addition of electricity, gas and water supply is largely driven by reduction in power sector subsidies in a broader fiscal consolidation context.[26] Another contributing factor was the slowdown in electricity generation by WAPDA, reflecting subdued grid electricity demand amid accelerated distributed rooftop solarisation. Underlying this contraction, however, is a structural change in Pakistan's power sector, which is not yet captured by the national income accounts.

**Industrial Activities** **Table 2.9**

growth in percent, contribution in percentage points

| | Growth in FY25R | | | | | Growth in FY26P | | | | | Contribution | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Year | Q1 | Q2 | Q3 | Q4 | Year | FY25R | FY26P |
| **Industry** | **0.2** | **1.7** | **0.5** | **20.0** | **5.5** | **7.8** | **6.6** | **4.9** | **-4.7** | **3.3** | **5.5** | **3.3** |
| Mining and quarrying | -6.1 | -3.3 | -4.1 | -2.3 | -4.0 | -4.5 | -1.1 | 3.2 | 8.9 | 1.5 | -0.3 | 0.1 |
| Manufacturing | 1.9 | 0.6 | 0.9 | 4.6 | 2.0 | 5.2 | 6.4 | 9.1 | 3.1 | 6.0 | 1.3 | 3.9 |
| Large scale | -0.9 | -2.6 | -2.0 | 3.0 | -0.7 | 3.9 | 5.7 | 9.6 | 0.4 | 5.0 | -0.3 | 2.2 |
| Small scale | 9.0 | 9.0 | 8.9 | 8.8 | 8.9 | 8.6 | 8.6 | 8.9 | 9.5 | 8.9 | 1.2 | 1.2 |
| Slaughtering | 6.5 | 6.5 | 6.4 | 6.4 | 6.4 | 6.3 | 6.4 | 6.6 | 7.0 | 6.6 | 0.5 | 0.5 |
| Electricity, gas and water supply | 0.0 | 3.4 | -11.3 | 123.0 | 28.9 | 21.2 | 16.0 | -18.9 | -33.2 | -10.2 | 3.4 | -1.5 |
| Construction | -3.6 | 9.3 | 12.9 | 17.5 | 8.8 | 15.9 | 5.3 | 1.7 | 3.5 | 6.3 | 1.1 | 0.8 |

R: Revised, P: Provisional

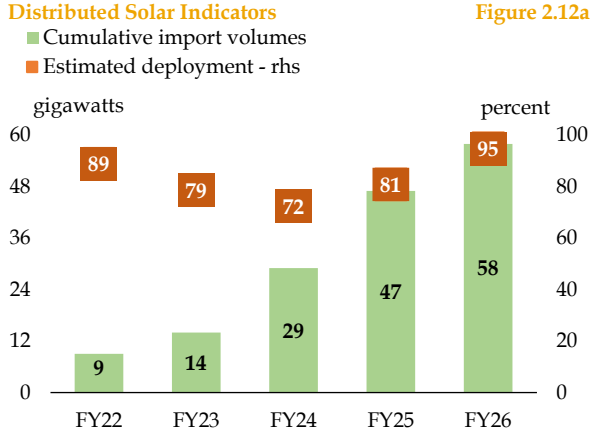
Source: PBS

[24] The National Meat Sector Transformation Strategy includes disease-free compartments, traceability systems, modern slaughterhouses, feedlots and cold-chain facilities to meet export standards and expand access to China and Gulf markets. Source: *Pakistan Economic Survey 2025–26*.

[25] Q4 outturns of electricity, gas and water supply significantly influenced full-year industrial growth in both FY25 and FY26.

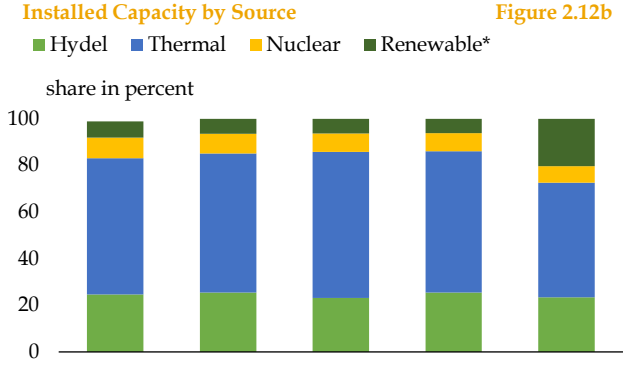
[26] Power sector subsidies declined by 34.3 percent from Rs 1,212 billion to Rs 796 billion in FY26 (Source: MoF). Since Pakistan's national income accounts include subsidies directly into sectoral GVA under the SNA 2008 framework, thus Rs 297 billion reduction compressed value addition of electricity, gas and water supply, even in the absence of any change in electricity generation.

**Distributed Solar Indicators** **Figure 2.12a**




Source: EMBER

**Installed Capacity by Source** **Figure 2.12b**




* Including 2813 MW from net metering in FY24 and FY25, and 7319 MW in FY26

Source: MoF

Steady growth in decentralised solar power generation has affected grid demand across major power consumers. The disaggregated analysis indicates that the shares of household and agriculture in electricity consumption have fallen by 2.1 and 2.5 percentage points in FY26, respectively.[27] This can be seen from rising import volumes of solar modules, which reached an all-time high of 58 gigawatts by end-June 2026 (**Figure 2.12a**). However, solar net-metered installed capacity stood at 7.3 gigawatts, revealing that a substantial share of installed solar was operating behind the meter (**Figure 2.12b**).

Moreover, lithium-ion battery imports have crossed US$ 1 billion in FY26 cumulatively, with its volumes rising at compound annual growth rate of 39 percent since FY17.[28] The trend reflects another emerging structural shift as prosumers[29] are now moving from grid displacement to grid independence, extending the hours of self-sufficiency beyond daylight. In lieu of these dynamics, introduction of the Prosumer Regulations 2026 represents a fundamental recalibration of the viability of rooftop solar for new installers.[30] The transition from net-metering to net-billing is expected to reduce the cross-subsidy burden on grid consumers by lengthening payback periods for new solar installers (**Box 4.3**).

The value addition of mining and quarrying grew by 1.5 percent in FY26, reversing the falling trend observed during the past four years. The decline in value addition by mining and quarrying since FY22 was due to falling gas production amid depleting reserves.[31] However, in FY26, the positive output is mainly driven by the gains in production of principal minerals, including crude oil, natural gas and coal. The higher coal production is supported by a rise in consumption of coal, and robust construction activity.[32] Sector-wise consumption reveals kilns as the major consumer of coal, followed by cement and power (**Figure 2.13**).

As regards crude oil and natural gas, domestic production rebounded in Q4, in the wake of a hostile geopolitical environment that disrupted

[27] In absolute terms, household and agriculture sectors consumed 39,472 GWh and 2,636 GWh during Jul-Mar FY26, down from 39,730 GWh and 4,566 GWh, respectively, in the same period last year. The impact is more pronounced in agriculture sector, whose share in total energy consumption has declined from a high of 9.2 percent in FY22 to 3.1 percent by the end of FY26. Source: MoF.

[28] Source: Renewables First, "Pakistan Electricity Review", 2026, www.renewablesfirst.org

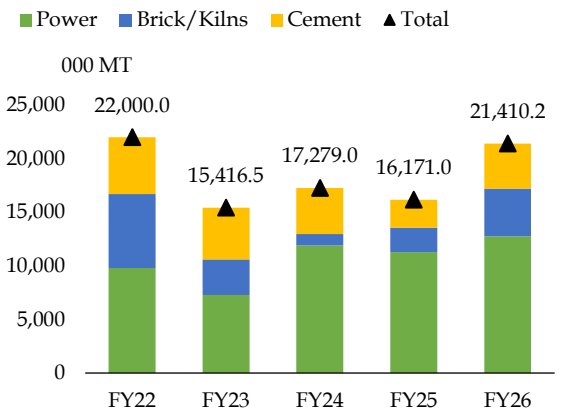
[29] The term "prosumer" refers to an electricity consumer who also generates electricity, typically through rooftop solar systems, for own use and export of surplus to grid.

[30] Prosumer Regulations 2026 replaced the one-to-one net-metering regime with a net-billing framework compensating exported electricity at a lower reference price rather than the full retail tariff. (Source: NEPRA S.R.O. 251(I)/2026 notified February 9, 2026)

[31] See for details, Chapter 2 of the State of Pakistan's Economy, Annual Report 2024-25.

[32] Limestone is Pakistan's most widely extracted non-fuel minerals and is primarily used as a key raw material in the domestic cement industry. On average, approximately 1.4 – 1.5 tonnes of limestone are used in producing a tonne of clinker. Source: U.S. Environmental Protection Agency

**Sector-wise Consumption of Coal** **Figure 2.13**




Source: MoF

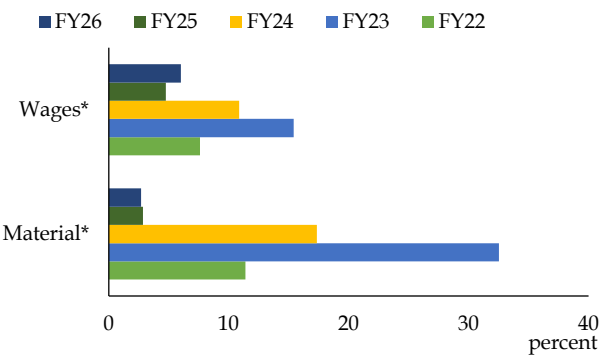
global energy supply chain.[33] Notably, the earlier fall in domestic output had been partly driven by excess LNG supply under long-term contracts, which had incentivised the use of imported gas over domestic production. However, the subsequent disruptions encouraged domestic companies to restore output from previously curtailed fields. As a result, oil and gas production rose by 22.3 and 11.7 percent YoY in Q4, respectively.

The current positive momentum in mining and quarrying should be treated as an opportunity to deepen domestic value addition in sectors where Pakistan has proven extractive capacity, particularly coal, limestone, and other industrial minerals. Rather than exporting raw materials or relying on unprocessed extraction, moving towards downstream processing and beneficiation strengthens domestic economic linkages, raises the share of value captured within the economy, and reduces exposure to commodity price swings.[34]

The momentum in construction activity continued in FY26 as well – albeit growth slightly decelerated compared to the previous year. Relatively slower growth in construction input prices and wages (**Figure 2.14a**), along with the subsidised housing scheme (Wazir-e-Azam Apna Ghar Program - Ghar Ho Tu Apna) and pickup in private sector credit, generated housing demand and contributed to overall construction activity.[35] However, a slowdown in Public Sector Development Program (PSDP) expenditure in Q4-FY26, amid evolving geopolitical tensions, weighed on the full year construction growth (**Figure 2.14b**).

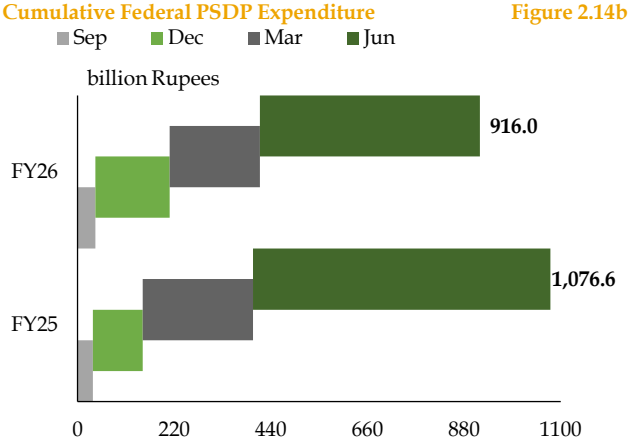
The broad-based growth in manufacturing and construction more than offset the contraction in

**Construction Inputs - YoY Growth** **Figure 2.14a**




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

**Cumulative Federal PSDP Expenditure** **Figure 2.14b**



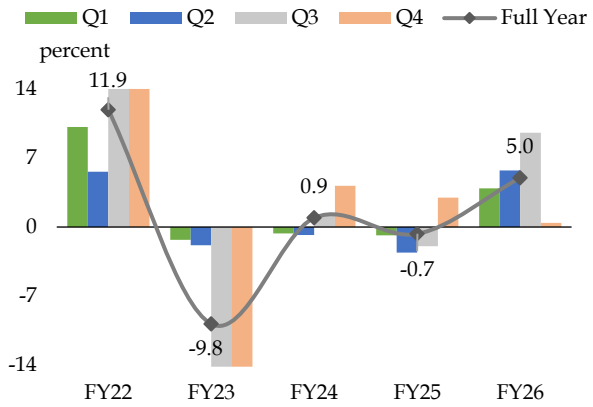

Sources: MoPD&SI; PBS

[33] Gas production is part of the 'Mining and Quarrying' segment of the industry, while its supply, including RLNG, falls under the 'Electricity, Gas and Water Supply' segment.

[34] Baur (2014) argues that mineral beneficiation is widely documented as a mechanism for strengthening the economic contribution of the extractive sector beyond the point of extraction.

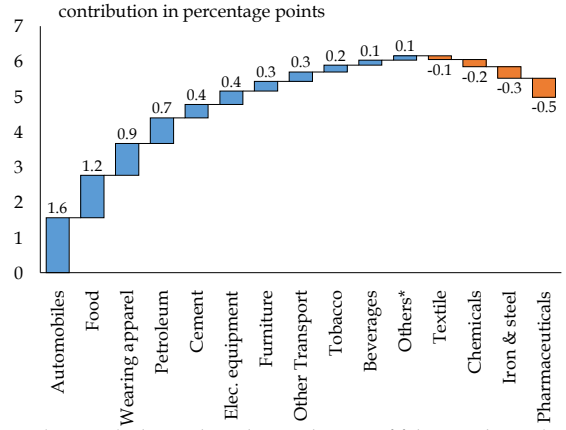
[35] The scheme offers subsidised financing at the fixed rate of 5 percent, with the markup subsidy paid by GOP. For details, see SMEFD Circular Letter No 1 of 2026 available at https://www.sbp.org.pk/smefd/circulars/2026/CL1.htm, https://www.sbp.org.pk/smefd/circulars/2026/CL2.htm.

**Quarterly Trend of LSM Growth** **Figure 2.15**




Source: PBS

**Sectoral Performance of LSM in FY26** **Figure 2.16**




* Others include combined contribution of febricated metals, rubber, machinery, paper & board, computer, wood, leather, and other manufacturing.

Source: PBS

electricity, gas and water supply. Manufacturing growth accelerated to 6.0 percent, which contributed around 3.9 percentage points to industrial growth.[36] The major impetus came from sharp recovery in LSM output, followed by small-scale manufacturing (SSM) and slaughtering sub-sectors.

**Large Scale Manufacturing[37]**

LSM grew by 5.0 percent against a contraction of 0.7 percent last year. This sharp recovery was supported by a host of factors including pickup in domestic demand, better availability of raw materials and higher capacity utilisation on average.[38] Quarterly data shows that LSM recovery gained traction as the year progressed, with growth accelerating up to Q3-FY26. However, increase in oil prices and global supply disruptions due to the Middle East conflict, austerity measures taken by the government, and elevated policy uncertainty, resulted in growth decelerating sharply in Q4-FY26 (**Figure 2.15**). In this regard, **Box 2.5** highlights the effect of uncertainty on manufacturing output in Pakistan.

Nonetheless, the LSM growth was broad-based, with production expanding in 16 of the 22 groups (**Table 2.10**). The major contributors to LSM growth included *automobiles* and allied industries (*rubber*, *tyres*, and *transport equipment*), *food and beverages*, *wearing apparel*, *petroleum products*, *non-metallic minerals* (mainly *cement*), *electrical equipment* and *furniture*. Meanwhile, *pharmaceuticals*, *chemicals*, and *iron and steel* recorded decline in production (**Figure 2.16**).

**Automobiles**

Automobiles saw a broad-based increase in production for the second consecutive year. Relatively easier financing conditions, a series of new models launched by the existing and new entrants in the auto sector, price discounts, zero-markup instalment plans offered by assemblers, and stable vehicle prices[39] contributed to strong booking activity and higher production volumes of passenger vehicles. The transport segment, comprising commercial vehicles such as trucks and buses, also witnessed a substantial growth during the year (**Figure 2.17**). Improved macroeconomic conditions along with affordable financing supported increased sales and thus production of commercial vehicles.

In addition, the expected developments pertaining to forthcoming 2026–31 auto policy also led to higher demand, specifically towards the

[36] LSM accounts for 8.0 percent of the total GDP, 44.1 percent of the industrial GVA, and 67.5 of manufacturing sector.
[37] This section is based on monthly disaggregated data released by the PBS.
[38] Average capacity utilization, as reported in BCI diffusion index, rose by 2.6 percent in FY26.
[39] The average motor vehicle price increased by less than 1 percent in FY26. Source: PBS

**Large Scale Manufacturing** **Table 2.10**

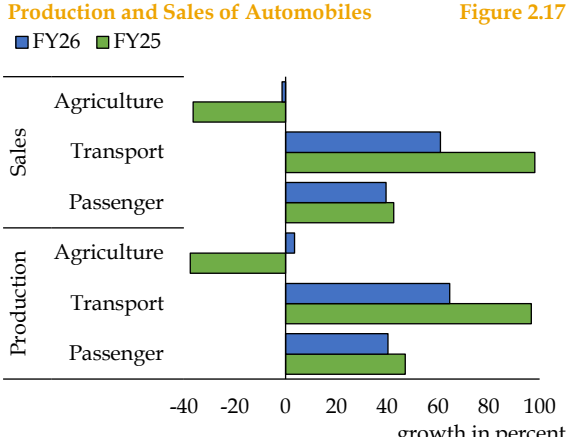
growth in percent; contribution in percentage points

| Sector | Weight | Growth | | | Contribution | | |
|---|---|---|---|---|---|---|---|
| | | FY24 | FY25 | FY26 | FY24 | FY25 | FY26 |
| **LSM** | 78.4 | **0.8** | **-0.7** | **5.0** | **0.8** | **-0.7** | **5.0** |
| *of which* | | | | | | | |
| Food | 10.7 | 1.7 | -1.8 | 7.0 | 0.3 | -0.3 | 1.2 |
| Beverages | 3.8 | -3.2 | 1.6 | 3.1 | -0.1 | 0.1 | 0.1 |
| Tobacco | 2.1 | -23.0 | 7.0 | 12.6 | -0.4 | 0.1 | 0.2 |
| Textile | 18.2 | -5.7 | 2.5 | -0.6 | -1.0 | 0.4 | -0.1 |
| Wearing apparel | 6.1 | 8.2 | 5.7 | 5.5 | 1.2 | 0.9 | 0.9 |
| Leather products | 1.2 | 5.6 | 1.0 | -1.9 | 0.0 | 0.0 | 0.0 |
| Wood products | 0.2 | 11.8 | 1.3 | -0.5 | 0.0 | 0.0 | 0.0 |
| Paper & board | 1.6 | -0.6 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 |
| Coke & petroleum | 6.7 | 9.8 | 5.3 | 9.7 | 0.6 | 0.4 | 0.7 |
| Chemicals | 6.5 | 5.1 | -3.5 | -2.5 | 0.4 | -0.3 | -0.2 |
| Pharmaceuticals | 5.2 | 15.7 | 2.7 | -8.9 | 0.8 | 0.2 | -0.5 |
| Rubber | 0.2 | -1.5 | -1.3 | 14.2 | 0.0 | 0.0 | 0.0 |
| Non-metallic mineral | 5.0 | -5.3 | -7.9 | 6.5 | -0.4 | -0.5 | 0.4 |
| Iron & steel | 3.4 | -4.4 | -8.7 | -7.8 | -0.2 | -0.4 | -0.3 |
| Fabricated metal | 0.4 | -7.8 | -13.9 | 9.6 | 0.0 | -0.1 | 0.0 |
| Computer, electronics, optical | 0.0 | -12.4 | 2.6 | 2.0 | 0.0 | 0.0 | 0.0 |
| Electrical equipment | 2.0 | -9.4 | -11.8 | 14.3 | -0.3 | -0.3 | 0.4 |
| Machinery and equipment | 0.4 | 45.5 | -35.5 | 3.0 | 0.2 | -0.2 | 0.0 |
| Automobiles | 3.1 | -25.0 | 46.2 | 57.8 | -0.6 | 0.8 | 1.6 |
| Other transport equipment | 0.7 | -4.0 | 36.6 | 42.4 | 0.0 | 0.2 | 0.3 |
| Furniture | 0.5 | 15.0 | -56.3 | 22.7 | 0.4 | -1.6 | 0.3 |
| Other manufacturing | 0.3 | 7.6 | -16.0 | 16.6 | 0.0 | -0.1 | 0.1 |

Source: PBS

end of FY26. The new policy was expected to focus more on electric vehicles, in line with the targets set under NEV Policy 2025, and increase taxes on conventional ICE vehicles.[40] This led the consumers to prepone their buying in anticipation of an increase in ICE vehicle prices. These trends were also reflected in a sustained momentum in production of automobile-allied industries such as rubber and tyres.

**Production and Sales of Automobiles** **Figure 2.17**




Source: PAMA

### Food and Beverages

The recovery in food manufacturing was largely driven by higher sugar production, along with increased wheat and rice milling. Besides, a relatively smaller contribution came from the beverages segment, where an improved product mix, particularly in flavoured drinks, supported higher output of juices, syrups, and squashes.

### Textile and Wearing Apparel

The growth in output of textile and wearing apparel remained subdued in FY26, despite stronger growth in export volume of garments.[41] The aggregate performance masked a sharp divergence as exports of ready-made garments expanded, while decline in domestic cotton

[40] This can be corroborated from the NEV policy 2025-30, which suggests introduction of carbon levy on first sale and import of petrol-powered vehicles, to generate the revenues to meet the EV adoption targets. (Source: https://pama.org.pk/wp-content/uploads/2026/06/NEV-Policy-Final-13-Aug-25.pdf)

[41] Export volumes of readymade garments grew by 5.0 percent in FY26. Source: PBS

production constrained manufacturing of low value-added textiles, cotton yarn and cloth.

**Petroleum Products**

The increase in production of petroleum products was mainly driven by the rising demand in overseas segment.[42] This is attributed to the enhanced furnace oil exports, besides higher shipping activity and stronger refuelling demand at Pakistani ports.[43] On the other hand, the decline in domestic consumption was broad-based, except for the transport and power sectors (**Figure 2.18**).[44]

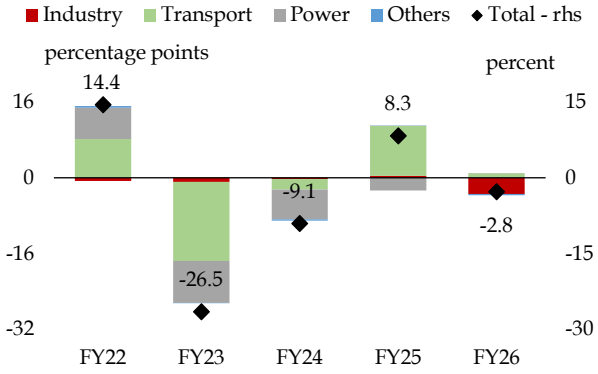
It is worth mentioning that higher domestic consumption also reflects reduced availability of smuggled products. Anecdotal evidence suggests that enhanced customs enforcement, sector-specific compliance measures and closure of the western border curtailed undocumented cross-border trade in petroleum products during the latter half of FY26.

**Cement**

Cement production increased in line with stronger construction activity. This was underpinned by a confluence of demand and supply factors. On the demand side, higher federal PSDP expenditure for most of the year and subsidised housing scheme helped construction activity in both the public and private sectors. This is evident from a 9.9 percent increase in domestic cement dispatches, while cement exports declined by 4.0 percent during the year (**Figure 2.19**).[45]

On the supply side, the sector has benefitted from normalised international coal prices[46] and an accelerating renewable energy transition that led

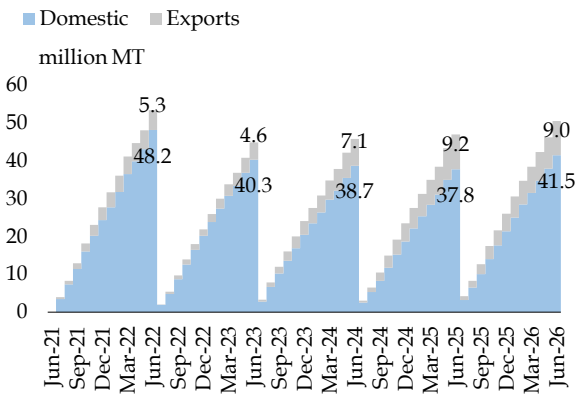
**Contribution to Growth in Consumption of Petroleum Products** **Figure 2.18**




* Others include household, agriculture and other govt. sectors
Source: MoF

to a decline in sector's operating costs in FY26.[47] Further, the sector is entering a phase of consolidation and capacity expansion, which may support greater production efficiency and improve firms' market presence as demand continues to recover.[48]

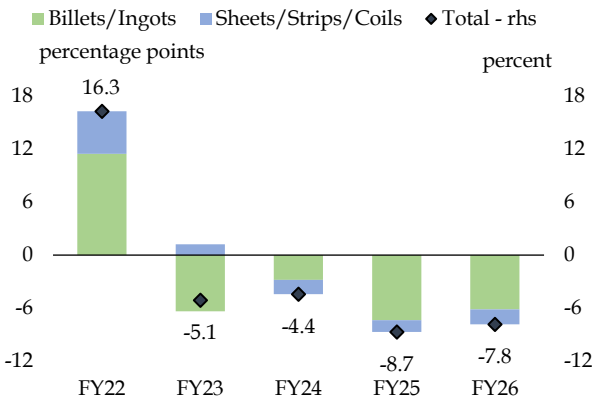
**Cement Dispatches** **Figure 2.19**




Source: APCMA

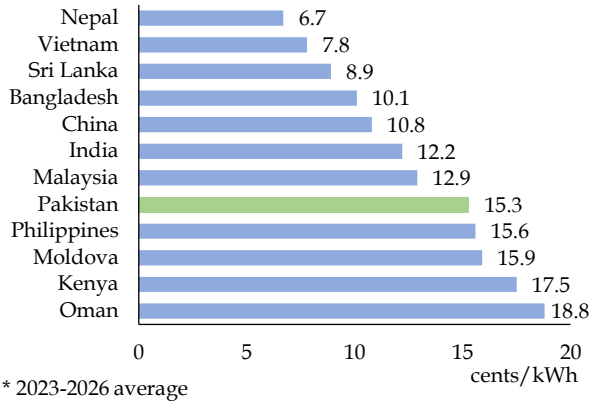
[42] This generally refers to bunker sales and other petroleum product exports, i.e. petroleum products sold for use by foreign vessels/ships at Pakistani ports and other export-related sales outside the domestic market.
[43] Arrival of ships increased from 7 in FY25 to 10 in FY26, on 30-Day rolling basis. (Source: https://portwatch.imf.org/)
[44] Consumption of major economic sectors including domestic, industry and agriculture declined owing to the switching towards cheaper alternatives like renewables and reduced reliance on furnace oil. (*Source: Pakistan Economic Survey 2025-26)*
[45] Decline in cement exports is mainly due to border closure that affected exports from northern region as southern region exports posted an increase during the period under review.
[46] Australian coal prices dropped by 3.4 percent in FY26, on top of 10.6 percent contraction in last year. Source: World Bank
[47] The cement industry is increasingly investing in solar and wind power to reduce its reliance on conventional energy sources. These investments are expected to ease production costs, particularly as energy constitutes a significant share of the sector's cost of goods sold (COGS), estimated at around 60 percent. Source: World Bank.
[48] A few leading cement manufacturers have acquired stakes in other firms, and most of the firms have announced capacity additions. Maple Leaf Cement Factory Limited has acquired majority stake in Pioneer Cement Limited via share purchase agreement, with the deal formally concluded in February 2026. Source: PSX.

**Contribution to Growth in Iron and Steel Output** **Figure 2.20**




Source: PBS

**Electricity Rates for Businesses in Selected Countries*** **Figure 2.21**




* 2023-2026 average

Source: globalpetrolprices.com

### Iron and Steel

The output of iron and steel declined for the fourth consecutive year as the sector continues to face structural headwinds amid elevated energy costs. The contraction is more pronounced in billets and ingots compared to flat steel (**Figure 2.20**). The primary factor is loss of competitiveness due to high energy cost, especially higher power tariffs (**Figure 2.21**). As a result, the demand is being increasingly met from imported finished steel.[49] Amid these challenges, the capacity utilisation of this sector, specifically of long products, has gradually declined from above 50 percent in FY22 to around 30 percent in FY25.[50]

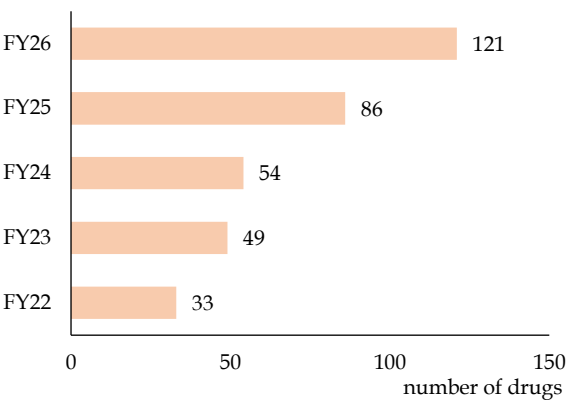
### Chemicals

High energy cost also impacted output of chemicals, which declined for the second consecutive year. Increase in gas prices and reduced gas supply due to falling domestic gas production constrained production of fertilisers. Moreover, the decline in fertiliser production can also be attributed to higher availability of inventory at the start of the year due to lower offtake in the previous year.[51]

### Pharmaceuticals

In contrast to an expansion last year, the output of pharmaceuticals declined in FY26 owing to several factors. These include: (a) suspension of bilateral trade with Afghanistan;[52] (b) increase in drug recalls resulting in slower drug approval process amid intensified quality assurance (**Figure 2.22**);[53] and (c) change of ownership amid exits of multinational companies that disrupted production due to reconfiguration of internal controls and supply chain.

**Reported Drug Recalls** **Figure 2.22**




Source: PACRA

[49] Volume of finished iron and steel imports increased by 27.4 percent, while scrap iron and steel imports increased by 8.5 percent only. Source: PBS

[50] Based on the data of 2-5 major industry players. (Source: PACRA)

[51] As per NFDC, urea stocks were at multi-year high of 1,873 thousand MT at the start of FY26.

[52] Afghanistan has been one of the top destinations of pharmaceutical exports accounting for approximately 45 percent of Pakistan's total pharmaceutical exports in FY25.

[53] Approximately 75 percent of the reported recalls are classified as High-Risk, leading to an increase in quality controls slowing down the production process. (Source: PACRA)

**Other LSM Groups**

Production of other LSM groups, especially furniture and electrical equipment, increased during FY26. Furniture production witnessed second-highest growth after the transport group.[54] The growth accelerated in H2-FY26 in line with the pick-up in furniture exports since January 2026. Similarly, output of electrical equipment was driven by consumer durable segment, supported by consumer finance for durables.[55]

## 2.4 Services

The services sector grew by 3.8 percent during FY26 **(Table 2.11)**, maintaining an upward trajectory for the third consecutive year. The growth remained broad-based as all sub-sectors showed an increase in value addition during FY26. Nonetheless, *wholesale and retail trade* (WRT), *transport and storage services* (Transport), *information & communication* (ICT), *general government services, real estate*, and *other private services* were the major contributors.

The output of WRT grew on the back of improved performance of the commodity-producing sectors, besides higher import volumes. The traction in economic activity also supported the *transport & storage* services, with increase in railways, pipe, road transport, and steady postal services & storage facilities.

The improvement in transport is also reflected by (i) substantial increase in production and sales of commercial vehicles; (ii) jump in imports of motor vehicles; (iii) higher POL sales to the transport sector, primarily road transport,[56] and (iv) increased credit for transport and storage, especially land transport, and warehousing and supporting activities.[57]

However, the decline in water and air transport somewhat moderated the overall growth of transport and storage services. The contraction in maritime and air transport was mainly due to Middle East conflict, which disrupted international transit routes, raised global energy prices as well as freight charges.

The growth in *general government services* was driven by increased expenditure on public administration, social security, health, and

**Services Sector** **Table 2.11**

growth in percent; contribution in percentage points

| | Growth in FY25R | | | | | Growth in FY26P | | | | | Contribution | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Year | Q1 | Q2 | Q3 | Q4 | Year | FY25R | FY26P |
| **Services sector** | **2.0** | **3.0** | **3.2** | **4.2** | **3.1** | **3.0** | **4.0** | **4.5** | **3.6** | **3.8** | **3.1** | **3.8** |
| Wholesale & retail trade | 0.7 | -0.9 | -0.4 | 1.9 | 0.3 | 2.3 | 2.8 | 3.5 | 0.7 | 2.4 | 0.1 | 0.7 |
| Transport & storage | 2.5 | 3.0 | 2.1 | 4.0 | 2.9 | 2.1 | 4.7 | 2.8 | 3.2 | 3.2 | 0.5 | 0.6 |
| Accommodation & food services | 4.1 | 4.1 | 4.1 | 4.0 | 4.1 | 3.9 | 3.9 | 4.1 | 4.3 | 4.0 | 0.1 | 0.1 |
| Information & communication | -1.8 | 10.8 | 10.3 | 8.8 | 7.0 | -2.5 | 6.3 | 18.5 | 15.0 | 9.5 | 0.4 | 0.5 |
| Finance & insurance activities | 0.0 | 15.9 | 13.2 | 11.4 | 10.0 | 7.9 | 2.2 | 4.9 | 2.2 | 4.2 | 0.2 | 0.1 |
| Real estate activities | 3.8 | 3.8 | 3.8 | 3.7 | 3.8 | 3.6 | 3.6 | 3.7 | 3.9 | 3.7 | 0.4 | 0.4 |
| General government | 1.9 | 7.9 | 12.7 | 12.1 | 8.6 | 5.6 | 5.8 | 5.8 | 5.5 | 5.7 | 0.6 | 0.4 |
| Education | 3.0 | 2.8 | 3.0 | 3.6 | 3.1 | 4.3 | 4.4 | 4.0 | 4.0 | 4.2 | 0.2 | 0.2 |
| Human health & social work | 3.1 | 3.5 | 3.1 | 3.2 | 3.2 | 6.2 | 5.4 | 4.4 | 6.1 | 5.5 | 0.1 | 0.2 |
| Other private services | 3.9 | 4.0 | 3.9 | 3.6 | 3.8 | 3.7 | 4.0 | 4.2 | 4.0 | 4.0 | 0.6 | 0.6 |

R: revised, P: provisional

Source: PBS

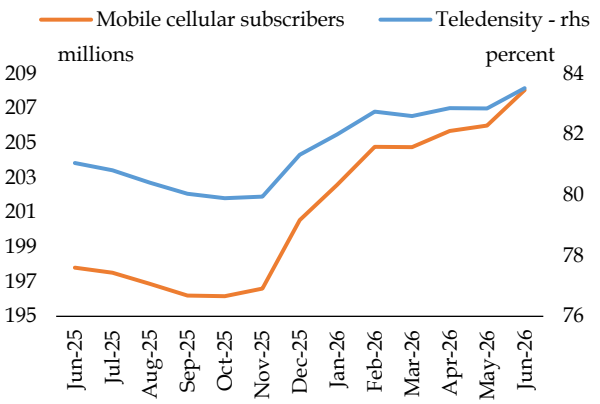
[54] Export volumes of furniture grew by 22.2 percent in FY26. Source: PBS

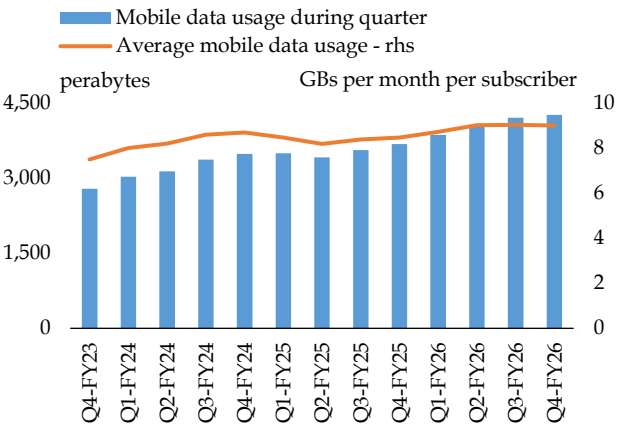
[55] Consumer finance for the purchase of durables grew by 4.2 percent in FY26, on top of 22.2 percent growth in FY25. Source: SBP

[56] POL sales to the transport sector increased to 15.0 million metric tons during FY26, from 14.8 million metric tons in the same period last year. Of this, sales to road transport rose to 14.5 million metric tons from 14.4 million metric tons, while sales to railways and domestic aviation declined. Source: OCAC

[57] The credit to transport and storage services surged to Rs 74.9 billion during FY26 against Rs 5.9 billion during FY25; credit to land transport and warehousing & support activities rose to Rs 20.0 billion and Rs 52.0 billion, respectively, compared to retirement of Rs 5.9 billion and increase in credit of Rs 7.8 billion, respectively during FY25. Meanwhile, the credit to Air and water transport declined. Source: SBP

**Trend in Teledensity and Cellular Mobile Subscriptions** **Figure 2.23**



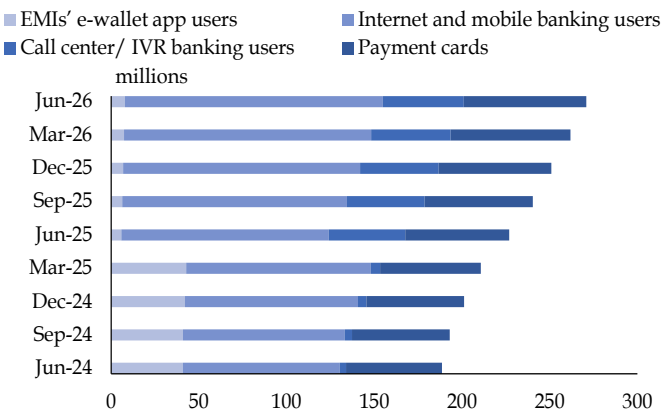

Source: PTA

education, as well as running of civil government.[58] Meanwhile, the growth in *other private services* was largely due to gains in professional, scientific, and technical activities, and support services.[59]

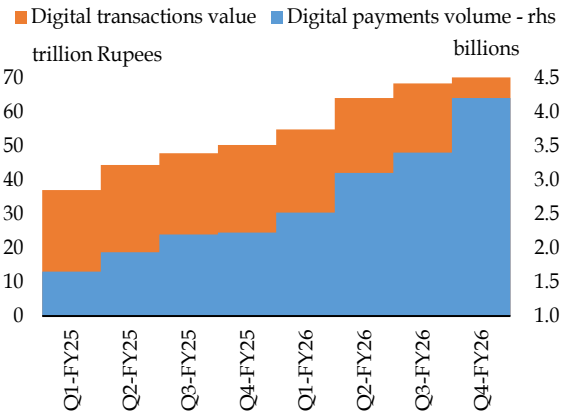
The *information & communication* services recorded accelerated growth in FY26, supported by an increase in computer programming, consultancy, and publishing services and rising IT services exports.[60] The improved performance is also corroborated by higher mobile phone imports. This can be linked to expanding digital connectivity, online services, and growing reliance on mobile technology for business, education, and entertainment. This is also evident from increasing teledensity, mobile phone subscription and mobile data usage (**Figure 2.23**),[61] as well as through increase in digital payment users and transactions (**Figure 2.24a and 2.24b**).

Growth in finance and insurance services decelerated in FY26 following a strong recovery in FY25, partly reflecting a higher deflator and base

**Digital Payment Channel Users and Instruments** **Figure 2.24a**




**Digital Payment Volume and Value** **Figure 2.24b**




Source: SBP

[58] The government spent Rs 1,033.5 billion on running of civil government in FY26, up from Rs 891.6 billion in the same period last year. Meanwhile, the budgeted allocations on health, education and social protection increased from Rs 28.2 billion, Rs 103.8 billion and Rs 608.0 billion, respectively to Rs 32.0 billion, Rs 112.7 billion and 734.2 billion, respectively. Source: MoF

[59] The professional, scientific and technical activities, architectural and engineering services grew by 3.9 percent, while administrative and support services grew by 3.4 percent during FY26. Source: PBS

[60] ICT exports increased to US$ 4.6 billion during FY26 compared to US$ 3.8 billion in FY25.

[61] Import of mobile phones increased to US$ 1.9 billion compared to US$ 1.5 billion in last year. Source: PBS

effect (**Table 2.12**).[62] Within finance and insurance services, growth in insurance, reinsurance and pension activities remained subdued, as heightened geopolitical tensions prompted insurers to withdraw standard war-risk coverage and raise premium rates, putting pressure on local insurers' underwriting margins. Moreover, the narrowing of the spread between weighted average lending and deposit rates also contributed to the deceleration in financial sector growth during FY26.[63]

Growth in *real estate activities* slightly decelerated mainly due to higher deflators compared to FY25. Apart from this, credit extended to the real estate sector experienced a modest expansion, rising from Rs 4.8 billion to Rs 5.0 billion in FY26, aligning with a pickup in construction activity. Concurrently, growth in *accommodation and food services* moderated due to higher deflator on account of higher food and energy prices.

## 2.5 Labour Market

Labour market depicted mixed picture during FY26. A moderate contraction was observed in industrial employment in Punjab and online job postings. Whereas newspaper job advertisements and employment sentiment index based on the SBP-IBA Business Confidence Survey (BCS) signalled improved job market condition.[64]

Industrial employment (based on data from Punjab) contracted by 1.4 percent during FY26, after growing by 0.6 percent during the same period last year (**Figure 2.25**). The decline was largely driven by textile, engineering (specifically diesel engine manufacturing), leather rubber & plastic (notably leather tanning) and food drinks & tobacco (primarily soft drinks) industries, which broadly reflected the slowdown in production of these subsectors in LSM.[65]

**Finance and Insurance Services** **Table 2.12**

growth in percent

| | FY25 | FY26 |
|---|---|---|
| Central banking | -15.9 | 9.1 |
| Other monetary intermediation | 5.3 | 4.1 |
| Scheduled banks | 5.9 | 4.2 |
| Non-scheduled banks | -27.7 | -2.8 |
| Insurance, reinsurance, and pension | 85.3 | 0.1 |
| Other financial services | -21.6 | -11.5 |
| Auxiliary activities | 38.3 | 8.2 |

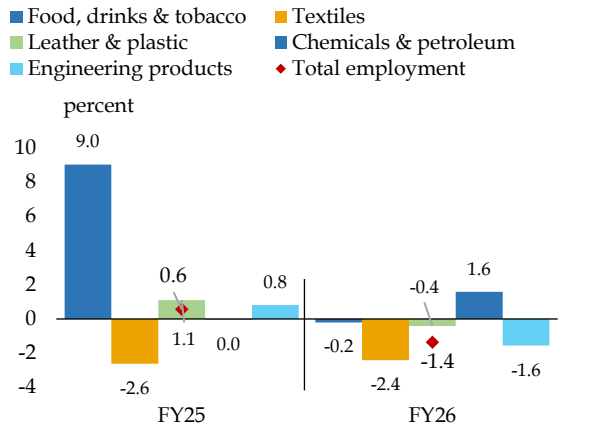
Source: PBS

However, hirings increased in chemicals & petroleum products, mainly on account of paints & varnishes, which is also in line with the higher production amid improved construction activity and automobile production. In pharma, employment growth was supported by strong profit margins despite decline in output.

The employment sentiments in business confidence surveys remained optimistic (above 50) in FY26. The optimism was driven by positive sentiments of both services and manufacturing firms. However, geopolitical tensions weighed on employer confidence, resulting in a minor moderation in sentiments during Q4-FY26.

The newspaper-based job postings picked up during FY26, broadly mirroring the recovery in

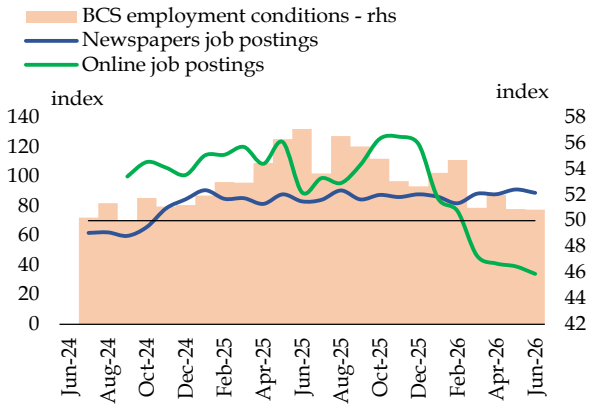
**Growth in Industrial Employment - Punjab** **Figure 2.25**




Source: BoS Punjab

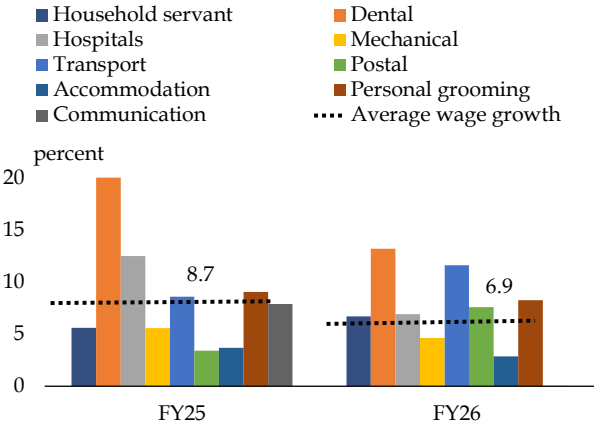
[62] A deflator is a price index used to convert nominal GVA into real GVA by adjusting for changes in prices. A higher deflator may therefore lead to lower real GVA, as it indicates a relatively faster increase in prices.
[63] The difference between weighted average lending and deposit rate (excluding zero markup and interbank) decreased from 4.2 percent at end-June 2025 to 3.8 percent at end-June 2026.
[64] SBP-IBA's monthly BCS measures sectoral business and inflation outlooks, including a 12-month past-and-future employment sentiment index. To analyse the employment sentiments, the average of past and future sentiment index is used.
[65] The textile sector maintained a steady downward employment trend, aligned with moderated high-value-added output.

**Job Postings and Employment Conditions** **Figure 2.26**




Sources: SBP; SBP staff calculations

**Average Wage Growth in Services Sector** **Figure 2.27**




Source: PBS

LSM, albeit with a lag, except for December 2025 and January 2026 (**Figure 2.26**). The increase in LSM in these months was driven by seasonal sugarcane crushing, an activity that is rarely advertised via newspapers as more than 80 percent of newspaper job postings pertain to services sector. Meanwhile, online job postings dropped, particularly in H2-FY26.

**Wage Growth**

The CPI based wage data shows that the growth in wages decelerated during FY26 (**Figure 2.27**). The nominal wage growth matched inflation trends in first half of the year. However, the surge in inflation in H2-FY26 outpaced wage growth, especially in Q4-FY26. Dentists fee recorded the highest increase, followed by wages of transport and personal grooming service providers. Meanwhile, household servants' wages recorded higher growth in FY26, reflecting increasing demand besides higher living expenses.

**Box 2.1: Reviving Investment in Productive Sectors of Pakistan**

Investment in Pakistan, as measured by Gross Fixed Capital Formation (GFCF), has been on a declining trend since the late 2000s. Total GFCF fell from an average of 15.0 percent of GDP during FY06–11 to 12.6 percent during FY22–26, primarily reflecting a decline in private investment (**Figure 2.1.1a**). More importantly, the decline is more pronounced in sectors that can potentially raise productivity, expand exports and generate technological spillovers. LSM and ICT, two such sectors, recorded the largest reduction in GFCF-to-GDP ratio, while it also declined in transport & storage services (**Figure 2.1.1b)**.

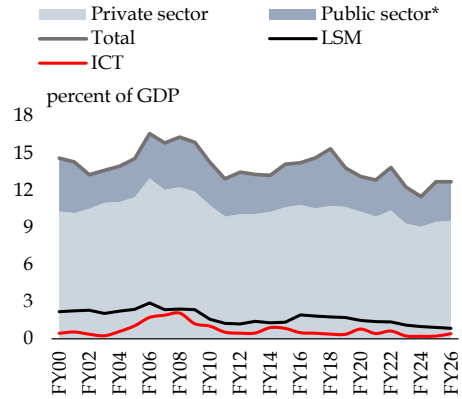
The trend is concerning because investment in manufacturing, modern tradable services and logistics brings together capital, skills and technology, supporting capital deepening, learning, and technology diffusion. These sectors involve firms to operate on a larger scale, have access to international markets, and improve product quality through external competition. The shift in investment away from such sectors affects productivity growth and weakens export diversification, besides curtailing demand for skilled labour. The resulting loss of productivity, exports and employment opportunities is reflected in Pakistan's slow structural transformation and limited employment creation in manufacturing sector (World Bank, 2022).

**Factors affecting investment in productive sectors in Pakistan**

- **High tariffs on inputs:** Tariffs and para-tariffs on raw materials, intermediate inputs and capital equipment raise the cost of expanding productive capacity. Specifically, a one percent increase in upstream protection is associated with a 0.63 percent decline in the revenue-based productivity of downstream firms and a 0.51 percent fall in their sales (World Bank, 2026a).[66]

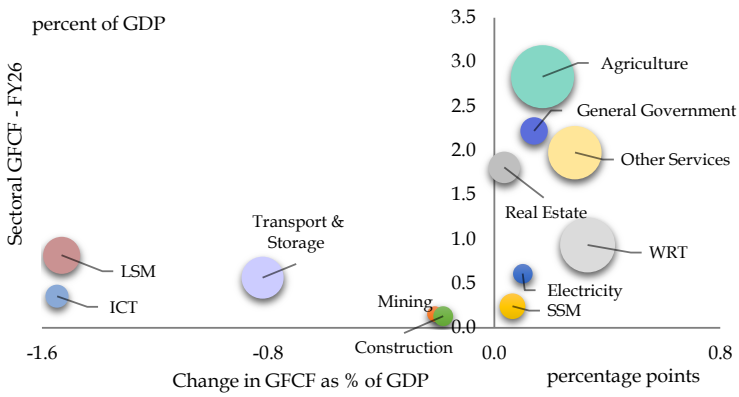
[66] Upstream protection refers to tariffs or other trade barriers on inputs and intermediate goods used by downstream firms in production.

**Gross Fixed Capital Formation** **Figure 2.1.1a**




* Inlcudes general government
Source: PBS

**Changes in Sectoral Investment in Pakistan in the Last Two Decades** **Figure 2.1.1b**




Negative values on the x-axis indicate a decline in the sector's GFCF-to-GDP ratio between FY07 and FY26. Bubble size represents the sector's share in GDP in FY26.

- **Anti-export bias:** Protection of final goods raises the relative returns from serving the domestic market compared with exporting. This weakens firms' incentives to invest in export capacity, efficiency and product quality. A study by World Bank (2026a) suggests that Pakistan's exports in 2024 were only 10.4 percent of GDP, well below regional peers such as India and Bangladesh, and roughly half of what the economy could achieve.
- **Limited long-term finance and policy uncertainty:** Credit constraints, public-sector crowding out and repeated episodes of macroeconomic instability raised financing costs and affected planning horizons. Long-term investments in machinery, development of digital systems and new production lines were particularly sensitive to these risks.
- **Informality and regulatory costs:** Complex rules and uneven enforcement increase fixed cost of capacity expansion in formal sector. Remaining small or informal then limits firms' access to finance, technology, skilled workers, and larger markets, weakening both the ability and the incentive to invest (World Bank, 2022).
- **Infrastructure and capacity gaps:** Unreliable energy, inefficient logistics, and limited support for technology adoption and worker training raise the cost and risk of upgrading. These constraints are especially binding in manufacturing and ICT, where investment depends on reliable complementary inputs (World Bank, 2026a).
- **Tax incentives favouring real estate:** Differences in tax treatment make real estate investment more profitable than manufacturing and tradable services in Pakistan (World Bank, 2022). Evidence from Khyber Pakhtunkhwa also shows that low effective property taxes encourage speculative purchases of plots (World Bank, 2024).

**Policy recommendations:**

Pakistan's prospects for sustained growth depend on reversing the declining trend in investment as well as improving its composition by encouraging investment in high employment generating and export-oriented sectors. The international experience, as summarised in **Table 2.1.1,** shows that government can encourage investment by addressing specific constraints such as limited long-term finance, infrastructure gaps, restricted market access, and costly inputs, while keeping firms exposed to exports, competition, and performance scrutiny. In this regard, some broader recommendations for reviving investment in Pakistan's industrial sector are summarised as follows:

- **Remove distortions before introducing new incentives:** Before offering additional incentives, Pakistan should address the existing policy distortions that discourage investment in productive sectors. For instance, simplifying the tariff structure and improving access to imported inputs should be an early priority (Nasir, 2020).[67] Meanwhile, the non-tradeable sectors, including real estate, need to be made less attractive through rationalisation of property taxes.
- **Prioritise public goods that support productive investment:** Firms are more likely to invest in export-oriented production when they have access to reliable infrastructure and workers with relevant skills. Public resources

[67] National Tariff Policy 2025–30 envisages gradual reduction in the maximum customs duty to 15 percent, streamlining the tariff structure to four slabs (0, 5, 10 and 15 percent), and phasing out Additional Customs Duties (ACDs) and Regulatory Duties (RDs) by 2030. These reforms are intended to simplify the tariff regime, lower input costs and improve export competitiveness.

**A Comparison of Industrial Policy Instruments in Selected Asian Economies** **Table 2.1.1**

| Country and sector | Main instruments | Constraint addressed | Performance requirements | Main lesson |
|---|---|---|---|---|
| Bangladesh: apparel | Bonded warehouses; duty-free imported inputs; EPZs and tax holidays | Imported-input costs; export entry | Benefits linked to export performance; global-market exposure | Apparel success, but weak diversification |
| South Korea: heavy and chemical industries | Foreign-loan guarantees; access to foreign credit; exemptions from capital-equipment tariffs | Long-term finance; machinery costs | 1973–79 programme; export-oriented regime | Lasting gains, with some initial resource misallocation |
| China: SEZ-led export manufacturing | SEZs and industrial parks; export-processing and duty-drawback regimes | Infrastructure and coordination; imported-input costs | Foreign and domestic investment; export-market exposure | Higher investment and productivity without crowding out domestic investors |
| Vietnam: export manufacturing, including electronics | SEZs and industrial zones; FDI attraction; trade integration | Investment coordination; market access | FDI and global-value-chain exposure; no common performance condition documented | GVC integration, but excessive proliferation of zones can reduce effectiveness |

Sources: World Bank (2026); Industrial Policy for Development

should thus focus on these shared inputs, which can lower the cost and uncertainty, rather than relying mainly on broad tax concessions that do not necessarily lead to new productive capacity (Mahmood, et al., 2009).

- **Support technology, skills, and supplier development:** Encouraging investment in productive sectors also requires addressing the practical constraints faced by firms. Support can be directed towards upgrading machinery and technology, upskilling workers, and strengthening local supplier capabilities. Such assistance should address clearly identified constraints and be linked to actual investment and technological upgradation (Wadho & Chaudhry, 2018).
- **Simplify tax administration:** Provide a single window for businesses to register, file returns, and pay taxes. Government authorities should coordinate collection and share revenues through agreed intergovernmental arrangements, reducing compliance costs and the need to deal with multiple agencies.
- **Keep support temporary and tied to results:** Incentives should not be permanent. Pakistan's experience suggests that support measures can influence firm behaviour without necessarily generating a meaningful increase in overall exports. Any new measures aimed at reviving productive investment should therefore be time-bound and linked to measurable outcomes, such as additional investment, expansion in export capacity, or improvements in productivity (Lovo & Varela, 2025).

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

**References**

i. World Bank Group (2022). From Swimming in Sand to High and Sustainable Growth: A Roadmap to Reduce Distortions in the Allocation of Resources and Talent in the Pakistani Economy. Pakistan Economic Memorandum; World Bank. https://hdl.handle.net/10986/38133
ii. World Bank. (2026). From Inward to Outward: Pakistan's Shift Towards Export-led Growth. https://documents1.worldbank.org/curated/en/099072126014044090/pdf/P507205-e58d7158-2f1b-41fa-b12b-db665fa9fbc8.pdf
iii. Fernandes, A. M. and Reed, T. (2026). Industrial Policy for Development: Approaches in the 21st Century - Overview. Policy Research Reports Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099111503312622762
iv. Nasir, J. (2020). The Tariff Tripod of Pakistan: Protection, Export Promotion, and Revenue Generation. *The Pakistan Development Review,* 59(3), 517–551.
v. Mahmood, T., Din, M. U., and Ghani, E. (2009). An Analysis of Technology Adoption by Export-oriented Manufacturers in Pakistan. *The Pakistan Development Review,* 48(4II), 939–948.
vi. Wadho, W., & Chaudhry, A. (2018). Innovation and Firm Performance in Developing Countries: The Case of Pakistani Textile and Apparel Manufacturers. *Research Policy,* 47(7), 1283–1294.
vii. World Bank (2022). Pakistan Development Update: Inflation and the Poor. https://thedocs.worldbank.org/en/doc/51427702c05371f59848a74a2d66ba87-0310062022/original/PDU-October-2022-Report-Web.pdf

viii. World Bank (2024). Land Sector Review in Khyber Pakhtunkhwa. https://documents1.worldbank.org/curated/en/099092724150516148/pdf/P18041711c4d2d02f1ba221df8a7e01ff44.pdf

ix. Lovo, S., & Varela, G. J. (2025). Industrial Policy under Constraints: Evidence from Pakistan's Export Subsidy Schemes. Policy Research Working Paper No. 11136, Washington, D.C.: World Bank Group.

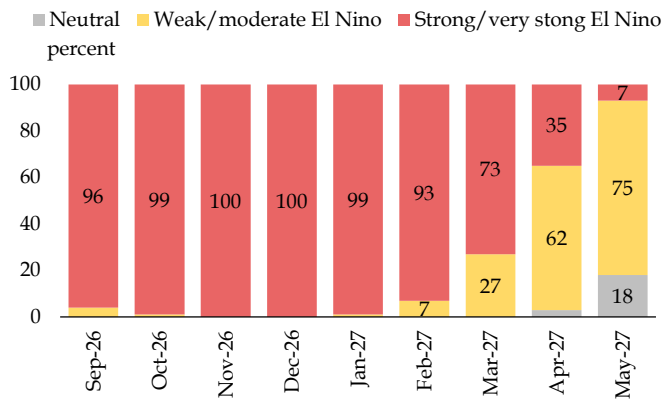
**Box 2.2: El Niño Risks to Pakistan's Agriculture and the Case for Preparedness**

Pakistan entered FY27 with agriculture exposed to a fresh round of weather risks from El Niño, underscoring the need for early preparation.[68] El Niño tends to bring hotter conditions, uneven rainfall and prolonged dry spells which raises risks to crop output and food security. Because it can be monitored in advance, it gives farmers and authorities time to prepare before its effects are felt. The warm phase of the El Niño-Southern Oscillation (ENSO) is associated with changes in atmospheric circulation that can alter rainfall patterns, increasing the risk of drought in some areas and heavy rainfall or flooding in others. It is important to note that the effect on Pakistan would depend on local weather conditions, availability of irrigation water, and the timing of these changes relative to critical crop-development stages.

Ensemble forecasts of the National Oceanic and Atmospheric Administration (NOAA) [69] point to below-normal seasonal rainfall and above-normal temperatures across parts of Pakistan during FY27. The probability of a strong or very strong El Niño remains above 90 percent from September 2026 to February 2027, before declining to 73 percent in March and 7 percent by May 2027, as weak or moderate conditions become more likely (**Figure 2.2.1a**). The temperature–rainfall stress index indicates greater exposure to drought-like conditions in Sindh, southern Punjab and parts of Balochistan (**Figure 2.2.1b**), suggesting risks to water availability and agricultural production. It does not imply that rainfall will remain weak throughout the period, as intense monsoon spells can still occur. The temperature-rainfall stress index should therefore be taken as a measure of overall seasonal heat and moisture stress, rather than the absence of rainfall. Unfavourable growing conditions may still emerge when rainfall is concentrated in short spells or followed by prolonged hot and dry periods.

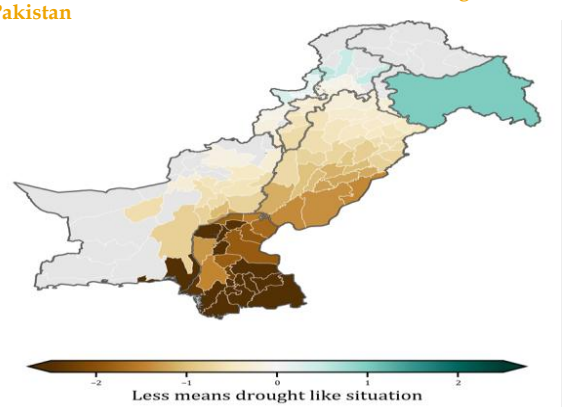
**Impact on crop yields:** Historical evidence indicates that El Niño has not affected all crops uniformly. Across six strong El Niño episodes, average yield anomalies were negative for maize, cotton and the wheat, at 3.4 percent, 2.0 percent, and 1.1 percent below their five-year centred trends, respectively (**Figure 2.2.2**). Yield of rice and sugarcane remained slightly above trend. El Niño therefore should be viewed as a risk as the eventual impact also depends on irrigation, input availability, and local weather conditions.

**El Nino Strength Probabilities** **Figure 2.2.1a**




Source: NOAA

**Temperature–Rainfall Stress Index across Pakistan** **Figure 2.2.1b**

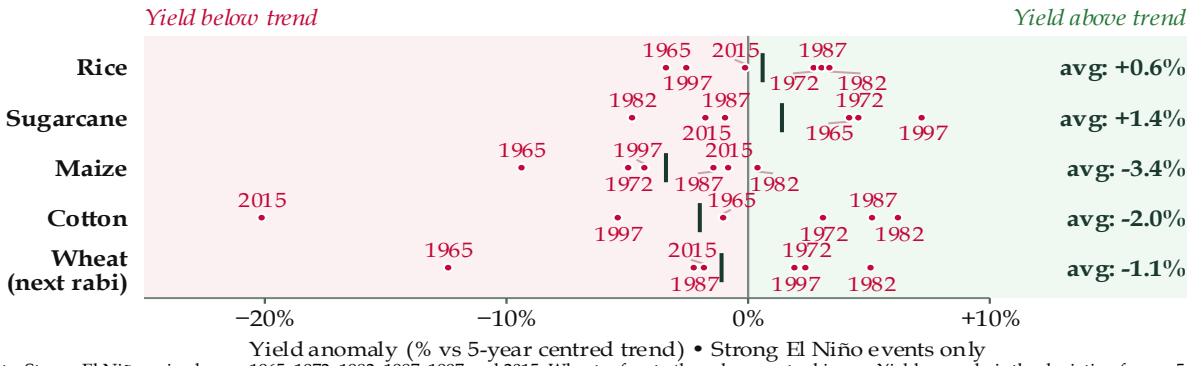



Source: SBP staff calculations based on NOAA data

[68] According to the World Meteorological Organization (WMO), El Niño is a phenomenon characterised by unusually warm ocean surface temperatures in the central and eastern equatorial Pacific.

[69] NOAA ensemble forecasts combine multiple simulations of future climate conditions, generated from different model runs and initial conditions. Combining these forecasts helps capture uncertainty and provides a robust indication of expected seasonal temperature and rainfall patterns than relying on a single model run.

**El Niño Years vs Pakistan Crop Yields (5-year Centered Trend)** **Figure 2.2.2**




Note: Strong El Niño episodes are 1965, 1972, 1982, 1987, 1997 and 2015. Wheat refers to the subsequent rabi crop. Yield anomaly is the deviation from a 5-year centered trend. The averages are calculated across six strong El Niño episodes (n = 6). The short vertical marker shows the crop-wise average.
Sources: Pakistan Economic Survey; SBP staff calculations.

The data from Pakistan and crop climate studies indicate that El Niño impacts agriculture primarily through the disturbance of rainfall pattern, increase in temperature and prolonged soil-moisture stress. During El Niño-like conditions, cotton and maize are likely to experience the highest yield losses, followed by wheat and rice, while sugarcane is relatively less affected (**Table 2.2.1**). Cotton and maize are especially vulnerable to combined heat and water stress, whereas rice depends more on availability of irrigation water. For wheat, the impact tends to appear with a lag through lower reservoir storage, weaker soil moisture at sowing and higher temperatures during grain filling.[70]

**Estimated Crop-yield Losses under El Niño-like Conditions** **Table 2.2.1**

percent

| Crop | Estimated impact on yield |
|---|---|
| Rice | −3 to −10 percent |
| Sugarcane | Zero to −8 percent |
| Cotton | −8 to −20 percent |
| Maize | −7 to −18 percent |
| Wheat | −3 to −11 percent |

Note: Estimates refer to the combined effect of around 1°C additional temperature and a significant soil-moisture deficit relative to normal conditions.
Source: SBP staff calculations based on studies listed in the references

**Implications for food security:** Lower agricultural production may result in food insecurity through reduced food availability, rising prices, and weaker rural incomes. Lower wheat, rice, and maize output would directly affect staple food supply and prices, while losses in cotton and sugarcane could reduce farm earnings and agricultural employment. This impact on crops may then spill over to other sectors of the economy. These risks can aggravate food insecurity given that already 11 million people are food-insecure in Pakistan.[71] Furthermore, the average household's spending on food and non-alcoholic beverages is approximately 36.7 percent of the total spending, which renders households, particularly those with low incomes, highly sensitive to food-price increases.[72]

**Case for preparedness:** Given these risks, early preparedness becomes necessary to prevent weather shocks from translating into major production and food-security losses. Vietnam went through a strong El Niño in 2019-20 and successfully managed it. Its experience shows that timely monitoring, changes in planting schedules, reduced exposure in high-risk areas and protection of freshwater resources can contain crop damage **(Table 2.2.2**). In Philippines, ahead of the 2023-24 El Niño, agriculture-related support was provided early to the agriculture dependant farm households exposed to droughts.[73] Existing social protection systems were used to provide cash assistance, farming tools, and water-management support, preventing losses from escalating. More recently, in May

[70] Saleem et al. (2022) associate yield losses across important crops with major drought episodes in Pakistan, with hydrological drought having more persistent effects. Ali et al. (2022) report significant effects of extreme temperature and rainfall on cotton and wheat in southern Punjab, while Iizumi et al. (2014) show that El Niño impacts vary across crops and regions.
[71] Around 11.0 million people in Pakistan, 22 percent of the population faced acute food insecurity at IPC Phase 3 or above during the 2025 peak, including 1.7 million in emergency, according to the Global Report on Food Crises 2026 by FAO and WFP.
[72] Pakistan Bureau of Statistics, *Household Integrated Economic Survey 2024–25*.
[73] Food and Agriculture Organization of the United Nations (FAO), The Philippines: Impact of Anticipatory Action - Safeguarding Farmers from Agricultural Drought through Government Systems, 2026. Forecasts of agricultural drought in Isabela Province in late 2023 were used to provide early assistance to more than 4,000 people through cash, tools and water-management support.

**Early Actions that Helped Vietnam Limit Crop Losses in 2019–20** **Table 2.2.2**

| ① Warn early | → | ② Plant earlier | → | ③ Reduce exposure | → | ④ Protect freshwater | → | ⑤ Contain losses |
|---|---|---|---|---|---|---|---|---|
| Water and salinity risks were monitored before the 2019–20 dry season, allowing local plans to be activated early. | → | Winter–spring rice was sown 10–20 days earlier; about 1.51 million ha had been planted. | → | About 50,000 ha shifted away from high-risk rice production, while roughly 100,000 ha was delayed or left uncultivated. | → | Five irrigation projects came online 6–13 months early, directly protecting 83,000 ha and supporting another 300,000 ha. | → | Rice damage was limited to 29,700 ha, only 7.3 percent of what was damaged in 2015–16. |

Source: Vietnam Ministry of Agriculture and Rural Development

2026, Lao People's Democratic Republic launched Southeast Asia's first sovereign anticipatory drought insurance pilot. Under the scheme, financing to farmers is released when a drought index crosses a predefined threshold, allowing government-led measures to act before drought impacts become severe.[74]

El Niño normally returns within a span of seven years, so Pakistan needs to build preparedness for it into its regular agricultural planning. This means using early forecasts to signal water management, improve seed and input availability, financing, and targeted help for farmers at risk. Doing so can reduce crop losses, protect farm incomes, and ease pressure on food security. This would make it easier to act before the next episode causes major losses, while reducing the need for costly relief after the damage is done.

**The contribution of Ijlal Ahmed Haqqani and Saad Ali is acknowledged in writing this box.*

**References:**

i. Gupta, S., Datt, G., & Gupta, S. (2026). Climate Change and Crop Yields in India. Monash Economics Working Paper No. 04/26, Monash University
ii. Zhao, C., et al. (2017). Temperature Increase Reduces Global Yields of Major Crops in Four Independent Estimates. *Proceedings of the National Academy of Sciences*, 114(35), 9326–9331.
iii. Ali, S., Liu, Y., Ishaq, M., Shah, T., Abdullah, Ilyas, A., & Din, I.U. (2017). Climate Change and Its Impact on the Yield of Major Food Crops: Evidence from Pakistan. *Foods*, 6(6), 39.
iv. Siyal, A.L., Mahesar, T.G., Sufyan, F., Siyal, F.K., Jatt, T., Mangi, F.H., Burdi, I.H., & Hossain, A. (2021). Climate Change: Impacts on the Production of Cotton in Pakistan. *European Journal of Agriculture and Food Sciences*, 3(3), 97–100.
v. Jaiswal, R., Mall, R.K., Patel, S., Singh, N., Mendiratta, N., & Gupta, A. (2023). Indian Sugarcane under Warming Climate: A Simulation Study. *European Journal of Agronomy*, 144, 126760.
vi. Gupta, S., Bhandari, L., Jakhu, R., & Sharma, M. (2022). Climate Change, Weather Anomalies, and Agriculture: Impact on Output of Major Crops in India. CSEP Working Paper No. 46, Centre for Social and Economic Progress, New Delhi
vii. Lesk, C., Rowhani, P., & Ramankutty, N. (2016). Influence of Extreme Weather Disasters on Global Crop Production. *Nature*, 529, 84–87.

**Box 2.3: Integrating Next Generation of Solar Energy Strategies (Agrivoltaics, Ecovoltaics, and Floatovoltaics) into Pakistan's Agricultural Landscape**[75]

Pakistan is rapidly moving towards solarisation. As Pakistan expands solar energy, large ground-mounted solar farms can compete with agricultural land. The next generation solar energy developments including Agrivoltaics,

[74] SEADRIF and FAO Launch Southeast Asia's First Anticipatory Drought Insurance Pilot in Lao People's Democratic Republic, May 28, 2026. Financing is triggered when the Combined Drought Index crosses a defined threshold. Source: FAO and Southeast Asia Disaster Risk Insurance Facility (SEADRIF),

[75] First conceptualised by Goetzberger and Zastrow in 1981, agrivoltaics combines solar energy generation with agriculture on the same land. Some definitions also include activities with ecosystem benefits, such as pollinator habitats. Ecovoltaics integrates solar development with biodiversity, ecological sustainability, and local socioeconomic benefits. Floatovoltaics, or floating solar, refers to solar systems installed on water bodies such as lakes, reservoirs, ponds, and canals.

**Smart Ways to Utilise Area Under Solar Panels** **Table 2.3.1**

| | |
|---|---|
| ○ Shelter for livestock | ○ Tool & equipment storage |
| ○ Gardening & shade-tolerant cash crops | ○ Compost decomposition |
| ○ Firewood storage | ○ Solar-drip irrigation |
| ○ Ecological grazing | |

ecovoltaics, and floatovoltaics offer ways to optimise land and water use, helping balance renewable energy generation with food security and environmental sustainability.[76] This box aims to discuss these emerging strategies and analyse how Pakistan can adopt them.

Agrivoltaics and ecovoltaics combine renewable energy generation with ecological and agricultural benefits by improving soil health, conserving water, and creating cooler microclimates that enhance solar panel efficiency, while supporting shade-tolerant crops (**Table 2.3.1**).[77] The shaded area also offers shelter and grazing for livestock, supports natural vegetation management through rotational grazing, and creates favourable conditions for compost decomposition near gardens and livestock areas.[78] Optimising solar array designs to direct rainfall, reduce evaporation, and support ecosystem restoration, may help increase agricultural productivity, particularly in water-scarce regions. They also provide farmers with decentralised electricity for irrigation and opportunities to earn income through net metering and crop sale. Ecovoltaic projects can be paired with aquifer recharge initiatives, where managed flooding or infiltration under solar arrays helps replenish groundwater supplies, directly addressing water scarcity in drought-prone areas (Fernandez-Bou, A. S. et al, 2024). Similarly, floating photovoltaic (FPV) systems (floatovoltaics) generate clean energy while significantly reducing water evaporation and algae growth.[79]

**Implementation considerations:**
Agrivoltaics, ecovoltaics and FPV offer significant land-use optimisation and co-benefits for renewable energy, but their deployment faces some challenges. In Pakistan, agrivoltaics is currently a niche solution best suited for shade-tolerant varieties rather than mainstream staple crops, while integrating livestock like sheep requires formalising livestock markets and training herders to navigate high-voltage infrastructure. Furthermore, utility-scale adoption is constrained by high initial capital costs and custom engineering needs, such as elevated panels and wind-stress modifications (**Table 2.3.2**).[80] Despite initial costs, Pakistan's strong solar potential—with 4 to 6 peak sun hours daily across many parts—ensures an impressive return on investment for agrivoltaics within six years (Abdullah et al., 2026). This financial viability is further reinforced by rapidly declining costs; for example, floating photovoltaics (FPV) costs fell from US$1.50 – US$2.50/Wp (2012–2017) to $0.65–$1.10/Wp (2025–2026), driven by mass production of HDPE pontoon floats and marine-grade aluminium racking.[81] Another concern in FPV is their engineering and environmental challenges, such as corrosion risks, material degradation, and potential impacts on aquatic ecosystems, which continue to be studied.

**Important Considerations for Implementing Agrivoltaics, Ecovoltaics and Floatovoltaics** **Table 2.3.2**

| Agrivoltaics and Ecovoltaics | Floatovoltaics |
|---|---|
| • Crop selection | • Environmental & equipment impact |
| • Environmental & equipment impact | • Solar racking & structural design |
| • Solar racking & structural design | ○ Mooring and anchoring |
| ○ Panel height | ○ Material durability |
| ○ Spacing & angle of panels | • Location benefits |
| • Location | |

[76] Pakistan is second-largest importer of solar panels, trailing only the Netherlands (which functions largely as a European re-export shipping hub). Source: The Economist
[77] Vegetation under panels creates a cooler microclimate primarily through evapotranspiration, where plants release water vapor that absorbs ambient heat. Cooler panels operate more efficiently — output drops 0.3-0.5 percent for every degree above 25°C. (Hinton, n.d.)
[78] Compost decomposition is the natural, controlled breakdown of organic waste (food scraps, yard trimmings, etc.) by bacteria and fungi, which can be used as a natural fertiliser.
[79] The FPV generate clean electricity while reducing water evaporation by 70 percent and algae growth by 50 percent (Neumann, 2026).
[80] A 1-acre agrivoltaics system with a 230 kW capacity requires a higher initial investment than traditional solar—costing around US$ 75,000 (Rs 20.9 million) according to DeltaEnergy—due to the specialised labour, high-efficiency 580W+ bifacial panels, industrial inverters, and elevated 8–10 foot galvanised steel mounting needed to accommodate farming (Abdullah et al., 2026)
[81] Wp stands for watt-peak. It is the maximum power a solar panel can produce under ideal, standardised test conditions.

**Global practices and trends:**
Many countries have adopted agrivoltaics and floatovoltaics in diverse agricultural and aquatic settings (Abdullah et al., 2026). Germany is a pioneer in the field of agrivoltaics, leading early research and large-scale testing and creating a blueprint for global adoption. Japan adopted it due to land scarcity, developing "solar sharing" system by installing solar panels over rice paddies.[82] In the US, the solar panels are installed over fruits, vegetables, and herbs, which powered around three hundred homes. France conducted the first scientific field experiment on agrivoltaics on wheat and lettuce.[83] China has successfully applied it on aquaculture farms.[84] Moreover, according to Neumann (2026), global FPV capacity has reached 5 gigawatt in 2025, with major projects including China's 320-megawatt Dezhou and India's 600 megawatt Omkareshwar projects.

Pakistan can also adopt these technologies by starting on a small scale by growing vegetables (leafy green, root vegetables, etc); berries (strawberries, raspberries, and blackberries); herbs (basil, mint, and cilantro); mushrooms (oyster, shiitake, etc.), flowers and some climate specific crops that can transform solar arrays into highly productive, revenue-generating agricultural hubs.

**Top crops for Agrivoltaics/Ecovoltaics farming and their benefits**
Crop selection under agrivoltaic and ecovoltaics systems should reflect the degree of shade, water availability, and local climate. Shade-tolerant vegetables and herbs may benefit from lower heat exposure and moisture loss, while fodder crops can support livestock and maintain soil cover. Mushrooms may be grown in suitably cool and shaded settings, whereas flowering plants can support pollination and biodiversity. High-value crops such as saffron, tea and coffee are location-specific and should be considered only where agro-climatic conditions are suitable.

**Challenges and policy priorities**
Successfully scaling agrivoltaics, ecovoltaics and FPV requires supportive land-use policies, developer interest, community engagement, localised execution, and creating awareness. This can be done by incentivising financing access, especially for small and disadvantaged farmers; streamlining project approvals, launching pilot projects, providing technical assistance to farmers, and promoting ecovoltaics as a standard for sustainable solar development through public-private partnerships. To overcome high upfront capital costs for smallholders, financing can be incentivised by leveraging existing frameworks like the SBP green financing schemes and subsidised agricultural loans.

**The contribution of Almas Karim is acknowledged in writing this box.*

**References:**
i. Manitius, N. (2024). Dual-use solar: What it is and How it can Help Ease Tensions Between Clean Energy Deployment and Land Use. Available at https://www.catf.us/2024/01/dual-use-solar-help-ease-tensions-between-clean-energy-deployment-land-use/
ii. Fernandez-Bou, A. S., Rodriguez-Flores, J. M., Cuppari, R. I., & Yang, V. (2024). Agrivoltaics and Ecovoltaics: How Solar Power can Deliver Water Savings, Farm Success, and A Healthier Environment. Available at https://energyindemand.com/2024/08/02/how-solar-power-can-deliver-water-savings-farm-success-and-a-healthier-environment/
iii. SolarPunk. (2025). Best Crops for Agrivoltaics: Growing food & Harvesting Solar Energy. SolarPunk Blog, February 5, 2025 available at https://www.solarpunkhq.com/en/blog/best-crops
iv. Mehta, K., Jain, R., & Zörner, W. (2025). Agrivoltaics Around the World: Potential, Technology, Crops, and Policies to Address the Energy–Agriculture Nexus for Sustainable and Climate-Resilient Land Use. *Energies*, 18(24), 6417.
v. Neumann, R. (2026). Floating Solar Farms 2026: Clean Energy Benefits & Global Projects. SurgePV, May 25, 2026 available at https://www.surgepv.com/blog/floating-solar-farms-clean-energy

[82] The panels were estimated to have a 20-year lifespan while generating 44,000 kWh of electricity annually.
[83] According to Dupraz et al. (2011), both wheat and lettuce grew successfully under the panels. The total output was 35 percent more than using land separately for farming or solar alone.
[84] In Shandong province, the integration of solar panels boosted shrimp and sea cucumber yields by 50 percent while generating enough electricity to power 113,000 homes.

vi. Hinton, M. (n.d.). What Can You Grow Under Solar Panels? Depth of Light Ltd. available at https://www.depthoflight.co.uk/blog/what-can-you-grow-under-solar-panels/
vii. Abdullah, F., Rana, H. A., & Fatima, T. (2026). Is Agrivoltaics the Solution to Pakistan's Troubles? Paradigm Shift, May 6, 2026 available at https://www.paradigmshift.com.pk/agrivoltaics/
viii. Dupraz, C., Marrou, H., Talbot, G., Dufour, L., Nogier, A., & Ferard, Y. (2011). Combining Solar Photovoltaic Panels and Food Crops for Optimising Land Use: Towards New Agrivoltaic Schemes. *Renewable Energy*, 36(10), 2725–2732.

**Box 2.4: Zarkhez-e: Developing an Integrated Agriculture Ecosystem**

**The Context:** The agriculture sector in Pakistan makes a significant contribution to the economy. It employs nearly one-third (33 percent) of the rural population, contributes over 23.4 percent to GDP and has strong backward and forward linkages with the manufacturing sector (MoF, 2026). Yet, despite its economic importance, the sector remains underdeveloped, with growth constrained by recurring shocks and persistent structural weaknesses.

The distribution of agricultural land, particularly owing to inheritance, has made farmlands smaller, with the average farm size declining from 6.4 acres in 2010 to 5.1 acres in 2024, while the number of farms increased from 8.26 million to 11.70 million during the same period (PBS, 2026). Owners of the small farms are caught in the vicious cycle of low productivity, low income and less capacity to invest in modern production techniques, making them vulnerable to economic shocks as well as natural calamities. These challenges are compounded by a lack of technical know-how, limited access to better quality agricultural inputs, post-harvest inefficiencies and weak market linkages.

**The Status:** Low and uncertain farm incomes, weak collateral position, and limited capacity to absorb shocks also restrict farmers' access to formal finance. Agriculture accounts for less than 10 percent of total private sector credit with less than one third of the farm owners having access to formal finance. Smallholders account for 93 percent of the existing borrowers of financial institutions, yet their average share in annual disbursements is only about 40 percent and their share in outstanding financing stands at 60 percent (PBS, 2026).

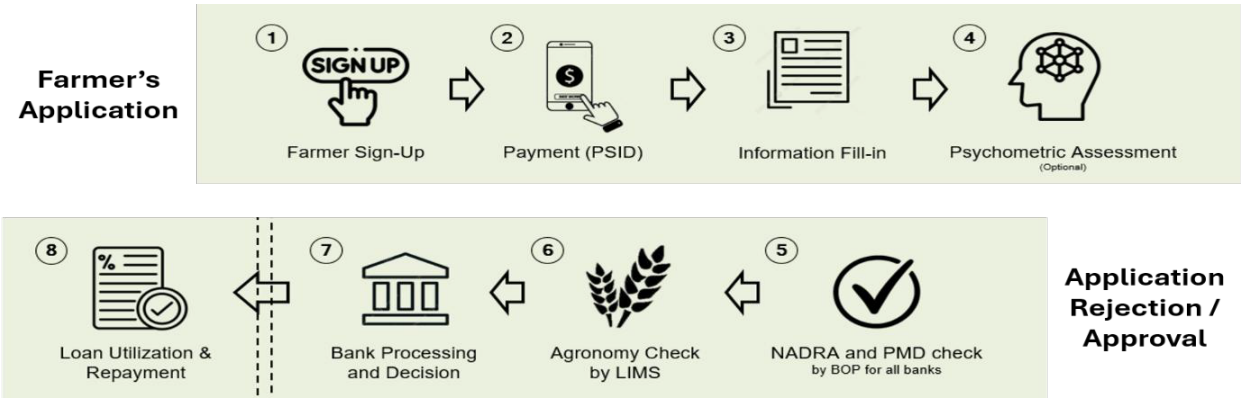
Moreover, despite the extensive branch network of commercial banks, nearly 68 percent of small borrowers are served by microfinance banks, microfinance institutions, and specialised banks, highlighting the need for stronger mainstream banking engagement in agricultural finance. Farmers are typically reluctant to go to formal financial institutions as they find limited access points, i.e. branches serving agriculture finance, cumbersome documentation, high collateral demand and stringent repayment schedules. On the other hand, financial institutions, particularly commercial banks, have less appetite for agriculture financing due to weak collateral, low recovery rates, vulnerability to economic/climate shocks and inadequate legal enforcement.

**The Solution:** Recognising these challenges, the Government of Pakistan (GoP) and SBP, in collaboration with the Pakistan Banks Association, launched Zarkhez-e in October 2025 as a comprehensive digital platform for agricultural financing that intends to address many of the challenges mentioned above. The Zarkhez-e is an end-to-end digital solution for collateral-free financing of small farmers.

In its first phase, the platform offers collateral-free financing of up to Rs 1 million to small farmers for production purposes only.[85] The GoP provides a risk coverage scheme to banks of 10 percent on first-loss basis, as well as an incentive of Rs 10,000 per incremental borrower during the year.[86] The 10 percent first-loss coverage is explicitly stated in the scheme and Zarkhez-e term sheet. To de-risk bank exposure, ensure access to finance for genuine farmers, and facilitate the purchase of inputs and repayments, the portal has a strong but efficient technology-based verification process and is limited to in-kind purchases. Farmers are also provided with agri-tech advisory services. Specifically, the platform streamlines the lending journey through digital applications, integrated identity verification through NADRA and PMD, agronomy verification through Land Information and Management System (LIMS),

[85] Eligible borrowers include landowners and tenants with landholding of up to 12.5 acres in Punjab and Khyber Pakhtunkhwa, 16 acres in Sindh, and 32 acres in Balochistan. The applicants must be resident Pakistani farmers, aged 21–60 years, possess a valid CNIC as per NADRA records, and have a mobile SIM registered in the name of the borrowing farmer.
[86] Further details are available at the SBP website for the Risk Coverage Scheme: https://www.sbp.org.pk/acd/2025/C2.htm and the Zarkhez-e Circular: https://www.sbp.org.pk/acd/2025/CL1.htm.

**Financing Process and Digital Lending Journey under Zarkhez-e** **Figure 2.4.1**




Source: SBP

standardised scoring models, defined turnaround times, and a multi-bank routing mechanism (**Figure 2.4.1**). The official documentation confirms NADRA/PMD checks, LIMS assessment, online processing, and structured digital utilisation of financing. It further ensures productive utilisation of financing by channelling loans through an approved agri-input vendor network, thereby creating a closed-loop mechanism that minimises misuse and strengthens impact.

Zarkhez-e is available to all eligible farmers across Pakistan, including borrowers in Gilgit-Baltistan (GB) and Azad Jammu & Kashmir (AJK). As of September 2026, it has reached over 85 percent of districts, with around 60,000 farmers registered, more than 36,500 applications submitted, and a roughly 60:40 tenant-to-owner mix, while over 17,000 loans amounting to Rs7.5 billion have been approved.

In the second stage, which is currently in the development phase, Zarkhez-e will be developed into a broader ecosystem, expanding financing options to include the livestock sector and collateralised financing, integrating input and produce marketplaces to facilitate online purchases of inputs and sale of output, and deepening partnerships with technology providers and other market players and organisations. The next phase will place greater emphasis on capacity building of farmers and field-level stakeholders to make it a sustainable platform. The aim is to evolve Zarkhez-e from a digital lending platform into a comprehensive enabler of agricultural finance, markets, advisory services, knowledge, and rural inclusion.

**The box is contributed by Agriculture Credit and Financial Inclusion Department (ACFID) of SBP.*

References:

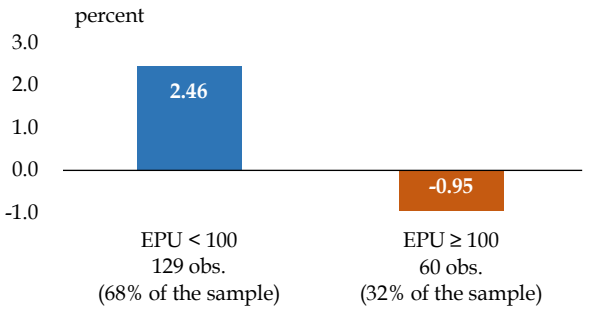
i. Ministry of Finance. (2026). Pakistan Economic Survey 2025–26: Agriculture. Government of Pakistan.
ii. Pakistan Bureau of Statistics. (2026). Agriculture Census 2024. Government of Pakistan.

**Box 2.5: Economic Policy Uncertainty and Manufacturing Activity in Pakistan**

Economic policy uncertainty has remained elevated in the last decade owing to successive domestic policy shocks, including abrupt changes in energy tariffs and import compression measures. These have coincided with the global commodity price spike of 2021–22 and, more recently, with heightened geopolitical risk stemming from the Middle East conflict (Tunio 2022). Together, these have suppressed business sentiments, delayed capital expenditure, and weighed on industrial and economic activity **(Figure 2.5.1**). This box investigates the impact of economic policy uncertainty on manufacturing output in Pakistan.

Economic theory and empirical literature identify several channels through which uncertainty affects manufacturing output (summarised in **Table 2.5.1)**. Based on the variables discussed in the cited literature, we test long-run relationship between economic policy uncertainty (EPU) and LSM using Johansen cointegration test. For this purpose, we have used monthly data from July 2015 to June 2026. Both the trace statistics and the maximum

**Average LSM Growth by EPU Regime** **Figure 2.5.1**




Note: The EPU threshold of 100 is not statistically derived but is treated as an economically meaningful benchmark, which is consistent with the international EPU literature, where values above 100 typically correspond to periods of policy stress.
Sources: Haver; PBS

**Uncertainty and Manufacturing Activity** **Table 2.5.1**

| Transmission Channel | Evidence/ Remarks |
|---|---|
| **Investment postponement** | Under uncertainty, firms opt to wait before committing to irreversible capital expenditure, depressing capacity additions. |
| **Working capital compression** | Banks tighten credit standards and firms slow down their production activities when the outlook is uncertain. |
| **Input-cost pressures and exchange rate pass-through** | Manufacturing sector is typically import-intensive in energy and raw materials. In this context, exchange rate depreciation translates into higher input costs and discourages output expansion. |
| **Oil price shocks** | Oil constitutes a primary input for major manufacturing sectors. The surge in oil prices following the outbreak of Middle East conflict has inflated the import bill and increased manufacturing cost. |
| **Expectations channel** | Inflation expectations remain unanchored in the wake of high uncertainty, resulting in deferred hiring and production plans. |

Sources: Baker, Bloom, and Davis, 2016; Bloom, 2009

eigenvalue test confirmed the presence of one cointegrating vector, leading to the estimation of a Vector Error Correction Model (VECM). **Table 2.5.2** presents the long run results, which indicate that a one percent increase in economic policy uncertainty reduces LSM output by approximately 0.1 percent, with the effect materialising after one month of the shock.[87]

This is in line with the economic rationale that firms require some time to adjust production processes. Moreover, accumulated inventories may also delay the impact as firms keep producing until they run out of raw material inventories or supply. Further, VECM results assert that uncertainty does dampen production in the short-run as only about 25 percent of the disequilibrium is corrected within the first period.[88]

The findings point to two specific policy priorities. *First*, and most directly, policies that reduce economic policy uncertainty, including transparent, rules-based frameworks for fiscal and regulatory decisions, and clear communication during episodes of elevated uncertainty, are expected to have a positive effect on LSM output. *Second*, the significant role of the exchange rate in both the long-run and short-run equations highlights the importance of maintaining orderly foreign exchange market conditions and avoiding excessive fluctuation, given its implications for input costs and export competitiveness.

**Long-run Results** **Table 2.5.2**

| Long-run equation (Dependent variable Log(lsm) | | | |
|---|---|---|---|
| **Variable** | **Coefficient** | **T-statistic** | **Significance** |
| Log(epu(-1)) | -0.1 | -2.9 | Significant |
| Log (er(-1)) | -0.06 | -5.3 | Significant |
| Pr(-1) | 0.005 | 1.1 | Insignificant |
| Constant | -4.2 | | |
| **VECM results (Dependent Variable D(LLSM)** | | | |
| ECM | -0.25 | -2.9 | Significant |
| D(llsm(-1)) | -0.1 | -1.1 | Insignificant |
| D(llsm(-2)) | -0.22 | -2.2 | Significant |
| D(lepu(-1)) | -0.04 | -2.1 | Significant |
| D(lepu(-2)) | -0.05 | -2.1 | Significant |
| D(ler(-1)) | 0.01 | -4.9 | Significant |
| D(ler(-2) | -0.04 | -2.2 | Significant |
| D(pr(-1)) | 0.02 | 2.4 | Significant |
| D(pr (-2) | -0.01 | -0.1 | Insignificant |

Source: SBP staff estimates

Beyond these model-specific implications, structural measures are needed to improve manufacturing resilience. These include reducing reliance on imported energy and intermediate inputs through energy diversification, domestic supply-chain development, and efficiency-enhancing investment, which would lower production costs and reduce exposure to adverse terms-of-trade shocks. This, together with the policy priorities discussed above, can improve the predictability of the business environment and support firm-level planning and investment.

[87] 11 seasonal dummies were added to capture seasonality, AIC is used to choose lags in VAR, LM test confirms there is no autocorrelation.
[88] A 25 percent error correction term shows that convergence of LSM towards equilibrium is moderate.

* *The contribution of Ravi Kumar and Abdul Basit is acknowledged in writing this box.*

**References**

iii. Bloom, N. (2009). The Impact of Uncertainty Shocks. *Econometrica*, 77(3), 623–685.
iv. Tunio, M.W. (2022). Economic Policy Uncertainty and Industrial Activity: An Evidence from Pakistan. MPRA Paper No. 113544
v. Dbouk, W., Moussawi-Haidar, L., & Jaber, M. Y. (2020). The Effect of Economic Uncertainty on Inventory and Working Capital for Manufacturing Firms. International Journal of Production Economics, 230, 107888.
vi. Mitra, G., Gupta, V., & Gupta, G. (2025). Economic Policy Uncertainty and Firm Performance: An Empirical Investigation of Indian Firms. Journal of Indian Business Research, 17(3), 193–220.
vii. Mumtaz, H., & Ruch, F. U. (2025). Policy Uncertainty and Aggregate Fluctuations: Evidence from Emerging and Developed Economies. The World Bank Economic Review, 40(3), pp 543-564
viii. Nusair, S. A. (2025). Economic Policy Uncertainty and Industrial Output in the G7 Countries: An asymmetric Analysis. Economic Change and Restructuring, 58(5), 1–40.
ix. Zhu, S., & Yu, G. (2022). The Impact of Economic Policy Uncertainty on Industrial Output: The Regulatory Role of Technological Progress. *Sustainability*, 14(16), 10

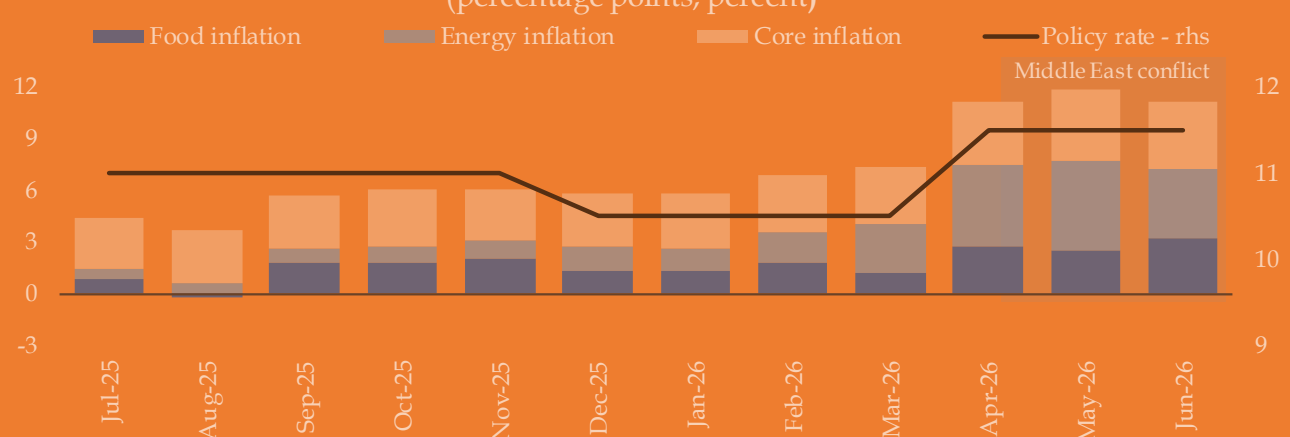


# 3

# Monetary Policy and Inflation

*The average NCPI inflation rose to 7.1 percent in FY26, compared with 4.5 percent in the previous year. Inflation remained relatively contained for most of the year, supported by coordinated monetary tightening and fiscal consolidation that kept domestic demand in check, benign global commodity prices, and favourable adjustments in electricity prices. Year-on-year inflation remained within the medium-term target range during Jul–Feb FY26. Inflationary pressures, however, intensified later in the year, as the outbreak of the Middle East conflict triggered a surge in global oil prices, pushing inflation into double digits from April 2026 onward. At the same time, the inflation outlook became more uncertain amid risks from unanticipated adjustments in energy prices, domestic floods, volatility in global commodity prices, and uncertainty surrounding global trade tariffs. In response, the MPC maintained a prudently cautious approach throughout FY26. Meanwhile, in line with the easing domestic financial conditions, reflecting the transmission of reduction in policy rate in the previous year, and a gradual recovery in economic activity, private sector credit growth also increased. Additionally, higher government's budgetary borrowing from scheduled banks, and expansion in credit to PSEs, underpinned increase in net domestic assets of the banking system. This, together with continued increase in net foreign assets of SBP led to higher growth in money supply in FY26.*

**Monetary Policy and Inflation**
(percentage points, percent)



# 3 Monetary Policy and Inflation

## 3.1 Policy Review

The monetary policy committee (MPC) continued with a prudently cautious stance amid uncertainty surrounding the inflation outlook. The MPC reduced the policy rate by 50 basis points (bps) in December 2025 as inflation was assessed to remain within the target range owing to benign global commodity prices and anchored inflation expectations. Subsequently, the MPC kept the policy rate unchanged in January and March 2026, before raising it by 100 bps to 11.5 percent in April 2026 as the Middle East conflict clouded the inflation outlook. This measured approach throughout the year kept the average national CPI (NCPI) inflation around the upper bound of the medium-term target range of 5.0 – 7.0 percent, i.e. at 7.1 percent, during FY26, despite global oil price shock and supply chain disruptions.

At the start of FY26, the MPC expected year-on-year inflation to remain mostly within the target range, with temporary deviations in a few months towards end of the fiscal year. This assessment was based on an adequately positive real policy rate, continued fiscal consolidation, improved external account position supporting exchange rate stability, and a generally favourable global commodity price outlook. However, this outlook was subject to risks emanating from higher-than-anticipated adjustments in the administered energy prices, possible flood-related supply disruptions, frictions in wheat market, volatile global commodity prices and the uncertainty surrounding global trade policies.

The MPC also initially projected real GDP growth in the range of 3.25 - 4.25 percent for FY26. The combined impact of earlier monetary easing, improving business sentiments and anticipated recovery in agriculture were expected to support the momentum in growth. While the expansion in economic activity was likely to result in a concomitant increase in imports, slower global growth was expected to weigh on exports outlook. Nonetheless, workers' remittances were projected to remain strong and help contain the current account deficit in the range of 0 - 1.0 percent of GDP in FY26.

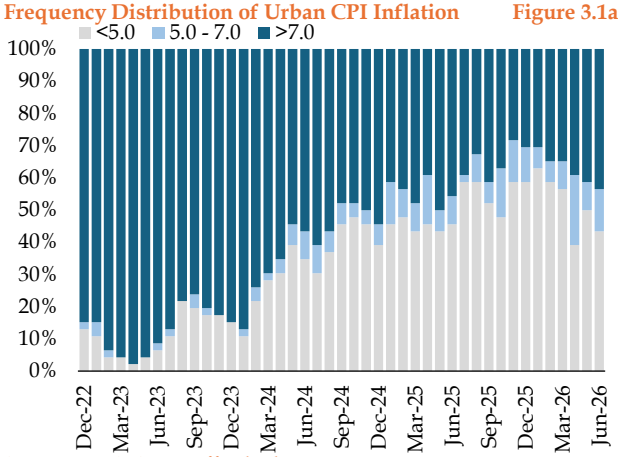
Although inflation remained below the lower bound of the medium-term target range during June-August 2025, the committee assessed that the near-term inflation outlook was clouded by elevated uncertainty stemming from both domestic and global factors. Expected adjustments in gas and electricity tariffs also posed upside risks to energy inflation. The floods during Aug-Sep FY26 further added to uncertainty, although their impact remained limited compared to the 2022 floods.

Moreover, rising sales of automobiles, cement, fertilizers and POL, alongside a broad-based private sector credit (PSC) growth pointed to stronger economic activity. Lower borrowing costs and reduced government's recourse to bank financing supported credit expansion. Moreover, large scale manufacturing (LSM) production showed a notable increase in Jul-Aug FY26, against a contraction in the same period last year.

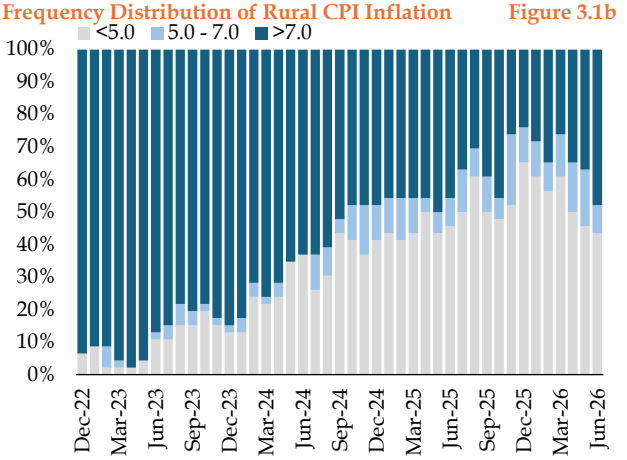
By October 2025, the growth outlook had further improved. However, persistent core inflation, uncertainty around food and global commodity prices, and the unfolding impact of the earlier policy-rate reductions warranted continued caution. Accordingly, the MPC kept the policy rate unchanged at 11.0 percent in its July, September and October 2025 meetings.

By December 2025, the balance of risks had improved, as inflation remained within the target range and its outlook improved, global commodity prices softened, and economic activity strengthened without creating excessive inflationary and current account pressures. Foreign exchange reserves also increased despite sizeable external debt repayments. These developments, particularly the improved inflation

**Frequency Distribution of Urban CPI Inflation** **Figure 3.1a**




**Frequency Distribution of Rural CPI Inflation** **Figure 3.1b**




Sources: PBS; SBP staff calculations

outlook, provided room for a measured 50 bps reduction in the policy rate to 10.5 percent, while maintaining an adequately positive real policy rate. The MPC subsequently maintained the policy rate in January 2026 amid persistent core inflation and stronger-than-anticipated economic activity leading to upward revision in FY26 growth projection by 0.5 percentage points to 3.75 - 4.75 percent. Meanwhile, SBP reversed the average Cash Reserve Requirement (CRR) for banks from 6 percent to 5 percent in line with improvement in economic fundamentals.[1]

However, outbreak of the Middle East conflict in late February 2026 posed significant upside risks to inflation outlook. Global fuel prices and freight and insurance costs rose sharply, while trade and transport routes were also disrupted. Given heightened uncertainty over the duration and intensity of the conflict, and increased risks to inflation, growth and the external account, the MPC maintained the policy rate at 10.5 percent in March 2026.

As the conflict prolonged, its inflationary impact became larger and more widespread. Global energy prices rose considerably above the pre-conflict levels, and the government also passed the increase to domestic consumers. As a result, NCPI inflation saw a broad-based increase reaching double digits by April 2026. Core inflation also increased, and inflation expectations and confidence of consumers and businesses deteriorated.

The breadth of inflation was particularly indicated by increase in prices of a large number of CPI items, which exceeded the upper bound of the medium-term target range in the last quarter of FY26 (**Figure 3.1**). The MPC assessed the year-on-year inflation to remain in double digits and exceed the upper bound of the target range for most of FY27. The committee therefore increased the policy rate by 100 bps to 11.5 percent in April 2026 to limit the potential second-round effects of the oil price shock and keep the inflation expectations anchored (**Box 3.1 & 3.2**).

The MPC also underscored the urgent need for comprehensive structural reforms to reduce external sector vulnerability to global supply shocks. The committee reiterated that combining steady fiscal consolidation with structural reforms is imperative to insulate the domestic economy from supply-side disruptions and prevent the entrenchment of second-round effects of the supply shocks.

## 3.2 Monetary Aggregates

Amidst ease in financial conditions, the broad money (M2) growth edged up to 14.7 percent in FY26 from 12.9 percent in FY25. This increase was

[1] In November 2021, SBP increased the average CRR from 5 percent to 6 percent and daily minimum requirement from 3 percent to 4 percent, to contain domestic demand.

**Monetary Aggregates - FY26** **Table 3.1**

billion Rupees, growth in percent

| | Stocks end-period | | Change in stock | | Growth (YoY) | |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | FY25 | FY26 | FY25 | FY26 |
| Broad money (M2) | 40,506.3 | 46,460.1 | 4,624.5 | 5,953.8 | 12.9 | 14.7 |
| NFA | 464.9 | 2,138.5 | 1,602.8 | 1,673.7 | -140.8 | 360.0 |
| NDA | 40,041.5 | 44,321.6 | 3,021.7 | 4,280.1 | 8.2 | 10.7 |
| Budgetary borrowing | 34,078.3 | 36,325.6 | 4,354.4 | 2,247.2 | 14.6 | 6.6 |
| SBP | 3,836.2 | 590.7 | -691.5 | -3,245.5 | -15.3 | -84.6 |
| Scheduled banks | 30,242.2 | 35,734.8 | 5,045.9 | 5,492.7 | 20.0 | 18.2 |
| Commodity operations | 1,066.5 | 1,008.6 | -311.8 | -58.0 | -22.6 | -5.4 |
| Credit to private sector | 9,948.7 | 11,412.0 | 1,081.9 | 1,463.3 | 12.2 | 14.7 |
| Credit to PSEs | 2,104.4 | 2,338.7 | -87.1 | 234.3 | -4.0 | 11.1 |
| Other items net | -8,089.5 | -7,419.9 | -2,487.0 | 669.6 | 44.4 | -8.3 |
| Currency in circulation | 10,634.5 | 11,941.5 | 1,481.4 | 1,307.0 | 16.2 | 12.3 |
| Deposits | 34,590.5 | 39,810.0 | 4,408.8 | 5,219.5 | 14.6 | 15.6 |
| Reserve money | 12,970.6 | 14,474.6 | 1,357.8 | 1,503.9 | 11.7 | 11.6 |

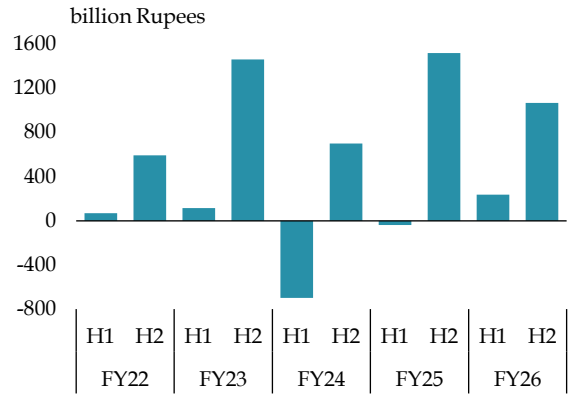
Source: SBP

largely contributed by expansion in Net Domestic Assets (NDA), while Net Foreign Assets (NFA) of the banking system also increased (**Table 3.1**). Sizeable budgetary borrowing, though lower compared to the previous year, together with increased credit to private sector and public sector enterprises (PSEs) underpinned the expansion in NDA. Moreover, build-up of foreign exchange reserves through significant FX purchases,[2] valuation gains on the SBP's gold holdings on account of surge in international gold prices, and repayment of foreign liabilities expanded NFA of the banking system.

On the liability side, currency in circulation (CiC) increased by Rs 1.3 trillion during FY26, lower than Rs 1.5 trillion expansion in FY25 (**Figure 3.2**). In terms of GDP, however, CiC remained almost unchanged around 9 percent. This moderation could be attributed to positive real interest rates. Despite this slight moderation during the full fiscal year, currency demand increased considerably in H2-FY26 amid Ramadan and Eid, higher remittance inflows[3] and improving economic activity. Heightened regional geopolitical uncertainty may also have contributed to higher precautionary cash holding in H2-FY26.

The bank deposits rose by Rs 5.2 trillion during FY26, compared to Rs 4.4 trillion increase recorded in FY25. By deposit type, the remunerative deposits made a slightly larger contribution than current deposits. Further, the pattern as well as underlying factors of the change in deposits also varied during the year. In H1-FY26, deposits increased by Rs 2.0 trillion, with

**Currency in Circulation - Flows** **Figure 3.2**



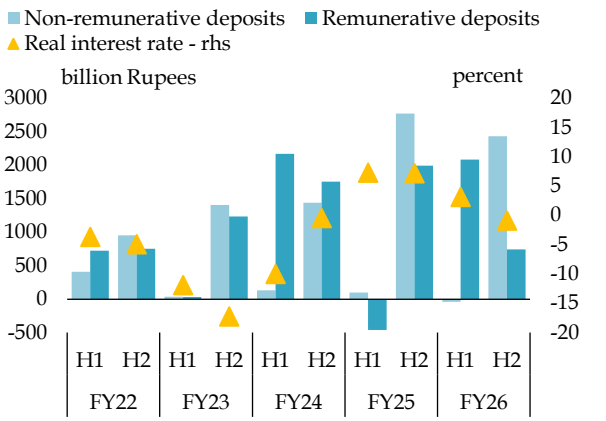

Source: SBP

[2] During FY26, SBP made net foreign exchange purchases of US$ 8.1 billion from the interbank FX market, compared to US$ 7.7 billion during FY25.

[3] 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.

growth in remunerative deposits more than offsetting a slight decline in current deposits. In H2-FY26, deposits expanded by Rs 3.2 trillion (**Figure 3.3**), led mainly by current deposits. Following the seasonal trend, most of the increase was concentrated in Q4-FY26, particularly in June 2026.

**Bank Deposits - Flows** **Figure 3.3**




Source: SBP

### Credit to Public Sector Enterprises

Credit to PSEs expanded by Rs 234.3 billion during FY26, after recording net retirements in the preceding two years (**Table 3.1**). The increase was largely concentrated in a few entities, including Central Power Purchasing Agency (CPPA), Pakistan State Oil (PSO), Pakistan National Shipping Corporation (PNSC) and Pakistan International Airlines Holding Company.

The rise in borrowing by the CPPA, under the government's arrangement with scheduled banks, was meant to clear accumulated payables in the power sector.[4] In addition, PSO relied on short-term borrowing to manage cash flows due to its large receivables.[5] Meanwhile, PNSC borrowed to finance purchase of new tankers,[6] and PIA Holding Company borrowed to meet finance costs on existing debt.[7]

### Commodity Operations Financing

In line with the shift in government policy to encourage private sector to procure and manage wheat stock, commodity operations financing saw a net retirement for the third consecutive year in FY26. The Sindh government partly retired its outstanding debt after releasing wheat stocks during FY26.[8] Pakistan Agricultural Storage & Services Corporation (PASSCO) also reduced its outstanding commodity debt during the year, while Punjab government fully retired its debt stock, in line with the shift toward market-based commodity operations.[9]

### Budgetary Borrowing

Net government budgetary borrowing from the banking system almost halved to Rs 2.2 trillion in FY26 from Rs 4.4 trillion in FY25. Although the government increased its borrowing from scheduled banks, large retirements to the SBP partially offset this increase.

The government accelerated repayments of SBP debt to smooth its domestic debt maturity profile. A large portion of this debt was scheduled to mature in FY29.[10] By retiring part of the debt ahead of the maturity, the government reduced the prospective refinancing burden and distributed repayments more evenly. Further, to extend the maturity profile of domestic debt and benefit from the reduced interest rates, the government set the targets for Treasury Bills (T-bills) around the maturities, while setting higher targets for Pakistan Investment Bonds (PIBs) during FY26 (**Table 3.2**).

[4] Press release no. 264, available at: https://pid.gov.pk/site/press_detail/30458.
[5] PSO (2026). Un-audited condensed interim financial statements for the nine months. Pakistan State Oil Company.
[6] PNSC (2026). Consolidated condensed interim financial statements for the nine months. Pakistan National Shipping Corporation.
[7] PIAHCL (2026). Financial results for the third quarter. PIA Holding Company Limited.
[8] Source: https://cm.sindh.gov.pk/news/sn-abyna-palysy-oharyn-la-srynr-palysy-mlazmn-ky-rygyolr-r-maholyaty-thfth-yn-ahm-sarn-jy-mnthory-ey-y.
[9] GOPb (2025). Punjab Debt Bulletin, Government of Punjab.
[10] IMF (2025). Pakistan: Second Review Under the Extended Arrangement Under the Extended Fund Facility. International Monetary Fund.

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

billion Rupees, ratio

| | Target | Acceptance | Acceptance (net of maturity) | Target-to-Maturity | Offer-to-Target | Acceptance-to-Maturity |
|---|---|---|---|---|---|---|
| | | | **Treasury Bills** | | | |
| Q1-FY26 | 2,975.0 | 3,549.2 | 515.5 | 0.9 | 3.2 | 1.2 |
| Q2-FY26 | 5,250.0 | 5,776.2 | 321.3 | 0.9 | 2.4 | 1.1 |
| Q3-FY26 | 3,900.0 | 4,832.7 | 875.1 | 0.9 | 2.6 | 1.2 |
| Q4-FY26 | 7,400.0 | 8,494.7 | 1,389.6 | 1.0 | 3.1 | 1.2 |
| **Total** | **19,475.0** | **22,652.9** | **3,101.6** | **1.0** | **2.8** | **1.2** |
| | | | **Pakistan Investment Bonds** | | | |
| ***Fixed Rate*** | | | | | | |
| Q1-FY26 | 1,000.0 | 1,635.5 | 1,050.6 | 1.7 | 5.0 | 2.8 |
| Q2-FY26 | 1,250.0 | 1,744.4 | 1,092.8 | 1.9 | 4.4 | 2.7 |
| Q3-FY26 | 1,300.0 | 1,563.5 | 1,563.5 | - | 3.6 | - |
| Q4-FY26 | 1,000.0 | 1,300.3 | 1,142.5 | 6.3 | 4.0 | 8.2 |
| **Total** | **4,550** | **6,243.8** | **4,849.4** | **3.3** | **4.2** | **4.5** |
| ***Floating Rate*** | | | | | | |
| Q1-FY26 | 1,850.0 | 1,556.7 | 674.2 | 2.1 | 4.7 | 1.8 |
| Q2-FY26 | - | - | -90.5 | - | - | - |
| Q3-FY26 | 650.0 | 402.9 | -114.9 | 1.3 | 12.9 | 0.8 |
| Q4-FY26 | - | - | -1,213.6 | - | - | - |
| **Total** | **2,500** | **1,959.6** | **-744.7** | **0.9** | **6.8** | **0.7** |

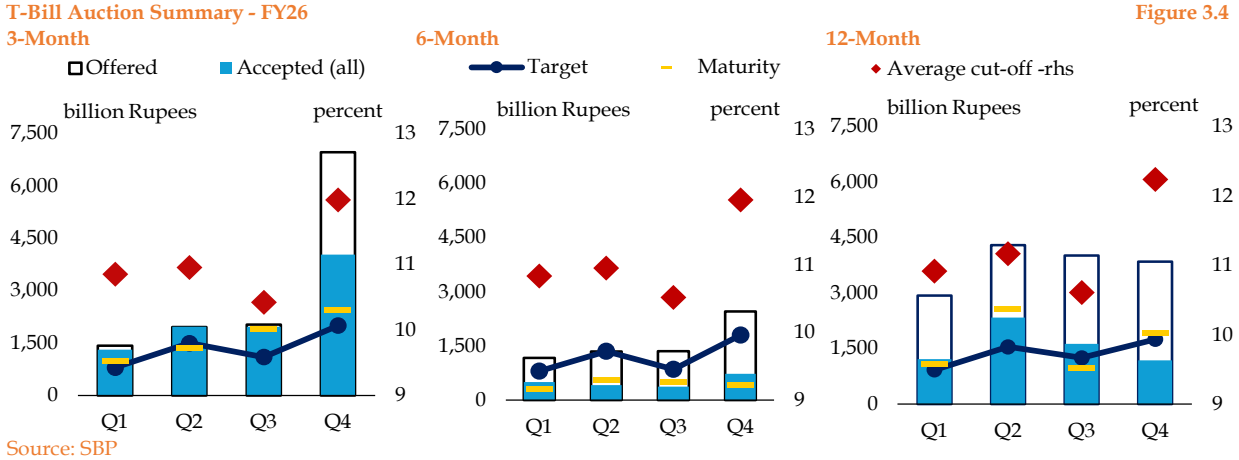
Note: Data shows face values of all securities. Acceptance includes both Competitive and Non-Competitive Bids (NCBs). For PIBs, acceptance also includes Short Sale.

Source: SBP

In T-bill auctions, investors' demand for 12-month bills was relatively higher. However, as geopolitical tensions and the associated uncertainty increased later in the year, market preferences shifted toward shorter-tenor bills, particularly 1-month and 3-month T-bills (**Figure 3.4 and 3.5**).

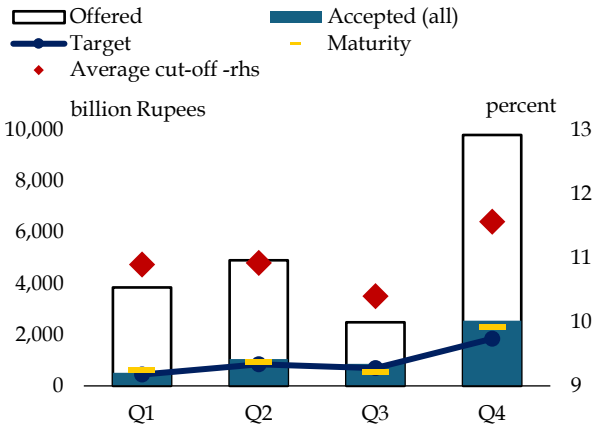
The cut-off rates in T-bill auctions moved closer to the policy rate during H1-FY26 (**Figure 3.6**). Following the policy rate reduction in December 2025, market participants initially expected the SBP to lower the policy rate further in January 2026. However, the outbreak of the Middle East conflict pushed up inflation expectations and led to a shift in market sentiments toward tighter monetary conditions. Accordingly, the market bid for higher returns in subsequent auctions. Furthermore, rising fiscal financing needs during H2-FY26 exerted additional upward pressure on cut-off rates. This pushed the cut-off rates above the policy rate, besides inducing increased volatility. However, as the market uncertainty began to ease, cut-off rates moved closer to the policy rate in June 2026.

**T-Bill Auction Summary - FY26** **Figure 3.4**



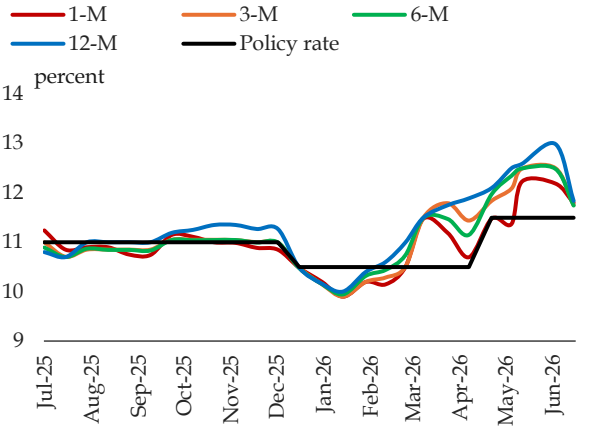

Source: SBP

**1-Month T-Bill Auction Summary - FY26** **Figure 3.5**




Source: SBP

**Cut-Off Rates** **Figure 3.6**




Source: SBP

Overall, the government recorded net borrowing through T-bills, with most of the increase seen during the second half of FY26. As upside risks to inflation and uncertainty over the policy rate increased, investors demanded higher yields on longer-term fixed-rate instruments. In response, the government mobilised more funds, specifically during Q4, through shorter-tenor T-bills. This approach allowed the government to meet immediate funding requirements at relatively lower cost.

Investors' demand for PIBs also remained robust during FY26, though offers softened somewhat during H2 as uncertainty increased. Demand remained particularly strong for 15-year zero coupon PIBs and 10-year semi-annual PFLs, which attracted the highest offers (**Table 3.3**). In H2-FY26, investors also demanded higher yields. The government responded by accepting smaller amounts and, in some auctions, rejecting all bids to avoid borrowing at relatively elevated rates.[11]

**Auctions of Pakistan Investment Bonds** **Table 3.3**

ratio

| | Offer-to-target | | Acceptance-to-target | |
|---|---|---|---|---|
| | FY25 | FY26 | FY25 | FY26 |
| 2Y- Zero coupon | 2.8 | 2.4 | 0.8 | 0.6 |
| 3Y- Fixed | 3.1 | 3.6 | 0.9 | 1.1 |
| 5Y- Fixed | 3.6 | 3.5 | 1.3 | 1.4 |
| 10Y- Fixed | 2.1 | 2.9 | 1.2 | 1.2 |
| 15Y- Zero coupon | 1.4 | 11.6 | 1.0 | 3.3 |
| 2Y - PFL Semi-Annual | 1.6 | - | 0.03 | - |
| 5Y- PFL Semi-Annual | 1.9 | - | 0.7 | - |
| 10Y- PFL Semi-Annual | 3.5 | 6.8 | 1.6 | 0.8 |

Source: SBP

PIB auctions reflected a notable change in the government's long-term borrowing strategy during FY26. In FY25, semi-annual floating-rate instruments had dominated conventional long-term issuance. In FY26, however, the government shifted its borrowing toward fixed-rate and zero-coupon PIBs (**Table 3.3**). This strategy reduced interest rate risk and increased predictability in future debt-servicing costs.

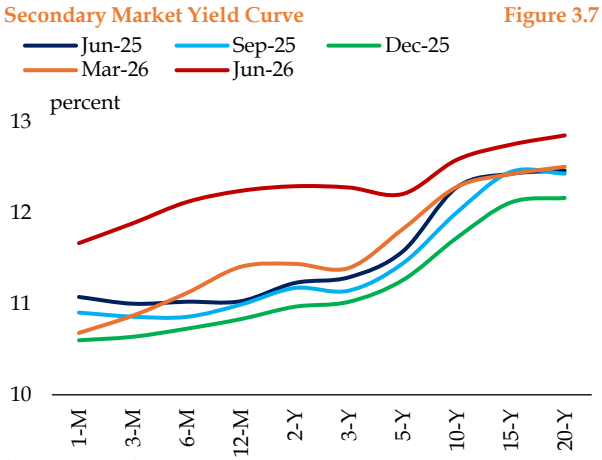
The secondary market yields declined during H1-FY26, broadly reflecting the reduction in the policy rate and expectations of further monetary easing. However, yields began to rise from March 2026 onward amid rising uncertainty (**Figure 3.7**). The yield curve, nevertheless, retained a positive slope, reflecting optimism about future economic growth and inflation as well as elevated uncertainty.

## Interbank Liquidity

Interbank liquidity remained under pressure during FY26, mainly due to increased government borrowing from scheduled banks, expansion in PSC, and lending to PSEs. These pressures were partly offset by stronger deposit growth,

[11] For instance, the government rejected all bids in the fixed-rate PIB auction of April 28, 2026, and in several other auctions including the 15-year and 10-year PIBs-fixed and the 10-year PFLs.

**Secondary Market Yield Curve** **Figure 3.7**




Source: MUFAP

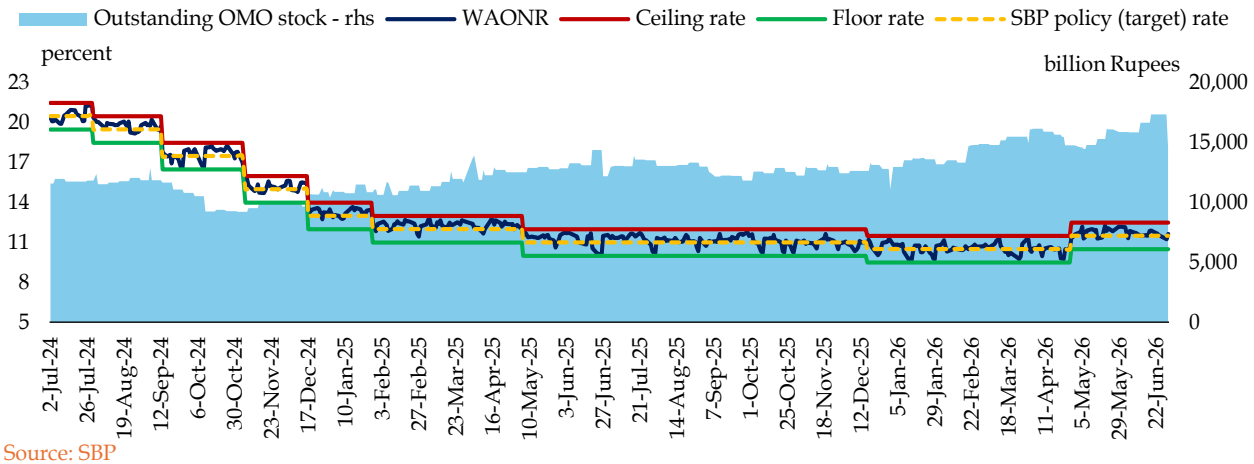
reduction in cash reserve requirement, SBP's net FX purchases, retirements in commodity operations financing and moderation in CiC.

SBP's liquidity operations effectively managed these pressures. As a result, the average outstanding Open Market Operations (OMOs) stock increased to Rs 13.9 trillion in FY26, compared to Rs 11.4 trillion in FY25, with market interventions primarily concentrated in 7-day and 14-day tenors. Liquidity operations remained closely aligned with market conditions, helping to anchor overnight rates around the policy rate (**Figure 3.8**). The weighted average overnight repo rate (WAONR) remained 9.4 basis points above the policy rate, on average, during FY26, compared with 23.4 basis points in FY25 (**Figure 3.9**).

Despite the prevailing liquidity pressures, banks' recourse to the ceiling facility moderated during FY26. Usage of the ceiling facility declined from 167 to 142 days, while the average number of borrowing banks fell from three to two and the average amount borrowed per visit decreased from Rs 193.2 billion to Rs 158.1 billion, indicating that regular OMOs largely met banks' liquidity requirements and reduced the need for overnight borrowing from SBP. Similarly, the use of floor facility fell by 33 percent to a three-year low of 164 days. The average number of participating banks also declined from three to two per operation, while the average placement dropped sharply from Rs 267.9 billion in FY25 to Rs 72 billion in FY26.

Liquidity requirements of the Islamic banks continued to be met through Shariah-compliant OMOs. The average volume of liquidity injections through Shariah-compliant OMOs declined to Rs 205.1 billion during FY26 from Rs 234.6 billion in the previous year. Consistent with this, recourse to the Islamic ceiling facility also moderated.[12]

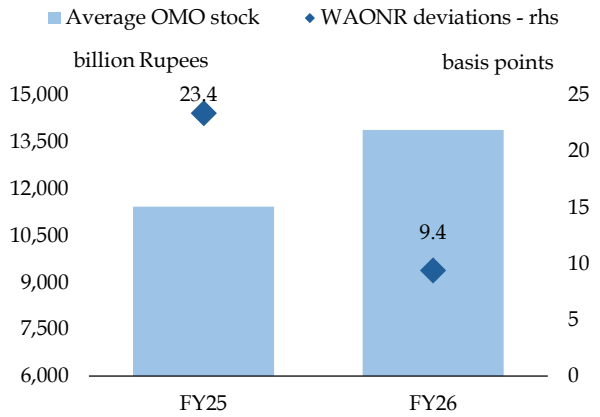
**Interbank Liquidity Indicators** **Figure 3.8**




Source: SBP

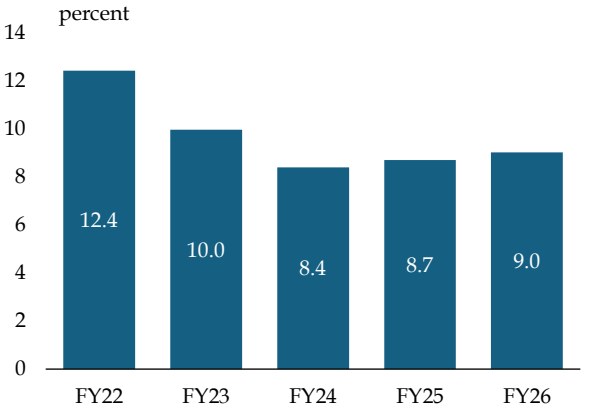
[12] The frequency of access to the Islamic ceiling facility declined from 115 days in FY25 to 95 days in FY26, while the average amount of collateral pledged decreased from Rs 6,495.7 billion to Rs 5,599.1 billion.

**Average WAONR Deviations from Policy Rate** **Figure 3.9**




Source: SBP

**Private Sector Credit-to-GDP Ratio** **Figure 3.10**



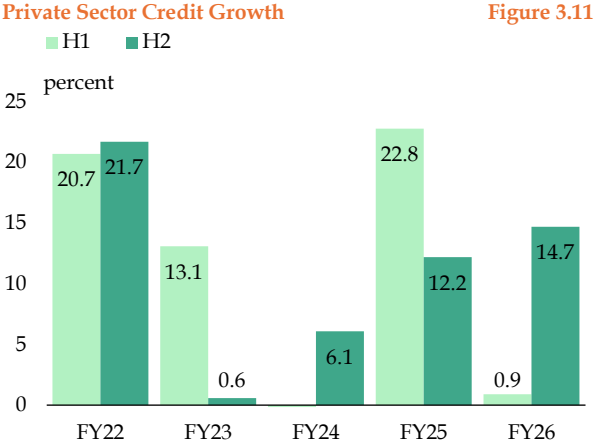

Source: SBP

## 3.3 Private Sector Credit

Private sector credit grew by 14.7 percent in FY26 compared to 12.2 percent in FY25. With this, credit-to-GDP ratio increased to 9.0 percent from 8.7 percent last year **(Figure 3.10)**.[13] Most of the increase in PSC was concentrated in H2-FY26, as credit growth remained sluggish in H1-FY26 because of high base effect stemming from banks' increased lending to avoid ADR-based tax in the previous year **(Figure 3.11)**.[14]

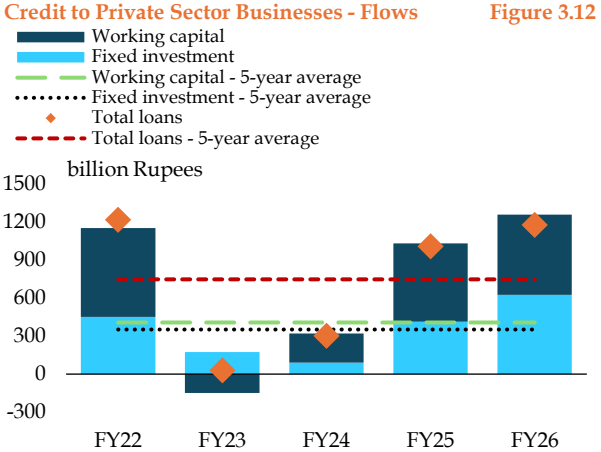
The loans to private sector businesses (PSBs), which constitute around 84.0 percent of total PSC,[15] expanded by Rs 1.2 trillion in FY26 compared to an expansion of around Rs 1.0 trillion in FY25. This increase was contributed by working capital and fixed investment loans, both surpassing levels observed in the previous year, as well as their past five-year averages **(Figure 3.12)**. Nonetheless, the contribution of fixed investment loans was noticeably higher in FY26 compared to FY25.

**Private Sector Credit Growth** **Figure 3.11**




Source: SBP

**Credit to Private Sector Businesses - Flows** **Figure 3.12**




Source: SBP

[13] Credit-to-GDP ratio in FY26 was still lower compared to its average of 10.3 percent during last five years (FY21-FY25).
[14] The increase in tax rate linked to ADR in FY25, particularly on bank income from government securities incentivized banks to improve ADR and increase loan portfolio. As a result, bank lending to private sector surged (for further details, **Chapter 3** of FSR (2024)).
[15] Private sector credit has two components: (i) investments in securities and shares of private sector; and (ii) loans to private sector. Loans to private sector are further classified into four components comprising of loans to private sector businesses, loans to trust funds and non-profit organizations, personal loans and others.

**Underlying factors of Private Sector Credit** **Table 3.4**
growth in percent, diffusion index

| | H1-FY25 | H2-FY25 | FY25 | H1-FY26 | H2-FY26 | FY26 |
|---|---|---|---|---|---|---|
| Global commodity prices | -4.1 | -5.2 | -4.7 | -7.6 | 18.6 | 5.3 |
| Global energy prices | -8.3 | -9.9 | -9.1 | -12.8 | 25.7 | 5.9 |
| Exchange rate (average) (+app/dep, %) | 3.3 | -0.6 | 1.3 | -1.2 | 0.5 | -0.4 |
| Weighted average lending rate* | 17.1 | 12.7 | 14.9 | 12.2 | 12.2 | 12.2 |
| **WPI** | 4.4 | -0.5 | 1.9 | 0.3 | 7.5 | 3.9 |
| Motor spirit | -10.9 | -7.6 | -9.3 | 3.8 | 28.1 | 15.9 |
| Diesel | -15.3 | -7.3 | -11.5 | 6.7 | 43.6 | 25.1 |
| Electricity | 7.9 | -17.3 | -5.6 | -15.4 | -0.7 | -8.5 |
| Natural gas liquified | 37.8 | -0.3 | 15.7 | 6.3 | 8.5 | 7.4 |
| **Economic activity** | | | | | | |
| LSM | -1.8 | 0.3 | -0.7 | 4.8 | 5.1 | 5.0 |
| Product demand** | 59.1 | 64.2 | 61.6 | 62.7 | 69.2 | 65.9 |
| Purchasing managers index** | 49.9 | 56.7 | 53.3 | 54.9 | 52.5 | 53.7 |

*Average during the period, ** Average of diffusion indices
Sources: SBP; PBS; WB

The expansion in credit to PSBs was supported by both demand- and supply-side factors. On the demand side, improving real economic activity and increase in consumer demand, evidenced by sustained growth in LSM and high-frequency demand indicators, stimulated credit demand. Furthermore, increased raw material procurement by PSBs increased working capital requirement. The surge in global energy prices in H2-FY26, which raised input cost, further increased working capital requirements of PSBs **(Table 3.4)**.

In addition, consumer financing also increased, led by auto financing and house building loans. Meanwhile, stable macroeconomic conditions together with lower financial costs drove expansion in the fixed investment loans.

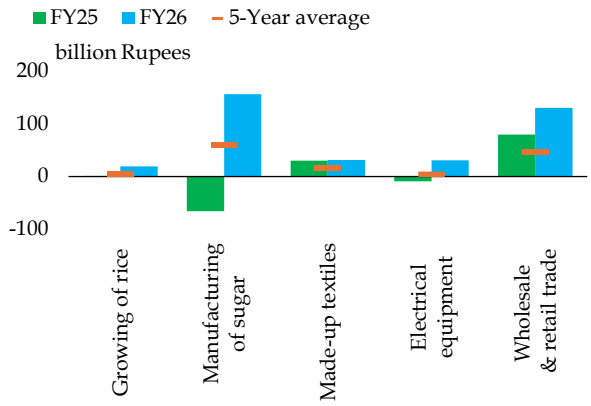
On supply side, reduction in CRR from 6 percent to 5 percent in January 2026 injected additional liquidity into the banking system. This, combined with a robust growth in bank deposits, significantly enhanced the capacity of commercial banks to extend credit to private sector.

### *Economic activity influenced demand for working capital loans*

The PSBs borrowed Rs 629.1 billion for working capital purposes in FY26 compared to Rs 617.3 billion in FY25. The major sectors availing short-term financing included manufacturing of motor vehicles; cement lime & plaster; sugar; textiles; electrical equipment; and wholesale & retail trade **(Table 3.5 and Figure 3.13)**.

Manufacturing of cement, lime & plaster more than doubled its short-term borrowing compared to last year. This can be attributed to increased demand amid recovery in construction activity in both private and public sectors driven by increase in overall PSDP spending and the government's low-cost housing scheme specifically, Wazir-e-Azam Apna Ghar Program (**Economic Growth, Chapter 2**).[16,17] Likewise, higher uptake of working capital loans by manufacturing of motor vehicles reflects strong automobile sales and

**Major Sub-Sectors Availing Working Capital Loans - Flows** **Figure 3.13**




Source: SBP

[16] PSDP expenditures as a percent of GDP increased to 2.7 percent in FY26 compared to 2.6 percent last year.
[17] Coal prices decreased by 1.6 percent in FY26 compared to an increase of 16.7 percent in FY25.

**Loans to Private Sector Businesses** **Table 3.5**

flows in billion Rupees

| | Total Loans* | | | | | | Working Capital** | | Fixed Investment | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY25 | | | FY26 | | | | | | |
| | H1 | H2 | FY | H1 | H2 | FY | FY25 | FY26 | FY25 | FY26 |
| **Total** | **1,915.7** | **-909.1** | **1,006.6** | **867.2** | **306.0** | **1,173.2** | **617.3** | **629.1** | **413.8** | **625.3** |
| A. Agriculture, forestry & fishing | 59.9 | 34.0 | 93.9 | 123.1 | 53.2 | 176.3 | 42.8 | 81.7 | 51.1 | 94.5 |
| Of which: growing of wheat | 28.6 | 16.9 | 45.4 | 20.3 | -16.8 | 3.5 | 36.6 | -9.0 | 8.8 | 12.5 |
| B. Mining and quarrying | 16.3 | -16.9 | -0.6 | -3.5 | -8.0 | -11.5 | -4.9 | -10.9 | 4.3 | -0.5 |
| C. Manufacturing: off which | 1,401.0 | -884.9 | 516.1 | 501.6 | 155.1 | 656.6 | 409.9 | 379.7 | 109.5 | 286.9 |
| Textile | 504.8 | -267.9 | 237.0 | 112.8 | -60.1 | 52.7 | 237.2 | 15.9 | 2.5 | 39.6 |
| Wearing apparel | 106.3 | -51.4 | 54.9 | 23.6 | -15.2 | 8.5 | 53.1 | 2.2 | 2.0 | 6.7 |
| Rice processing | 92.1 | -57.8 | 34.3 | 106.1 | -56.3 | 49.8 | 30.3 | 46.2 | 4.0 | 3.7 |
| Sugar | -26.7 | -16.4 | -43.2 | -39.6 | 200.9 | 161.3 | -65.8 | 155.9 | 20.5 | 8.0 |
| Vegetable & animal oils | 17.6 | -6.7 | 10.9 | -28.1 | 0.8 | -27.3 | 12.3 | -25.3 | -1.4 | -2.0 |
| Cement & plaster | 107.1 | -126.6 | -19.5 | 5.4 | 27.5 | 32.9 | 8.2 | 21.1 | -27.5 | 11.9 |
| Fertilizers | 45.8 | 2.5 | 48.4 | 37.6 | 36.0 | 73.6 | 28.1 | -5.4 | 20.2 | 79.0 |
| Refined petroleum | 42.7 | -11.0 | 31.7 | 26.9 | -44.4 | -17.5 | 5.1 | -2.3 | 26.5 | -15.2 |
| Motor vehicles | 27.9 | -19.4 | 8.6 | 68.9 | -38.9 | 30.0 | 11.5 | 15.9 | -3.0 | 14.1 |
| Basic iron & steel | 18.2 | -2.7 | 15.5 | 6.1 | 3.1 | 9.2 | 1.1 | -9.0 | 13.2 | 19.5 |
| Paper and paper products | 14.4 | 8.1 | 22.5 | 5.7 | 2.6 | 8.3 | 7.6 | 5.7 | 14.9 | 2.6 |
| D. Electricity, gas, steam & AC supply | -24.8 | -3.0 | -27.8 | -84.2 | 21.0 | -63.2 | 0.1 | -18.0 | -27.4 | -45.5 |
| E. Water supply; sewerage, waste management | 7.2 | 1.1 | 8.3 | 13.4 | -1.2 | 12.2 | -1.9 | 1.2 | 10.2 | 11.0 |
| F. Construction | 25.9 | -8.4 | 17.5 | 9.0 | 16.8 | 25.8 | 11.7 | 19.2 | 24.1 | 47.2 |
| G. Wholesale and retail trade^ | 91.7 | 45.5 | 137.2 | 155.7 | 52.7 | 208.4 | 79.2 | 130.0 | 60.6 | 92.0 |
| H. Transport. & storage | -14.8 | 20.7 | 5.9 | 27.6 | 47.2 | 74.9 | -17.3 | 13.5 | 20.0 | 58.1 |
| I. Accommodation & food service | 43.0 | -0.8 | 42.2 | 13.1 | 4.3 | 17.4 | -1.1 | 9.6 | 43.6 | 9.8 |
| J. Information and communication | 133.9 | 11.5 | 145.4 | 59.8 | -16.6 | 43.2 | 42.6 | 17.7 | 102.5 | 25.8 |
| Others | 176.4 | -107.8 | 68.5 | 51.5 | -18.5 | 29.4 | 56.3 | 5.4 | 15.5 | 45.9 |

^ includes repair of motor vehicles and motorcycles

* 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

production amid lower interest rates and reduced tariffs on the import of auto parts.[18]

The increase in working capital loans availed by manufacturing of electrical equipment can be linked to rise in production of electric fans and transformers driven by government policy measures, besides improvement in overall demand in the economy.[19] Similarly, in line with the increase in sugarcane production and its price, the working capital needs of sugar manufacturers increased in FY26.

Conversely, demand for working capital loans by the textiles declined. This was primarily due to contraction in domestic cotton output and subdued international demand, which collectively suppressed short-term credit utilisation by the low value-added textiles. [20]

### *Profitability shaped working capital requirements of some sectors*

Manufacturing of coke and refined petroleum products and growing of wheat are other major sectors that retired working capital loans in FY26, against an expansion in the previous year. Specifically, petroleum and coke refining sector reduced its reliance on short-term financing. Improved liquidity—driven by strong sales volumes, price increases, and better profit margins—effectively lowered overall working capital requirements, signalling their improved cash flow.[21]

[18] Source: FBR S.R.O. 1151 (I)12025, S.R.O 1152(2025).

[19] Source: Prime Minister Fan Replacement Program, available at: https://www.sbp.org.pk/circulars/shsfd-circular-no-01-of-2026

[20] Feroz1888 Mills LTD (2026). Condensed Interim Financial statement for Q3-FY26.

[21] Attock petroleum Limited (2026). Interim Report & Financial Statement, March 2026.

Similarly, wheat growers retired working capital loans despite a 4.5 percent increase in crop area. This retirement underscored an improvement in farmers' cash position, driven primarily by a sharp increase in domestic wheat prices and targeted government support that enhanced farmers' liquidity.[22] In contrast, short-term borrowing by rice processing units increased due to lower exports, amid growing global competition that impacted liquidity of rice millers.[23]

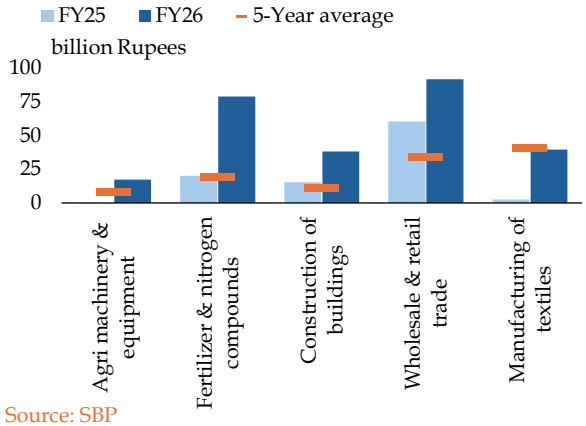
### *Stable macroeconomic environment encouraged fixed investment loans*

Fixed investment loans rose by Rs 625.3 billion in FY26, compared to Rs 413.8 billion in FY25. This expansion was driven by favourable macroeconomic environment, specifically increased capacity utilisation (on average basis during the FY26), lower interest rate, and the government's EXIM bank administered Long Term Financing Facility (E-LTFF) for plant and machinery.[24] Notwithstanding this improvement, fixed investment loans have been on decline in terms of GDP (**Box 3.3**).

Major sectors that availed long-term financing during FY26 included agriculture machinery & equipment, fertilizers and nitrogen compounds, construction of buildings and manufacturing of textiles **(Figure 3.14).** Textiles manufacturers scaled up financing for fixed investment to enhance capacity, specifically major textile firms invested in solarisation to reduce production cost and improve production efficiency.[25]

Higher offtake of fixed investment loans by agriculture sector can be linked to solarisation, besides increased imports of agricultural machinery and implements. Similarly, the increased uptake of fixed investment loans by

**Major Sub-Sectors Availing Fixed Investment Loans - Flows** **Figure 3.14**




Source: SBP

construction sector was meant for import of construction machinery. Fertilizer & nitrogen compounds sector availed long-term loans to improve operational efficiency of plants by investing in alternative gas supply lines.

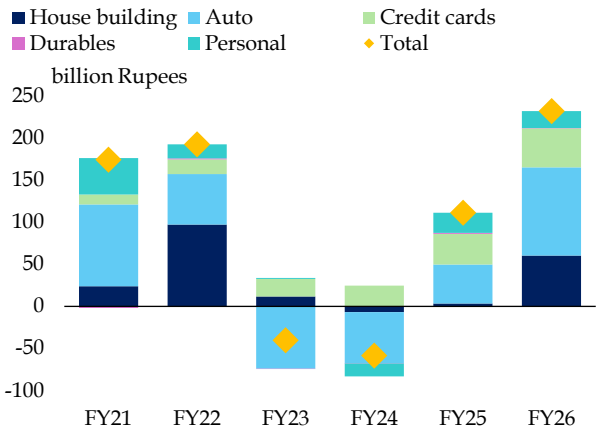
### *Consumer Financing*

Consumer financing expanded by Rs 231.8 billion in FY26 more than twice the increase of Rs 111.2 billion in FY25. The increase was mainly driven by recovery in auto financing, followed by house building loans and credit cards (**Figure 3.15**) amid lower borrowing costs, easing inflation during most of the year, and a gradual recovery in household demand.

The expansion in auto loans was supported by lower lending rates (**Box 3.4**). This was in line with the trends in automobile sales and production.[26] Housebuilding finance also increased, aided by the lower lending rates, moderation in construction input prices and the launch of subsidised housing schemes (**Figure 3.16**).[27] Meanwhile, credit card financing maintained its upward trajectory, supported by higher card

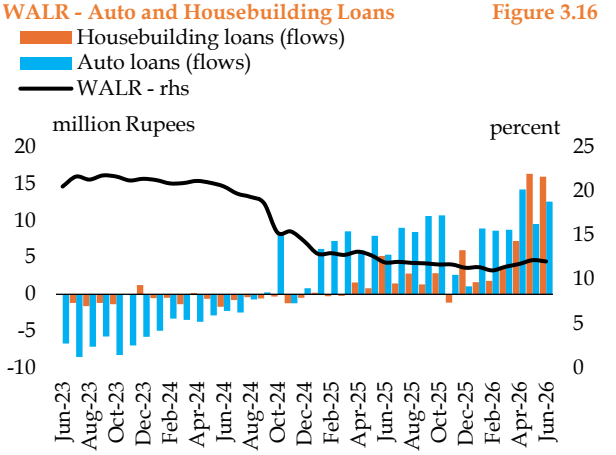
[22] Engro Holdings (2026). Quarterly Report, March 2026.
[23] Matco Foods Limited (2026). Third Quarterly Report, Reaching New Heights, 2026.
[24] Under E-LTFF, a limit of Rs 110 billion of fresh financing was made available during FY26. Out of which, around Rs 58 billion were disbursed by the commercial banks. This financing was available to businesses at concessional rate, 3 percent below the policy rate, available at: https://eximbank.gov.pk/long-term-financing/
[25] Stylers International Limited (2026). Quarterly Report, March 2026; Interloop Limited (2026). Quarterly Report, March 2026.
[26] For further discussion see **Chapter 2**.
[27] Mera Ghar Mera Ashiana later renamed the Wazir-e-Azam's Apna Ghar Program was introduced to promote affordable housing at subsidised markup rates. Source: SH&SFD Circular No.3. SBP

**Consumer Financing - Flows** **Figure 3.15**




Source: SBP

**WALR - Auto and Housebuilding Loans** **Figure 3.16**




Source: SBP

issuance and increased transaction volumes and sales.[28, 29]

*Advances to priority sectors increased*

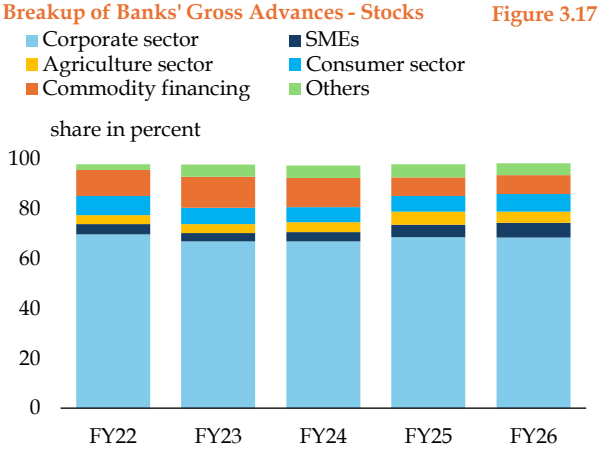
The share of advances to SMEs in total advances slightly increased in FY26 compared to the previous year **(Figure 3.17)**. This expansion was driven by targeted government and SBP initiatives, notably the Risk Coverage Scheme for Small Farmers,[30] the Prime Minister's Youth Business and Agriculture Loans, and Revised Prudential Regulations for SMEs.[31] Furthermore, SBP and the government's credit guarantee scheme for small farmers (Zarkhez-e), together with government's Kissan Card initiative, also contributed to increase in advances to agriculture sector.

## 3.4 Inflation

The average NCPI inflation in FY26 rose to 7.1 percent, up from 4.5 percent in the previous year (**Table 3.6**). Monthly trends show that year-on-year inflation remained within the medium-term target range during Jul-Feb FY26, before accelerating in the final months of the fiscal year, pushing up the average inflation slightly above the upper bound of the medium-term target range.

In overall terms, the increase in inflation was driven by supply-side pressures within energy

**Breakup of Banks' Gross Advances - Stocks** **Figure 3.17**




Source: SBP

[28] In FY26, credit card issuances have been higher in volume than the comparable period in FY25. Source: Payment Systems Annual Review. SBP.

[29] Anecdotal evidence suggests that card issuances increased substantially in Q1-FY26 amid special cards being offered under several agricultural schemes.

[30] Risk Coverage Scheme was announced on August 20, 2025, to extend financing for small and marginalized farmers, further details are available at https://www.sbp.org.pk/circulars/acfid-circular-no-02-of-2025

[31] The key measures included revision in SME financing limit from Rs 25 million to Rs 100 million, and for Medium Enterprises from Rs 100 million to Rs 500 million; enhancement in regulatory retail portfolio from Rs 180 million to Rs 300 million; simplification of loan application for SMEs; digital supply chain financing; incentives for export-based SMEs; EFS enhancement plan; and Exim bank administered long term financing facility for plant and machinery (Source: Revised Prudential Regulations for SMEs available at) https://www.sbp.org.pk/assets/documents/laws_regulations/Updated_Prudential_Regulations_for_SME_Financing-July_16_2026.pdf

**Average CPI Inflation** **Table 3.6**

growth in percent, contribution in percentage points

| Items | Weight | Average Inflation | | | Contribution | | |
|---|---|---|---|---|---|---|---|
| | | H1-FY26 | H2-FY26 | FY26 | H1-FY26 | H2-FY26 | FY26 |
| **NCPI** | **100** | **5.1** | **9.0** | **7.1** | **5.1** | **9.0** | **7.1** |
| **Urban CPI** | **100** | **5.2** | **9.0** | **7.1** | **5.2** | **9.0** | **7.1** |
| **Food** | **36.8** | **3.1** | **5.4** | **4.2** | **1.2** | **2.1** | **1.7** |
| *Perishable* | 4.4 | -8.7 | -0.4 | -5.1 | -0.4 | 0.0 | -0.2 |
| *Non-perishable* | 32.4 | 4.8 | 6.0 | 5.4 | 1.7 | 2.1 | 1.9 |
| **NFNE (Core inflation)** | **53.7** | 7.0 | 7.9 | 7.4 | 3.1 | 3.6 | 3.3 |
| **Energy** | **9.5** | 5.6 | 22.0 | 13.5 | 0.9 | 3.3 | 2.1 |
| **Rural CPI** | **100** | **5.0** | **8.9** | **7.0** | **5.0** | **8.9** | **7.0** |
| **Food** | **45.9** | **3.9** | **6.9** | **5.4** | **1.9** | **3.3** | **2.6** |
| *Perishable* | 5.7 | -8.8 | -4.3 | -7.1 | -0.6 | -0.2 | -0.4 |
| *Non-perishable* | 40.3 | 5.9 | 8.2 | 7.0 | 2.5 | 3.5 | 3.0 |
| **NFNE (Core inflation)** | **42.6** | **8.1** | **8.3** | **8.2** | **3.1** | **3.3** | **3.2** |
| **Energy** | **11.4** | **-0.3** | **19.1** | **9.2** | **0.0** | **2.3** | **1.1** |

Sources: PBS; SBP staff calculations

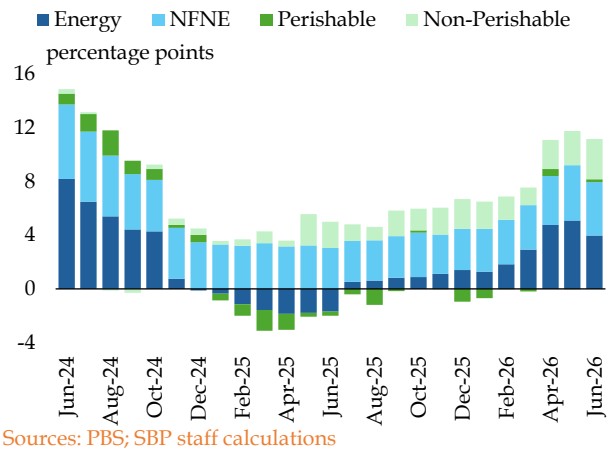
and food groups. Supply frictions and higher transportation costs, alongside crop losses caused by floods, exacerbated food inflation throughout the year. Moreover, the pass-through of elevated global energy prices to domestic prices – following the outbreak of the Middle East conflict – compounded inflationary pressures from March 2026 onward.

The surge in global energy prices drove increases in domestic fuel, electricity and transport prices, impacting both energy and non-energy segments. While core inflation moderated during FY26, it remained the primary contributor to headline inflation, accounting for roughly half of average inflation in urban and rural baskets. However, the composition of inflation shifted during the year, with the contribution of energy rising from one-fifth in Jul-Feb FY26 to about 40 percent in Mar-Jun FY26 in urban regions (**Figure 3.18**).[32]

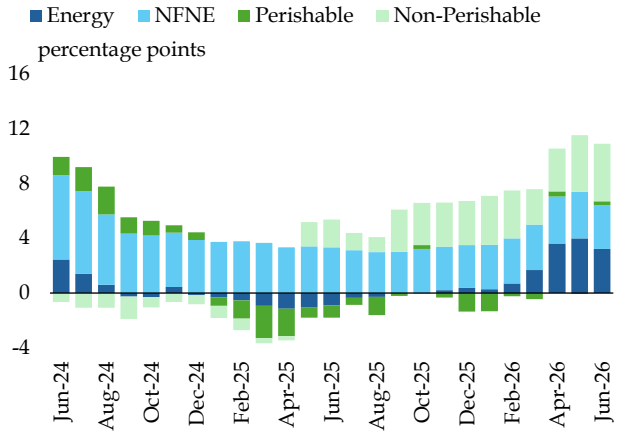
*Supply chain disruptions contributed to food inflation in FY26*

Food inflation was driven by non-perishable food items, in both urban and rural regions. The prices of perishable food items, on the other hand, declined owing to improved domestic supply of fresh vegetables including potatoes.[33] While production of tomatoes and onions decreased, the closure of the western border improved domestic availability, leading to easing price trends. Within the non-perishable food items, wheat and wheat

**Urban CPI Inflation Composition** **Figure 3.18a**



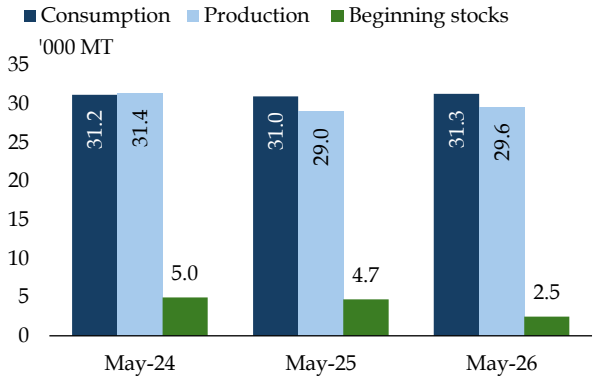

**Rural CPI Inflation Composition** **Figure 3.18b**




Sources: PBS; SBP staff calculations

[32] Likewise, contribution of energy in the rural basket rose from one-tenth in Jul-Feb FY26 to 31 percent in Mar-Jun FY26.
[33] Potato production increased by 27.6 percent in FY26. Source: MoF (2026). Pakistan Economic Survey 2025-26, Ministry of Finance.

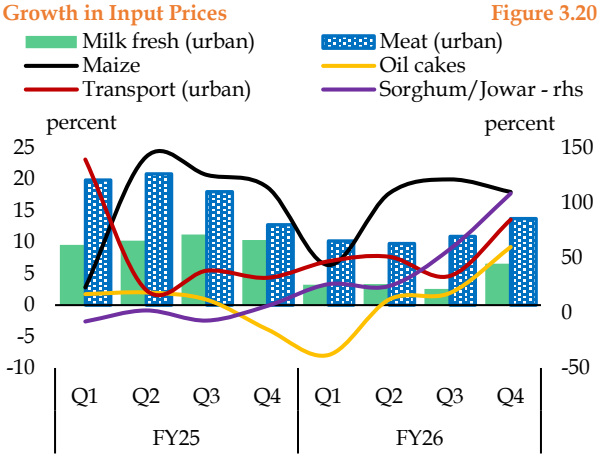
**Wheat Consumption and Production** **Figure 3.19**




* Stocks are shown as of May which marks the start of the wheat market year

Source: USDA

**Growth in Input Prices** **Figure 3.20**




Source: PBS

flour prices accounted for the bulk of the increase in food inflation. Prices of other food items, including milk, meat, and sugar also contributed to the food inflation.

Several factors were responsible for increase in prices of wheat and its products in FY26. First, the transitional impact of government's withdrawal from large-scale public procurement in FY25 and delays in operationalising private-sector-led wheat procurement arrangements created market uncertainty.[34] Second, decline in crop production in FY25 reduced overall supply. Third, flood-related losses further intensified price pressures due to concerns over supply shortages, resulting in reduced beginning stocks at the start of the year (**Figure 3.19**). [35] Fourth, global energy price shock, which led to higher transport costs, further added to wheat price increase from April 2026 onward.

Similarly, the spike in electricity and fuel costs also pushed up meat and fresh milk prices in the last quarter of FY26 (**Figure 3.20**). This impact was further reinforced by seasonal spike in demand due to Eid ul-Adha in May 2026.

Sugar prices also saw upward pressure due to domestic market frictions and supply concerns. A drop in sugarcane output in FY25 created sentiments about shortages in FY26.[36] This resulted in emergency imports by the government during Sep-Nov FY26,[37] which added to the market perception regarding a shortfall in domestic production. This resulted in speculative behaviour by some market players, leading to higher sugar prices in FY26.[38]

*The Middle East conflict fuelled energy inflation*

Energy inflation accelerated in FY26, after dropping to multi-year low in the preceding year. While benign global commodity prices and power sector reforms helped ease energy prices during most of the year, supply shock caused by the Middle East conflict reversed the trend from March 2026 onwards.

In H1-FY26, energy inflation remained contained despite a sizeable increase in gas charges, as lower global crude oil prices and downward adjustments in electricity tariffs partly offset the impact of administered gas-price revisions. The hike in gas charges primarily reflected ongoing energy-sector reforms aimed at improving cost recovery and containing circular debt accumulation.[39] Overall, increase in fixed monthly charges raised gas prices for households by 23

[34] Source: USDA (2026). Grain and Feed Update, September 2026, Report No. PK2026-0012.
[35] Source: USDA (2025). Grain and Feed Update, September 2025, Report No. PK2025-0011.
[36] FY25 saw a production shortfall of 3500 MT in sugar. This fed into expectations of a projected shortfall in FY26. Source: USDA.
[37] The volume of sugar imports stood around 308,404 MT in H1-FY26. Source: PBS
[38] Press Release date July 31st, 2025. Ministry of National Food Security and Research.
[39] Pakistan: Third Review under the Extended Fund Facility. May 2026. IMF Staff Report

percent in FY26,[40] making it the largest contributor to energy inflation during the year (**Figure 3.21a and b**).[41]

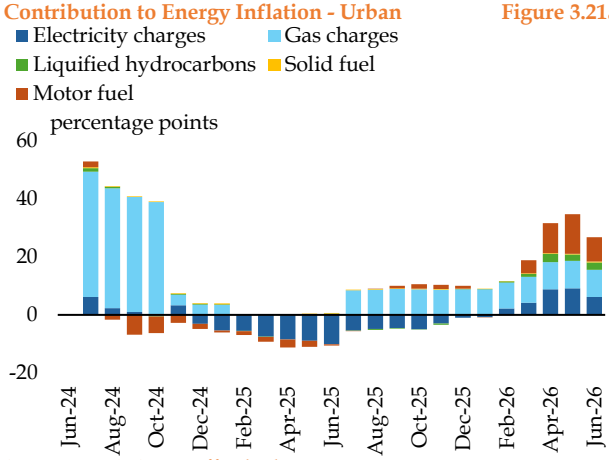
Moreover, after remaining subdued in H1-FY26, electricity charges also experienced a double-digit increase in H2-FY26. During the first half, a negative Quarterly Tariff Adjustment (QTA) provided temporary relief to consumers. However, an upward adjustment to the QTA in December 2025 drove energy costs higher for the remainder of the year.[42] Further increase came from annual rebasing, which was deferred from July 2025 to January 2026 following the shift in NEPRA's rebasing timeline.[43]

Nonetheless, power sector reforms effectively mitigated a more severe spike in the QTA. Most notably, integration of industrial consumers into the national grid—under the *Off-the-Grid (Captive Power Plants) Levy Act, 2025*—coupled with a moderate uptick in economic activity, stimulated electricity demand. This successfully reduced capacity payments, which comprised a significant portion of the QTA. Moreover, the surge in international crude oil prices impacted retail electricity prices through positive Fuel Cost Adjustments (FCA) due to elevated generation costs from March 2026 onward.[44]

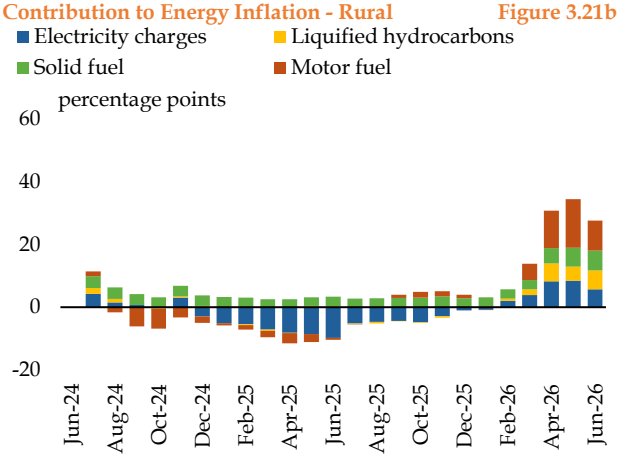
The pass-through of the energy price shock was most pronounced in motor fuels and liquified hydrocarbons. Motor fuel prices were already on a steady increase since the start of the year due to upward adjustments in the Petroleum Development Levy (PDL) and the implementation of the Climate Support Levy from July 2025. This uptrend intensified following the surge in global energy prices (**Figure 3.22**). In view of high volatility in global commodity prices, the government shortened the fuel price adjustment cycle from fortnightly to weekly revisions by March 2026 to keep domestic demand in check.[45] The decision has implications for inflation dynamics (**Box 3.5)**.

Although the government temporarily reduced PDL for April and May 2026 to provide relief to consumers, following the reduction in ex-depot prices, the levy was raised again in June 2026.

Contribution to Energy Inflation - Urban — Figure 3.21a




Contribution to Energy Inflation - Rural — Figure 3.21b




Sources: PBS; SBP staff calculations

[40] Source: OGRA notification dated June 09, 2025
[41] Gas charges contributed more than half of the increase in urban energy inflation in FY26.
[42] QTA is adjusted after every three months, it does not only capture fuel-cost variation; but also adjusts for changes in capacity payments, transmission and distribution costs, variable O&M, use-of-system charges, and other approved cost components faced by DISCOs. Source: NEPRA
[43] PR No. 150. January 17th, 2025. Ministry of Information and Broadcasting. Government of Pakistan
[44] FCA is a monthly fuel-cost pass-through mechanism and is therefore more directly linked to the changes in generation fuel mix, exchange rate movements and international fuel prices. Source: NEPRA
[45] OGRA Notification dated 1st March 2026.

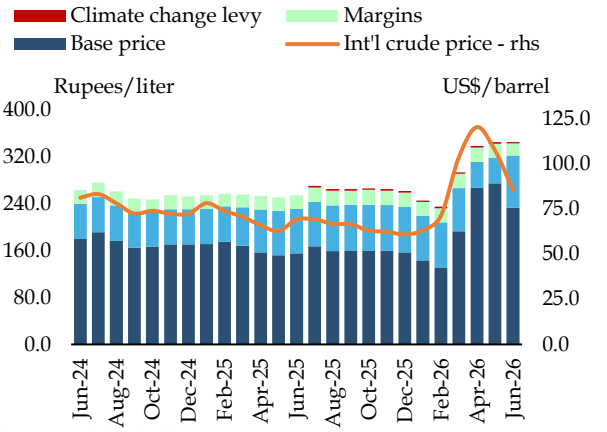
Likewise, the global energy price volatility also affected liquified hydrocarbon prices - LNG and RLNG, which saw the largest increase compared to other domestic energy sector components.[46] Importantly, the incidence of the direct pass-through of the global energy shock to domestic prices fell more on consumers in high consumption baskets (**Box 3.6**).

*Core inflation eased in FY26, but underlying price pressures remained*

Continuing the disinflationary trend observed in FY25, core inflation eased further in FY26 across urban and rural baskets (**Figure 3.23a and b**).[47] The moderation, more evident during H1-FY26, was supported by coordinated monetary and fiscal tightening, which prevented unwarranted expansion in domestic demand, and benign global commodity prices. However, the disinflationary process reversed in H2-FY26.

The moderation in core inflation was initially driven by easing price pressures across core goods and services, particularly recreation and culture, footwear and cotton cloth (**Figure 3.24**). Lower import prices and subdued demand from textile mills helped ease price pressures in cotton cloth.[48]

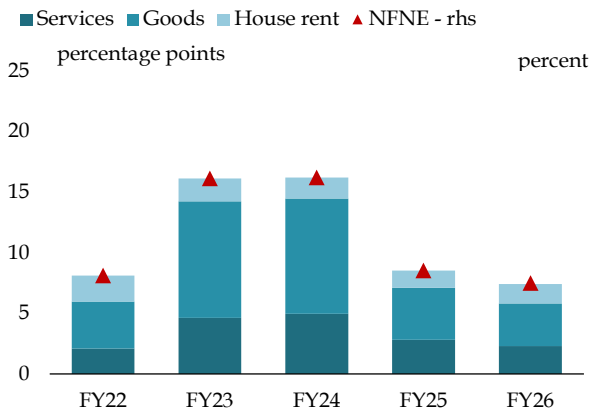
**Composition of Motor Fuel Prices** **Figure 3.22**



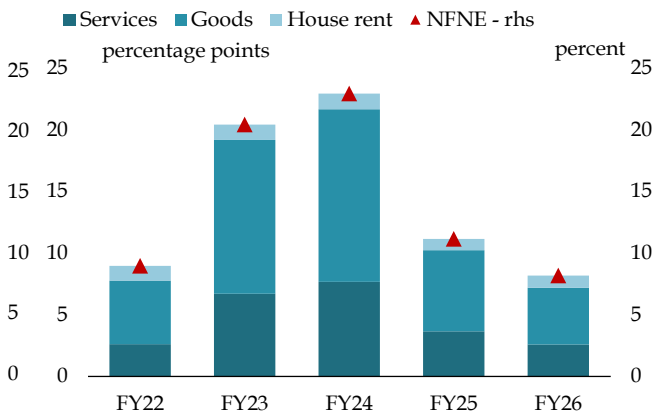

Sources: OGRA; WB

Additionally, tax rate relaxations and high base effect from previous year explained softening prices of recreation and culture and footwear, respectively.[49,50] These gains, however, were partly offset by around 40 percent increase in prices of personal effects. Personal effects contributed nearly one-fifth to core inflation in FY26, significantly higher than the historical average of 5 percent.[51] This sharp increase in the contribution of personal effects was largely driven by rising gold and silver prices amid heightened global uncertainty. However, the outbreak of the

**Contribution to Core Inflation - Urban** **Figure 3.23a**



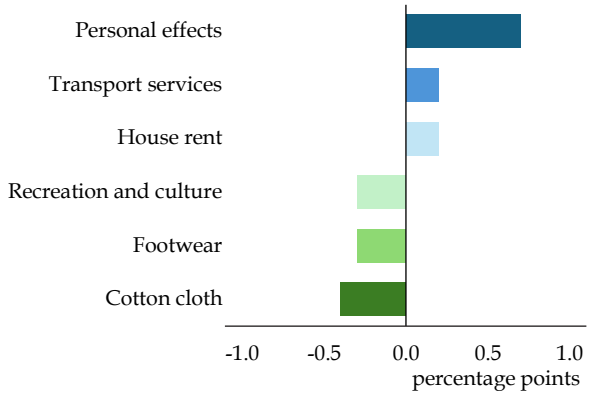

**Contribution to Core Inflation - Rural** **Figure 3.23b**




Source: PBS

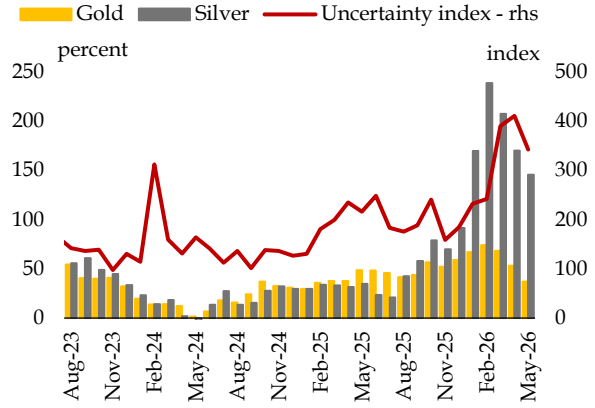
[46] MoF (2026) Pakistan Economic Survey 2025-26, Ministry of Finance.
[47] Urban core inflation declined to 7.4 percent in FY26 from 8.5 percent in FY25. Excluding personal effects, which largely capture movements in gold prices, core inflation fell more sharply to 6.3 percent from 8.3 percent.
[48] Source: Monthly Cotton Review June 2026 – Pakistan Central Cotton Committee
[49] Lower customs valuations for imported laptops and reduced GST on cable TV services in Sindh supported the moderation in recreation and culture. Source: Valuation Ruling No. 2000/2025, Directorate General of Customs Valuations.
[50] Source: Sindh Finance Act (2025).
[51] The average contribution of personal effects category to core inflation during FY17-FY25 was 5 percent.

Top Contributors to Core Inflation - Urban FY26 Figure 3.24




Source: PBS

Uncertainty and Precious Metal Prices Figure 3.25




Sources: PBS; Fed US

Middle East conflict led to some moderation in precious metal prices as demand for liquidity increased (**Figure 3.25**).[52]

The disinflationary trend in core inflation reversed in the latter months of FY26, especially in the aftermath of the Middle East conflict. This trend was largely attributed to a pickup in services inflation during the final quarter of FY26.[53] Specifically, transport services contributed the most, as higher fuel costs – stemming from the global energy price shock – directly increased bus, rail, and auto-rickshaw fares, alongside a sharp spike in airfares during April and May 2026.[54] Postal services also added to inflationary pressures as courier charges increased during the year.

Moreover, house rent maintained a gradual upward trend throughout FY26, underpinned by persistent structural imbalances in the housing market. Pakistan faces an estimated shortage of around 10 million housing units, with the deficit concentrated largely among low- and middle-income households.[55] Consistent with these supply constraints, house rent increases were more pronounced for smaller units in major urban centres.[56]

While core inflation declined during FY26, it remained persistently higher than the upper bound of the medium-term range for most of the year. This indicates that underlying inflationary pressures have yet to fully dissipate (**Box 3.7**).

**Box 3.1: Monetary Policy Response to Energy Price Shocks**

Energy price shocks pose a challenge for calibrating monetary policy because the initial inflationary impulse originates from the supply side, while monetary policy is for demand management. Further, monetary tightening to mitigate the impact of energy price spikes on headline inflation may result in output contraction [Bodenstein et al. (2008)]. The case for a response, however, arises when the initial shock begins to propagate to a broader set of prices through production costs, wages, price-setting behaviour and inflation expectations. Such a situation raises the risk of turning a temporary energy-led spike in inflation into a persistent and broad-based one. Therefore, no monetary policy response or a delayed response can result in de-anchoring of inflation expectations. Against this backdrop, this

[52] Gold and silver prices reached their peak in February 2026. During the same month, the personal effects' n.e.c. category accounted for 28.8 percent of core inflation. In FY26, gold prices increased by 54.4 percent, compared with a five-year average increase of 26.8 percent. Gold and silver account for almost half of the personal effect`s n.e.c. category in the CPI basket.
[53] The contribution of services to urban core inflation remained broadly stable at around 0.9 percentage points during the first three quarters before increasing to 1.5 percentage points in the final quarter.
[54] Bus fares, which account for nearly half of the transport services basket, increased by an average of 34.3 percent during FY26.
[55] Source: SME, Housing & Sustainable Finance Department, SBP.
[56] Source: Zameen Property Index

box explores the relevant literature and responses of major central banks to draw lessons for an appropriate monetary policy response to mitigate the impact of these shocks on inflation.

***Literature suggests that monetary policy should respond to persistence rather than the relative-price shock alone.*** For an oil price shock, central banks should respond to the second-round effects that cause expected inflation to deviate from the target [Carare et.al. (2021)]. This is particularly important for emerging economies like Pakistan, where second-round impact on food inflation is higher due to sheer weight of food in CPI [Gelos & Ustyugova, (2012)]. The case for monetary tightening becomes stronger when the shock persists and begins to influence wages, expectations and broader price-setting behaviour.

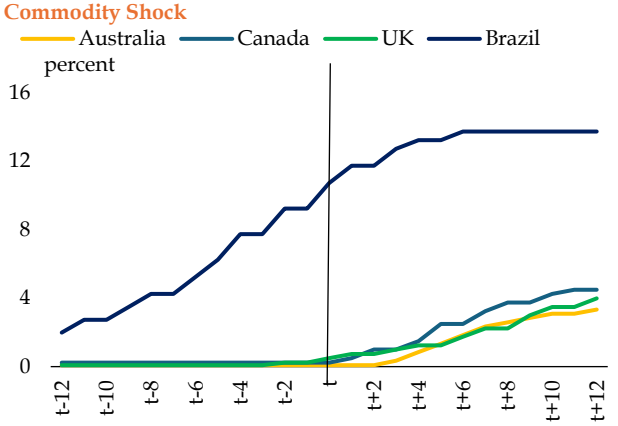
***The recent country experiences show that different central banks have responded differently to energy price shocks***. The Bank of Canada held its policy rate in March 2026 noting that inflation was close to target and core pressures remained limited, explicitly indicating that it would look through the immediate oil-price effect while monitoring whether higher costs spread to other goods and services and become persistent [BoC (2026)]. Similarly, the ECB kept its policy rate unchanged in March 2026 as inflation was close to target and longer-term inflation expectations remained anchored [ECB (2026)]. The US Federal Reserve also maintained its policy rate in March 2026 and April 2026, noting that higher energy prices though raised short-term inflation expectations, longer-term expectations remained broadly anchored [Fed (2026)]. On the contrary, the Reserve Bank of Australia raised its policy rate in March 2026 and May 2026. This was because higher energy prices coincided with pre-existing excess demand, elevated underlying inflation, and higher short-term inflation expectations which increased the risk of external shock leading to more persistent inflation [RBA (2026)].

Based on the preceding discussion, an appropriate response should take into account following considerations.

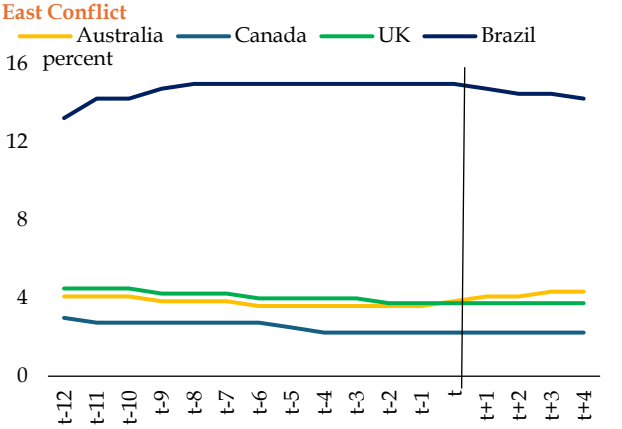
***First, it is critical to distinguish between a transitory shock or the one that develops into persistent one.*** Prolonged energy-price increases often lead to higher costs feeding into wages and firms' pricing decisions – wage-price spiral. Labour-market conditions are also important, since greater slack can reduce both workers' bargaining power and firms' ability to pass higher costs to final prices. Much of this evidence, however, emerges with a lag.

***Second, assessing second-round effects is central to calibrating the monetary policy response***. Inflation targeting central banks, like the Bank of England, distinguish between the direct impact of higher energy prices on fuel and utilities and the subsequent propagation of the shock, noting that policy would generally look through the direct effects [BoE (2026)].[57] Rather than relying solely on headline inflation, it is more instructive to monitor whether the energy shock is becoming broad-based, the distribution and breadth of price increases, firms price expectations and

**Monetary Policy Response Post 2022-23 Commodity Shock** **Figure 3.1.1a**




**Monetary Policy Response Post Middle East Conflict** **Figure 3.1.1b**




Source: Haver Analytics

[57] Out of a sample of thirty-eight central banks, thirty-three held their rates three months post-shock. Source: Bank of International Settlements Data Portal.

cost pass-through, realised and expected wage growth, household and market inflation expectations, and firms' profit margins [BoE (2026)].

***Third, the initial conditions also matter for policy calibration.*** This is most prominent when comparing policy decisions during the recent energy price shock and the 2022-23 commodity shock due to the Ukraine-Russia war. Most central banks raised rates post 2022-23 shock because it compounded with the post-pandemic shock (**Figure 3.1.1**), resulting in high and persistent core inflation. The Middle East conflict in comparison has caused volatility in global energy prices, however, the impact of the shock on core commodities is yet to be seen.

***In sum,*** the policy response depends on the nature, duration and persistence of the energy shock and the economy's initial inflation and demand conditions. A temporary increase in energy prices with anchored expectations and contained underlying inflation provides greater scope to look through its direct, and potentially some indirect effects. Conversely, a persistent shock that increases wages and inflation expectations may require tightening to prevent inflation from becoming entrenched.

**The contribution of Mehreen Tariq Ghani and Hafiza Bismah Qadoos is acknowledged in writing this box.*

***References:***

i. Baba, C. & Lee, J. (2022). Second-Round Effects of Oil Price Shocks: Implications for Europe's Inflation Outlook. IMF Working Paper No. 2022/173. International Monetary Fund.
ii. BoC (2026). Summary of Governing Council Deliberations: Fixed Announcement, March 18, Bank of Canada.
iii. BoE (2026). Monetary Policy Report, April 2026, Bank of England.
iv. ECB (2026). Monetary Policy Decisions, 19 March 2026, European Central Bank.
v. FED (2026). Federal Open Market Committee Statement, 18 March 2026, Federal Reserve Bank.
vi. Bodenstein, M. Erceg, C. J. & Guerrieri, L. (2008). Optimal Monetary Policy with Distinct Core and Headline Inflation Rates. Federal Reserve Board International Finance Discussion Paper No. 941.
vii. Cuevas, A. & Topak, S. (2008). Monetary Policy and Relative Price Shocks in South Africa and Other Inflation Targeters. IMF Working Paper No. 08/289. International Monetary Fund.
viii. Drechsel, T. McLeay, M. Tenreyro, S. & Turri, E. D. (2026). How Should Central Banks Respond to Commodity Price Shocks? Optimal Monetary and Exchange Rate Frameworks for Commodity-Exposed Economies. Bank of England Staff Working Paper No. 1,186.
ix. Gelos, G. & Ustyugova, Y. (2012). Inflation Responses to Commodity Price Shocks: How and Why Do Countries Differ? IMF Working Paper No. 12/225. International Monetary Fund.
x. RBA (2026). Statement by the Monetary Policy Board: Monetary Policy Decision, March 17, Reserve Bank of Australia.
xi. RBA (2026). Statement by the Monetary Policy Board: Monetary Policy Decision, May 5, Reserve Bank of Australia.

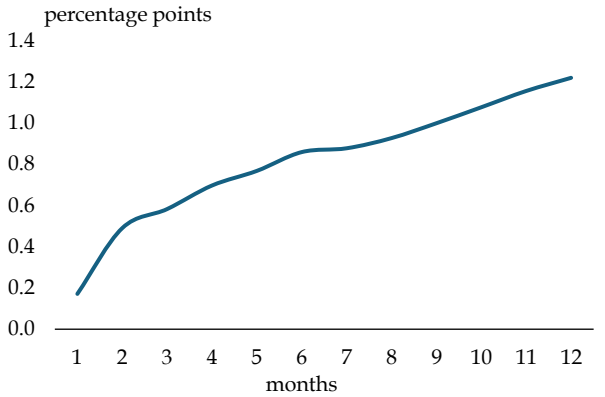
**Box 3.2: Assessing Second Round Effects of Global Energy Price Shock in Pakistan**

Global energy price shocks raise inflation both directly via increase in utility and fuel costs, and indirectly through second-round pressures from subsequent adjustments in wages and costs, and inflation expectations. Ruch and Du Plessis (2015) highlight that second round effects emerge through both the cost channel—higher input costs raising firms' output prices—and the expectations channel, where households and workers demand wage increases anticipating higher future prices, and fuel wage-price spirals. Literature shows that energy price shocks produce significant second-round effects on inflation expectations and core inflation [Allon-Pineda et al. (2025), Alp et al. (2023)].

Assessment of the second-round effects of energy price shock is necessary as these remain embedded in inflation for an extended period. It is particularly important in the context of calibrating an appropriate monetary policy response. In this backdrop, this box attempts to quantify second round effects of oil price shock in case of Pakistan. For this purpose, we estimate Structural VAR on monthly data from January 2004 to June 2026.[58] The variables include global

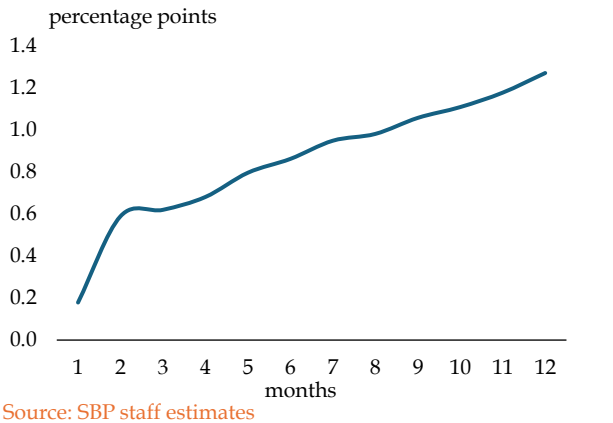
[58] Variables were recursively ordered using Cholesky decomposition.

**Cumulative Response of CPI Inflation to a 10 percent Shock to Global Energy Price** **Figure 3.2.1**




Source: SBP staff estimates

**Cumulative Response of Food Inflation to a 10 percent Shock to Global Energy Price** **Figure 3.2.2**



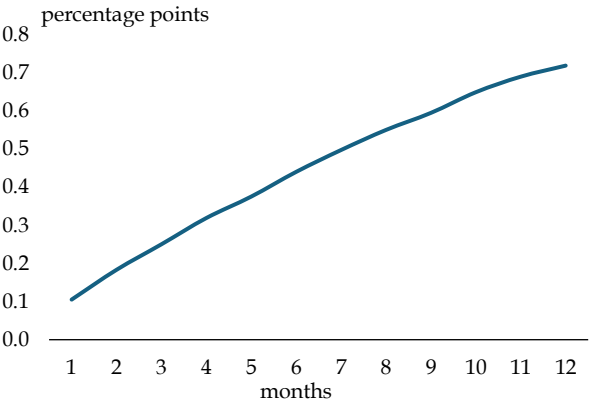

Source: SBP staff estimates

energy price index,[59] nominal exchange rate, CPI inflation, policy rate, large-scale manufacturing index, food inflation, expected inflation, and core inflation.[60,61]

The results show that a 10 percent increase in global energy prices raises CPI inflation by 1.2 percentage points after one year from the shock, with effects persisting for two years **(Figure 3.2.1)**. Food inflation increases by 1.3 percentage points after one year **(Figure 3.2.2),** while core inflation increases by 0.7 percentage points **(Figure 3.2.3)**. These estimates are in line with the findings of Ruch and Du Plessis (2015), Christine J. et al (2024),[62] Alp et al. (2023), Baba, C. & Lee, M. J. (2022) and Conflitti, C. & Luciani, M. (2017).[63]

In view of the above results, central bank should tighten monetary policy to address the potential second round effects of global energy price shock. Literature suggests that a timely and appropriate response minimizes uncertainty regarding their magnitude and helps in anchoring of inflation expectations to prevent them from becoming entrenched [Soderstrom (2002)]. Conversely, ignoring these effects risks entrenching inflation expectations, which later necessitates more aggressive tightening and results in a higher output loss to restore price stability.

**Cumulative Response of Core Inflation to a 10 percent Shock to Global Energy Price** **Figure 3.2.3**




Source: SBP staff estimates

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

***References:***

i. Ruch, F. U. & Du Plessis, S. (2015). Second-Round Effects from Food and Energy Prices: An SBVAR Approach. South African Reserve Bank Working Paper, 15(05).
ii. Allon-Pineda, J. C. S., Ocampo, J. C. G., & Santos, E. R. D. (2025). Second-Round Effects and Asymmetry in Oil and Food Price Shocks to Inflation. *Latin American Journal of Central Banking, 100180.*

[59] Global energy price is a composite index and comprises three key components including crude oil, natural gas and coal prices. Source: Pink Sheet available at https://www.worldbank.org/en/research/commodity-markets
[60] All the variables were non-stationary in levels.
[61] AIC criteria showed six lags were optimal for SVAR.
[62] The authors estimated that a 10 percent increase in Dubai crude prices leads to a combined (direct & indirect) effect on core and non-core which persists for 18 months and reaches its peak at 0.28 percentage points in 13th month.
[63] The authors estimated that a 10 percent unexpected increase in global oil prices increases core inflation by 0.1 percentage points with the effect remaining significant more than four years in US economy.

iii. Alp, H., Klepacz, M., & Saxena, A. (2023). Second-Round Effects of Oil Prices on Inflation in the Advanced Foreign Economies, Federal Reserve System Notes 2023-12-15-1.
iv. Conflitti, C., & Luciani, M. (2017). Oil Price Pass-Through into Core Inflation. *The Energy Journal,* 40(6), 221-248.
v. Baba, C., & Lee, M. J. (2022). Second-Round Effects of Oil Price Shocks: Implications for Europe's Inflation Outlook (No. 2022-2173). International Monetary Fund.
vi. Christine, J. Pineda, A. Ocampo, J.C. and Santos, E.R. (2024). Second-Round Effects of Supply Shocks on Inflation, Monetary Policy Report February 2024, Bankgko Sentral ng Pilipinas (BSP).
vii. Söderström, U. (2002). Monetary Policy with Uncertain Parameters. *Scandinavian Journal of Economics, 104(1),* 125-145.
viii. BoE (2026). Monetary Policy Report, April, Bank of England.

**Box 3.3: Drivers of Fixed Investment Loans**

Fixed investment loans in Pakistan grew by 8.3 percent in FY10 compared to 19.0 percent in FY26. Yet, their share in terms of GDP fell from 5.0 percent in FY10 to 2.9 percent in FY26 (**Figure 3.3.1**). This decline has implications for long-term growth potential, export competitiveness and job creation. This box analyses key drivers of fixed investment loans. The literature identifies policy uncertainty, real interest rates, capacity utilisation and operating profits as important determinants of fixed investment loans. Each of these is analysed in the context of Pakistan in the following.

***Economic policy uncertainty***

High economic policy uncertainty discourages firms from committing long-term debt (**Figure 3.3.2**). Latif & Siddiqi (2025) and Quddus et al. (2022) found significant negative effects of economic policy uncertainty on corporate investment. Addressing this issue requires ensuring predictability in the economy. This involves adopting credible fiscal frameworks, predictable energy policy, strengthening infrastructure, and ensuring stable macroeconomic environment.

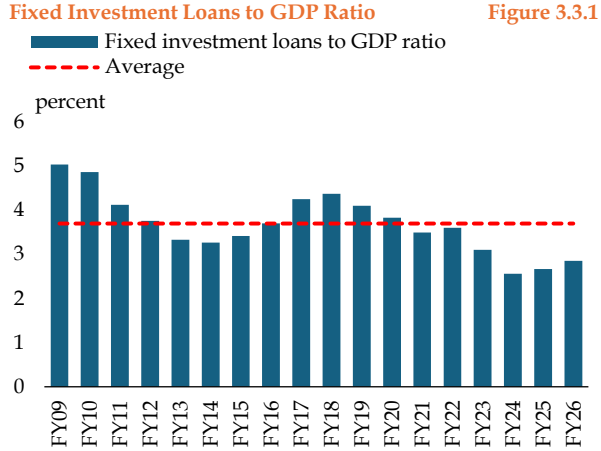
***Borrowing cost***

Increased borrowing cost is one of the factors impacting firm's long-term investment. Zahid et al. (2026) found that higher real interest rates reduce capital investment, especially during recessions **(Figure 3.3.3)**. In this regard, ensuring monetary policy credibility supports anchored inflation expectations and reduces the necessity for aggressive interest rate hikes. Furthermore, targeted government support for micro, small, and medium enterprises (MSMEs) can effectively lower borrowing costs for industrial sector.

***Capacity utilisation***

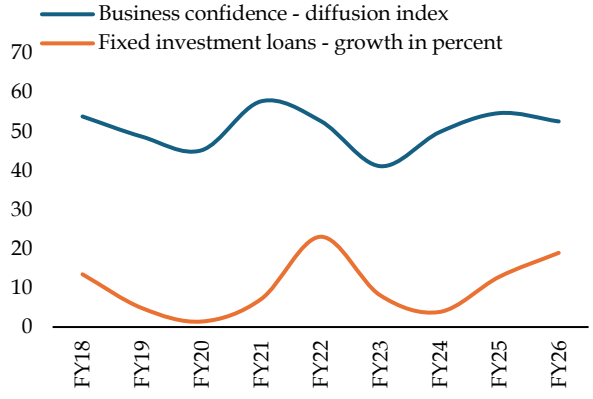
Lower capacity utilisation of manufacturing firms weakens investment demand, and vice versa [Artica (2023)]. Firms borrow to expand capital when utilization of existing plant is high, and demand is growing in the economy. Further, low-capacity utilisation also implies that firms are producing output at higher cost which constrains the profitability

**Fixed Investment Loans to GDP Ratio** **Figure 3.3.1**



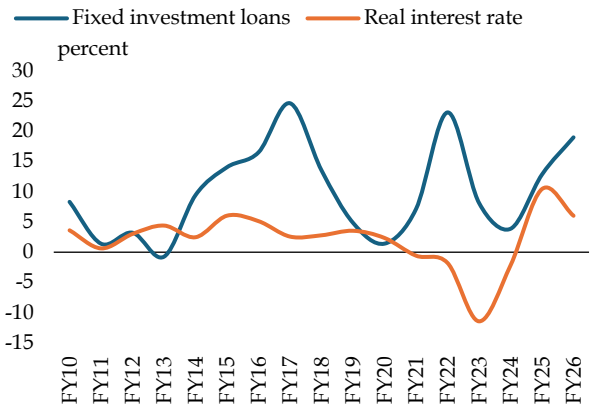

Source: SBP

**Fixed Investment Loans and Business Confidence** **Figure 3.3.2**



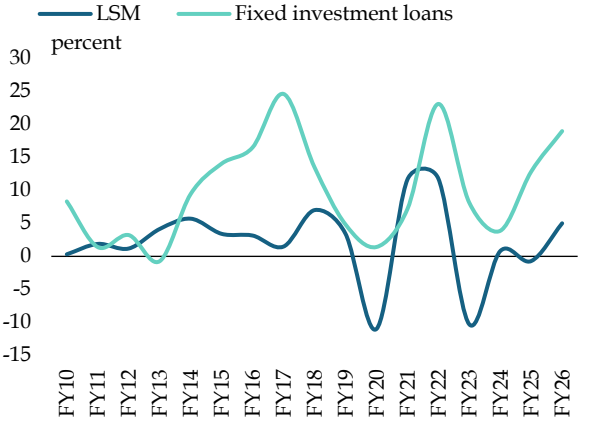

Source: SBP

**Fixed Investment Loans and Real Interest Rate** **Figure 3.3.3**




Source: SBP

**Fixed Investment Loans and LSM Growth** **Figure 3.3.4**



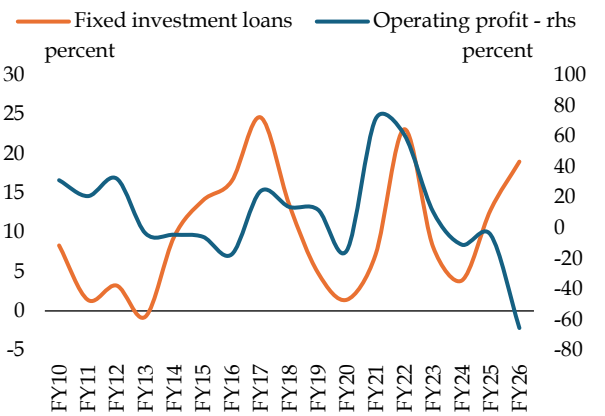

Source: SBP

and creditworthiness besides reducing their ability to service debt **(Figure 3.3.4)**. A stable macroeconomic environment, reliable infrastructure and greater export access can help provide stable environment for promoting sustained growth and exploiting the potential of the economy.

***Operating profit***

Increase in profitability positively influences businesses decision to invest for capacity expansion (**Figure 3.3.5)**. Moreover, increase in operating profit strengthens balance sheet of firms by enhancing their ability to pay long term loans. Larger capital-intensive firms with increased operating profits receive long-term debt at favourable terms compared to smaller firms [Saif-Alyousfi, A. Y. et al (2025)]. A stable macroeconomic environment that entails maintaining low and stable inflation, encouraging research and development and adoption of green technologies is likely to improve the operational performance of firms.

**Fixed Investment Loans and Operating Profit** **Figure 3.3.5**




Source: SBP

***Conclusion***

Reviving business fixed investment in Pakistan requires addressing core economic fundamentals. Key priorities include enhancing the credibility of macroeconomic policies, ensuring long-term macroeconomic stability, rationalizing taxes, and expanding capacity utilisation through infrastructure development and export promotion.

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

***References:***

i. Zahid, M. F., Mahmood, F., & Ali, H. Interest Rate Fluctuations and Corporate Investment: Evidence from the Non-Financial Sector of Pakistan, Pakistan Institute of Development Economics, February 2026.
ii. Bilsborrow, R. E. (1977). The Determinants of Fixed Investment by Manufacturing Firms in a Developing Country. *International Economic Review*, 697-717.
iii. Ndikumana, L. (1999). Debt service, Financing Constraints, and Fixed Investment: Evidence from Panel Data. *Journal of Post Keynesian Economics, 21(3)*, 455-478.
iv. Latif, A. S., & Siddiqi, M. F. (2025). How Economic Policy Uncertainty Shapes Firm Financing and Investment: A Pakistani Perspective. *Advance Journal of Econometrics and Finance,* 3(2), 78-87.
v. Quddus, A., Pavelkova, D., Hussain, S., & Pham, T. P. (2022). The Impact of Investment Decisions on Firm Financial Performance Moderated By Economic Policy Uncertainty: Evidence From the Manufacturing Sector of Pakistan. *Asian Economic and Financial Review, 12(11), 969-981.*

vi. Artica, R. P. (2023). The Impact of Excess Capacity on The Investment Falloff. Panoeconomicus, 70(3), 403-428.
vii. Saif-Alyousfi, A. Y., Alsadan, A., & Alalmaee, H. (2025). Profitability and Capital Intensity: Moderating Role of Debt Financing. *Economies*, 13(11), 324.

**Box 3.4: Tracing the Auto Sector's Response to Monetary Policy**

Globally, consumer credit is found to be sensitive to interest rate movements. The automobile sector provides a useful context for examining this important transmission channel, as auto loans make up more than one-third of consumer credit in Pakistan. Economic literature supports this view. Johnson et al. (2014) found that credit conditions are a significant determinant of vehicle purchases, with households more dependent on credit being particularly sensitive to financing conditions. Ustabaş & Buyun (2024) also confirm the sensitivity of automobile demand to financing conditions. **Figure 3.4.1** shows close movement between growth of real auto finance and automobile sales in Pakistan. Auto finance tends to weaken during tighter monetary conditions and recover when financing conditions ease (**Figure 3.4.2**). Against this background, this box examines whether changes in real auto finance are associated with subsequent changes in automobile sales in Pakistan. The analysis controls for vehicle availability through Completely Knocked Down (CKD) imports, workers' remittances (WR) and other relevant variables.

To assess this relationship, an Auto Regressive Distributed Lag (ARDL) model is estimated using monthly data from November 2008 to June 2026 (**Table 3.4.1**). The coefficient of real auto finance is found positive and weakly statistically significant, implying a one percentage point acceleration in real auto finance growth is associated with an increase in auto sales growth by about 3.2 percentage points. This provides evidence that auto finance is a relevant channel through which monetary conditions are transmitted to consumer demand. Remittances also impact sales positively, confirming that remittance-funded demand operates alongside financing. In addition, CKD imports affect sales with lags, especially at the fourth lag, suggesting that imported-kit availability matters for production, inventory and delivery of vehicles.

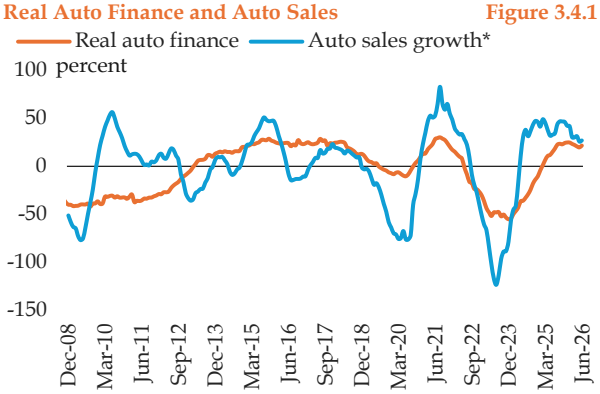
The role of CKD imports also underscores the importance of localisation. Since a large share of the value of each vehicle sold is imported, changes in auto financing are likely to be accompanied by changes in vehicle imports. Greater localisation would reduce the imported content of each vehicle and thereby weaken this link, allowing shifts

ARDL Results (Dep. Variable Automobile Sales) Table 3.4.1

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| Real auto finance | 3.2 | 1.9 | 1.7 | 0.09 |
| CKD imports | 0.0 | 0.1 | -0.2 | 0.86 |
| CKD imports (-1) | 0.3 | 0.1 | 3.0 | 0.00 |
| CKD imports (-2) | 0.1 | 0.1 | 0.5 | 0.61 |
| CKD imports (-3) | -0.4 | 0.1 | -3.7 | 0.00 |
| CKD imports (-4) | 1.0 | 0.1 | 10.5 | 0.00 |
| WR | 0.6 | 0.3 | 1.9 | 0.06 |
| YOY_sales(-1) | 0.1 | 0.1 | 2.6 | 0.01 |
| YOY_sales(-2) | -0.1 | 0.1 | -2.5 | 0.01 |
| C | -12.2 | 6.0 | -2.0 | 0.04 |
| COVID_SHOCK_ DUMMY | -233.2 | 41.6 | -5.6 | 0.00 |
| Adj R-squared | 0.6 | | | |
| F-statistic | 34.4 | | Prob(F-stat) | 0.00 |

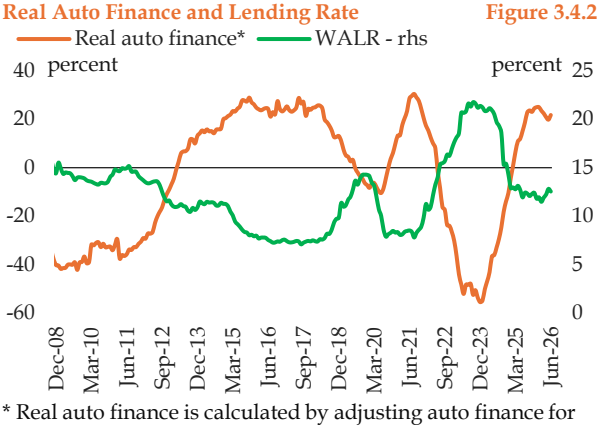
Note: All coefficients were tested for statistical significance at the 10% level.
CKD terms are jointly significant (Wald F = 30.2, p < 0.01).
LM test indicates no serial correlation.
Source: SBP staff estimates

Real Auto Finance and Auto Sales Figure 3.4.1




* Auto sales growth is measured as the six-month moving average of the growth rate in automobile unit sales.
Sources: SBP; PAMA

Real Auto Finance and Lending Rate Figure 3.4.2




* Real auto finance is calculated by adjusting auto finance for inflation.
Sources: SBP; PAMA

in financing conditions to influence domestic demand with less accompanying movement in the external account.

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

***References:***

i. Johnson et al. (2014). Auto Sales and Credit Supply. Finance and Economics Discussion Series No. 2014-82. Federal Reserve System.
ii. Ustabaş. A & Buyun. B (2024). Does monetary policy affect automotive demand? An empirical example from Turkey, *Journal of Emerging Economies and Policy*, Vol.9, No.1.

**Box 3.5: Daily Fuel Price Adjustments and its Pass-through to Inflation**

The government has progressively shortened the petroleum-pricing cycle during 2026 amid heightened global oil-price volatility, moving from fortnightly to weekly reviews in March, and then daily on July 17, 2026. The first single-day notification applied on July 21, after which OGRA began publishing daily ex-depot prices. The step shortened the administrative lag between changes in international costs and domestic prices and increased the frequency with which the pricing formula incorporates changes in market-linked costs.[64]

Daily pricing does not imply one-for-one indexation to the latest international quote. In fact, for motor fuel, OGRA uses seven-working-day averages of Platts Arab Gulf product prices and the PKR/USD exchange rate, alongside import costs, IFEM, regulated margins, levies and taxes.[65] OGRA determines and publishes the resulting ex-depot price without routine federal approval, while the government retains control over taxes, levies and regulated components. The system is therefore more market-linked but remains distinct from full retail deregulation.[66]

**Why adjustment frequency matters for inflation?**

Higher international energy prices first affect inflation directly through increase in fuel prices; depending on the duration and magnitude of the shock, higher fuel prices may subsequently pass-through to transport and production costs and, ultimately, food and other non-energy prices. More frequent adjustments change the speed and timing of pass-through from international fuel prices and the exchange rate movement to domestic pump prices.

Cross-country evidence indicates that the domestic pricing regime is an important determinant of fuel-price pass-through. Under the daily framework, overlapping seven-day averages allow changes in external costs to enter domestic fuel prices more promptly than under fortnightly pricing. Coady et al. (2012) show that automatic pricing formulas can preserve pass-through, while moving-average mechanisms smoothen short-term fluctuations. Daily pricing therefore reduces the administrative lag in first-stage transmission without implying one-for-one adjustment to daily international prices. Using data for 109 developing economies over 2000–2014, Kpodar and Imam (2020) find that pass-through is higher under more flexible pricing mechanisms, when international price movements are relatively moderate and less volatile.

**Implications for inflation**

For CPI inflation, however, a shorter transmission lag should be distinguished from the cumulative inflationary effect of the external shock. More frequent adjustment limits the accumulation of unpassed costs and, consequently, the need for relatively large discrete corrections in domestic fuel prices. Coady et al. (2012) show that automatic pricing mechanisms with smoothing can avoid prolonged periods of unchanged domestic prices associated with ad hoc pricing and the relatively large adjustments that may subsequently become necessary.

[64] Government of Pakistan, Petroleum Division, notifications for March 14, 21 and 28, 2026; Cabinet-approved revised pricing guidelines dated July 17, 2026; Petroleum Division, 'Petroleum Minister Consults Industry on Daily Pricing Reform,' July 18, 2026. The first single-day price applied on July 21, 2026.

[65] The HSD pricing framework was revised in August 2026 to benchmark prices to Dubai crude plus a diesel crack spread capped at US$ 41.89 per barrel, limiting the pass-through of exceptionally high international refining margins. The framework remains under review, including rules-based interventions for exceptional price shocks. Source: Petroleum Division

[66] OGRA, daily petrol and HSD price build-ups; Government of Pakistan, revised pricing guidelines, July 17, 2026. The Cabinet instructions specify seven working-day Platts averages and no routine federal or prime-ministerial approval; OGRA price sheets provide the detailed build-up.

More frequent adjustment also reduces discretion over the timing of formula-based price changes. Delaying pass-through does not eliminate the cost of an external shock; it may instead appear through foregone fuel-tax revenues, explicit or implicit subsidies, supplier balances, or larger subsequent price adjustments. A consistent pricing rule instead allows market-driven cost changes to pass-through in both directions and makes any decision to cushion their impact an explicit fiscal policy choice. This is particularly relevant when higher international energy prices require domestic demand to adjust to the adverse terms-of-trade shock.

Therefore, daily price adjustments impact the timing of the pass-through of the external shock to domestic prices rather than the underlying size of the external shock. The eventual impact on CPI impact, however, depends on the persistence of the shock and the strength of indirect and second-round effects.

**The contribution of Syed Hamza Ali and Mehreen Tariq Ghani is acknowledged in writing this box.*

**References**

i. Coady, D. Arze del Granado, J. Eyraud, L. and Tuladhar, A. (2012). Automatic Fuel Pricing Mechanisms with Price Smoothing: Design, Implementation, and Fiscal Implications. IMF Technical Notes and Manuals No. 12/03. International Monetary Fund.
ii. Kpodar, K. R. and Imam, P. A. (2020). To Pass (or Not to Pass) Through International Fuel Price Changes to Domestic Fuel Prices in Developing Countries: What Are the Drivers? IMF Working Paper No. 20/194, International Monetary Fund.

**Box 3.6: Household Exposure to Energy Price Shock**

The effects of Middle East conflict transmitted rapidly to domestic energy prices, raising energy inflation during Apr–Jun FY26 to around 31 percent in both urban and rural areas. The welfare consequences of such a shock, however, cannot be inferred from aggregate inflation alone. A common price shock can impose very different burdens across households because the level and composition of energy consumption vary with income, access to commercial fuels, transport use, location and other household characteristics. International evidence shows that differences in consumption baskets can generate substantial variation in households' exposure to energy shocks, although the incidence across income groups depends on country-specific consumption patterns and households' capacity to adjust expenditure (Battistini et al., 2023; OECD, 2023).

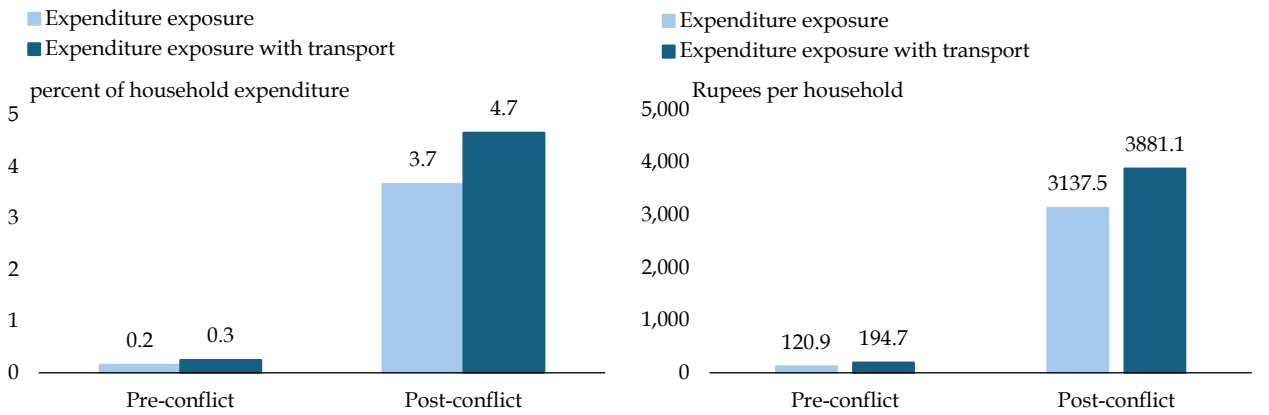
Against this backdrop, this box examines the distributional incidence of the recent energy price shock in Pakistan. It estimates the additional household expenditure required to maintain the pre-shock consumption bundle and examines how this expenditure burden varies across the consumption distribution and energy sources. The analysis identifies how the energy types, including electricity, motor fuel, natural gas, LPG and kerosene, and solid fuels, to the overall expenditure burden as well as the share of households facing relatively high exposure. In doing so, it complements aggregate inflation analysis with an assessment of the immediate purchasing-power implications of higher energy prices for households.

**Methodology**

The analysis combines channel-specific urban and rural CPI price changes with microdata for 30,123 households from HIES 2024-25. For each household, expenditure on electricity, natural gas, LPG and kerosene, solid fuels, and motor fuel is multiplied by the corresponding price change. The resulting increase in monthly expenditure is expressed as a share of the household's total monthly consumption expenditure to obtain a measure of direct household expenditure exposure. A broader measure adds purchased transport expenditure, assuming full pass-through of motor-fuel price increases to transport costs.

This methodology follows the household-budget approach used by Causa et al. (2022) and Hua and Shi (2024), which combines household-specific expenditure shares with category-level price changes to estimate the first-round distributional effects of price shocks. The estimates capture first-round expenditure exposure, and does not account for substitution across fuels, reductions in energy consumption, household-specific tariff slabs, income responses, transfers, or indirect pass-through to other goods and services.

**Household Exposure to Energy Price Shocks** **Figure 3.6.1**




Source: PBS; SBP staff estimates

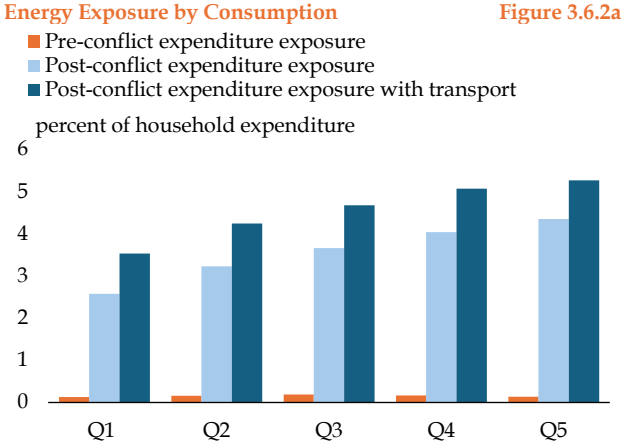
**Results**

The energy price shock substantially increased the expenditure required for households to maintain their pre-shock consumption bundle. On average, the additional expenditure for first consumption quintile rose from 0.15 percent of household consumption expenditure before the shock to 3.67 percent after the shock, equivalent to an increase from Rs 121 to Rs 3,137 per household per month. Including purchased transport raises the post-shock expenditure requirement to 4.65 percent of household consumption, or Rs 3,881 per month (**Figure 3.6.1**).

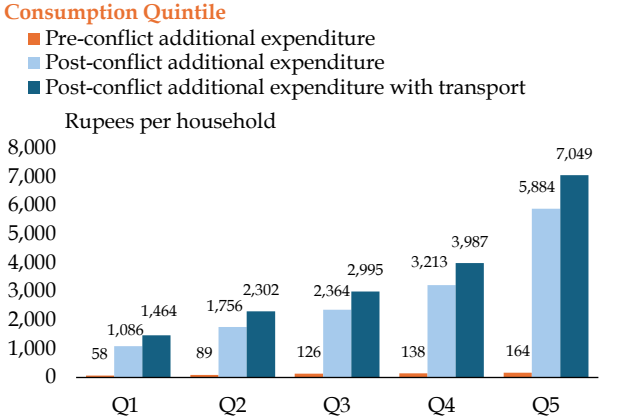
The expenditure burden increases along the consumption distribution. Post-conflict direct exposure rises from 2.57 percent for the first consumption quintile to 4.34 percent for the fifth consumption quintile; including transport increases the corresponding burden to 3.53 and 5.27 percent (**Figure 3.6.2a and 3.6.2b**). The difference is considerably larger in rupee terms: the additional monthly expenditure required to maintain the same consumption bundle increases from Rs 1,086 in the first consumption quintile to Rs 5,884 in the fifth consumption quintile. Thus, households in the fifth consumption quintile incur around 5.4 times the rupee loss of those in the first consumption quintile, compared with about 1.7 times their proportional exposure.[67]

The rising expenditure burden across the consumption distribution differs from the regressivity of energy shocks often documented in advanced economies, where lower-income households typically allocate larger budget shares to utilities and heating (Battistini, Bobasu and Gareis, 2023; Causa et al., 2022). For Pakistan, the result points to differences in commercial-energy consumption across the expenditure distribution. Higher-consumption households

**Energy Exposure by Consumption** **Figure 3.6.2a**



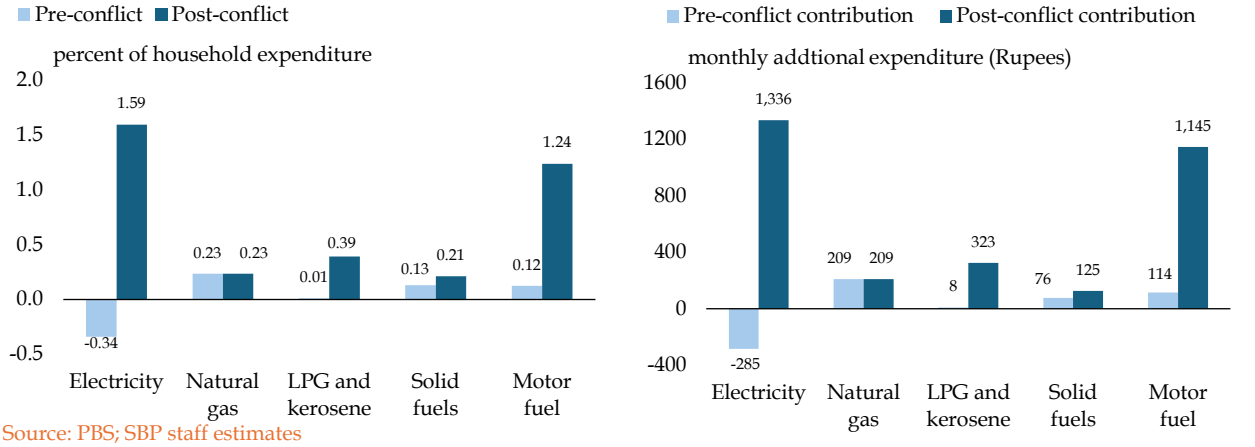

**Monthly Cost of Energy Price Shocks by Consumption Quintile** **Figure 3.6.2b**




Source: PBS; SBP staff estimates

[67] When measured against reported household income, the additional post-conflict expenditure equals around 5 percent for Q1 and 18 percent for Q5, indicating the greater commercial-energy use of higher-consumption households.

**Household Energy Exposure by Source** Figure 3.6.3



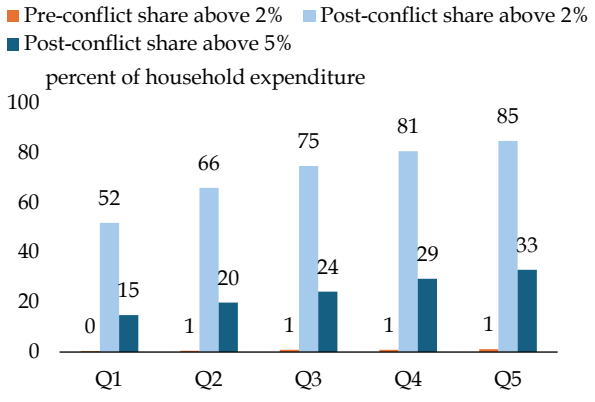

Source: PBS; SBP staff estimates

tend to have greater access to commercial energy, higher appliance ownership and greater private mobility, increasing their expenditure on electricity, gas and motor fuel. Lower-consumption households may consume less commercial energy or rely more on non-purchased fuels, which lowers their measured direct exposure.[68]

The composition of the shock further explains the distributional pattern. Electricity and motor fuel dominate household exposure, contributing 1.59 and 1.24 percentage points, respectively, to the post-conflict direct expenditure burden. Together, they account for about 77 percent of the estimated proportional exposure and nearly four-fifths of the additional monthly expenditure. LPG and kerosene contribute 0.39 percentage point, while natural gas and solid fuels add 0.23 and 0.21 percentage point, respectively (**Figure 3.6.3**).

Average exposure by consumption quintile, however, conceals substantial dispersion within each group. Before the shock, no more than around 1 percent of households in any consumption quintile had direct expenditure exposure above 2 percent of household consumption. In post-shock, this share rises from 52 percent in the first consumption quintile to 85 percent in the fifth consumption quintile. More severe exposure, above 5 percent of household consumption, affects 15 percent of households in the first consumption quintile and 33 percent in the fifth consumption quintile (**Figure 3.6.4**).[69]

**Share of Households with High Energy Exposure** Figure 3.6.4




Source: PBS; SBP staff estimates

**Policy implications**

The government policy decision to fully pass on the increase in global energy prices to domestic prices was intended to curb energy demand and limit the fiscal burden associated with suppressing prices. This was particularly relevant for higher-consumption households, who account for greater energy consumption and, as the results show, face substantially larger expenditure increases following the shock. Higher prices therefore place greater incentives for demand adjustment where energy consumption is relatively high.

At the lower-end of the consumption distribution, however, lower measured exposure does not imply a greater capacity to absorb the shock. Lower-income

[68] The result should not be interpreted as evidence that poorer households are better able to absorb the shock. Direct exposure measures the size of the price exposure, not savings, liquidity, food security or access to coping mechanisms.

[69] These figures are not comparisons of a quintile average with a threshold. Each of the 30,123 sampled households is first classified using its own energy spending and total consumption; the chart then reports the survey-weighted share crossing the threshold within each quintile.

households have less room to accommodate higher energy costs and may have to reduce energy use or compress expenditure on other essential goods and services. This strengthens the case for targeted support rather than generalised price suppression, allowing vulnerable households to be protected while preserving price signals and the intended demand response among higher-consuming households. The government's move toward targeted subsidies is also supported by earlier evidence that generalised electricity subsidies disproportionately accrue to better-off households (Trimble et al., 2011; Walker et al., 2017). At the same time, the presence of highly exposed households even in the lower consumption quintiles suggests that targeting based solely on consumption levels may overlook vulnerable households; incorporating energy exposure could further improve the incidence of support.

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

**References**

i. Battistini, N., Bobasu, A. and Gareis, J. (2023), Who Foots the Bill? The Uneven Impact of the Recent Energy Price Shock, ECB Economic Bulletin, Issue 2, 2023
ii. Causa, O., Soldani, E., Luu, N. and Soriolo, C. (2022), *A* Cost of Living Squeeze? Distributional Implications of Rising Inflation, OECD Economics Department Working Papers, No. 1744.
iii. Hua, S. and Shi, W. (2024). The Cost of Living Crisis: Impact and Policy Support to Households, Evidence from Micro Level Data: Greece. IMF Selected Issues Paper, 2024, 007.
iv. Walker et al. (2017), Residential Electricity Subsidies in Pakistan, World Bank.
v. Trimble, Yoshida and Saqib (2011), Rethinking Electricity Tariffs and Subsidies in Pakistan, World Bank Policy Note, Report No. 62971.

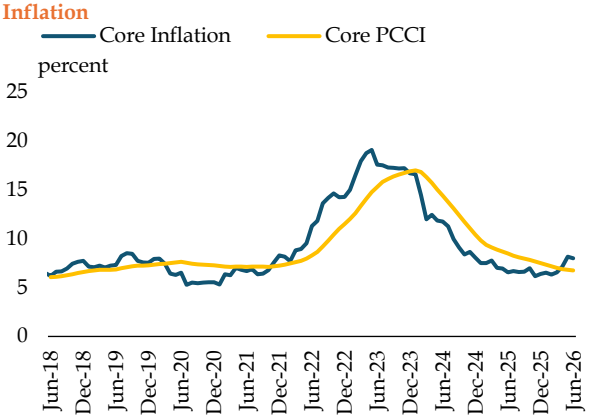
**Box 3.7: Decomposition of Core Inflation into Common and Transitory Components**

The literature on core inflation emphasizes the need to separate persistent economy-wide inflation from relative-price movements and other transitory item-specific disturbances (Bryan and Cecchetti, 1994; Quah and Vahey, 1995; Stock and Watson, 2016). This distinction is important for monetary policy conduct because persistent inflation driven by common factors is more relevant for assessing underlying inflationary pressures than temporary movements arising from changes in price of an individual item.

To achieve and maintain price stability, a central bank generally responds to economy-wide shocks that affect a broad range of goods and services and hence the general price level rather than temporary movements in individual prices due to sector-specific factors. The common inflation component is intended to capture price changes attributable to economy-wide factors, including capacity utilisation, movements in non-labour input costs such as commodity prices, and changes in the prices of imported goods and services. This box estimates the persistent and common component of core inflation (Core-PCCI) in Pakistan during FY20–26 from monthly item-level core CPI inflation using Principal Component Analysis (PCA), following the framework of Bańbura and Bobeica (2020).

The measure summarises the common movement across core items and retains its persistent part. The estimation results are shown in **Figure 3.7.1**. The difference between core inflation and Core-PCCI represents idiosyncratic components. During FY20 and FY21, before the inflation surge, observed core inflation and Core-PCCI remained broadly close, although short-lived differences emerged. This narrow gap suggests that observed movements in core inflation were largely explained by changes in the common component, with only a limited role for item-specific factors. During FY22 and FY23, observed core inflation rose above Core-PCCI. This divergence indicated that sector specific factors had a greater influence on core inflation during this period.

**Core Inflation vs Persistent Component of Core Inflation** **Figure 3.7.1**




Source: SBP staff estimates

From FY24 through FY26, observed core inflation declined more rapidly than Core-PCCI, causing the persistent common component to remain above conventional core inflation for much of this period. This widening gap suggests that favourable item-specific movements contributed more to observed disinflation, while persistent economy-wide price pressures eased more gradually due to the lingering impact of earlier shocks on production costs and price-setting behaviour. The gap subsequently reversed towards the end of FY26 as core inflation picked up, while Core-PCCI continued to ease, suggesting that the recent increase was largely associated with item-specific rather than common price pressures.

Overall, the persistence of the common component above observed core inflation for much of FY24–FY26 suggests that underlying price pressures receded more gradually than indicated by conventional core inflation. Core-PCCI can therefore provide a useful complementary gauge of underlying inflation by filtering out item-specific movements and focusing on price changes that are common across the core basket and persistent over time.

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

**References**

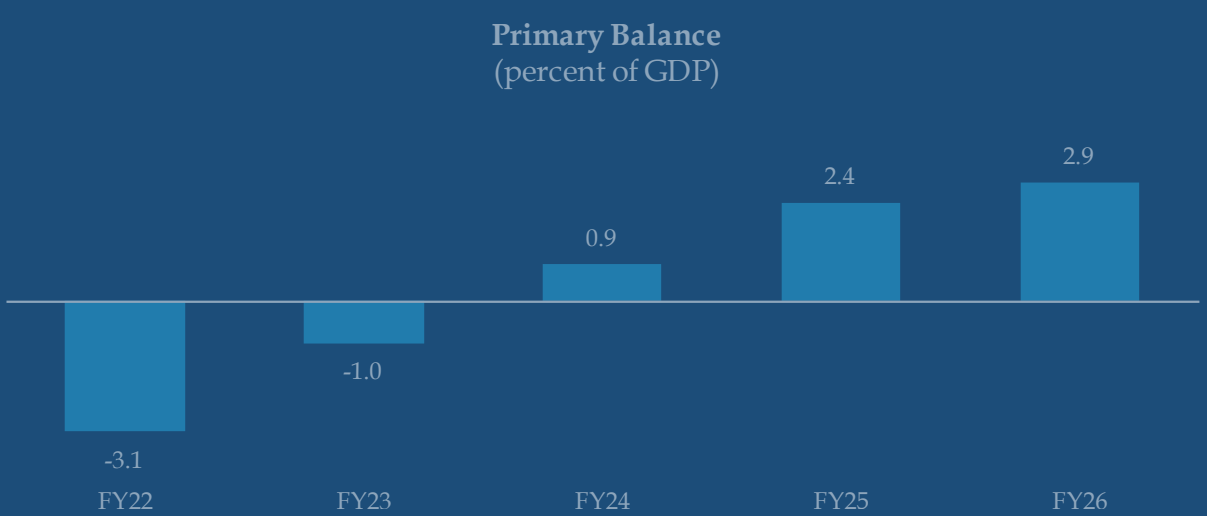
i. Bańbura, M., and Bobeica, E. (2020). PCCI: A Data-Rich Measure of Underlying Inflation in The Euro Area. ECB Statistics Paper Series No. 38.
ii. Bryan, M. F., and Cecchetti, S. G. (1994). Measuring Core Inflation. In N. G. Mankiw (ed.), Monetary Policy. University of Chicago Press.
iii. Quah, D., and Vahey, S. P. (1995). Measuring Core Inflation. *The Economic Journal,* Vol. 105, No.432.
iv. SBP (2025). Persistence in Core Inflation in Pakistan. Box 3.2 in The State of Pakistan's Economy, Annual Report 2024-25.
v. Stock, J. H., and Watson, M. W. (2016). Core Inflation and Trend Inflation. *Review of Economics and Statistics*, 98(4).



4

# Fiscal Policy and Public Debt

*Fiscal consolidation continued for the fourth consecutive year, with fiscal and primary balances improving further in FY26. The improvement primarily owes to a notable decline in debt servicing, which more than compensated for a slight decline in total revenue. Total expenditure declined substantially in FY26 due to significant drop in mark-up payments. Non-interest expenditure also declined, reflecting decrease in subsidies and provincial current expenditure. Continued fiscal consolidation slowed the pace of public debt accumulation, reducing the public debt to GDP ratio to 68.6 percent at the end of FY26 from 70.5 percent in the previous year. Furthermore, the increased issuance of medium- to long-term securities improved the public debt profile leading to reduction in refinancing and interest rate risks. In addition, the ongoing build-up in foreign exchange reserves and decline in interest payments improved the solvency indicators and repayment capacity of the government.*



# 4 Fiscal Policy & Public Debt

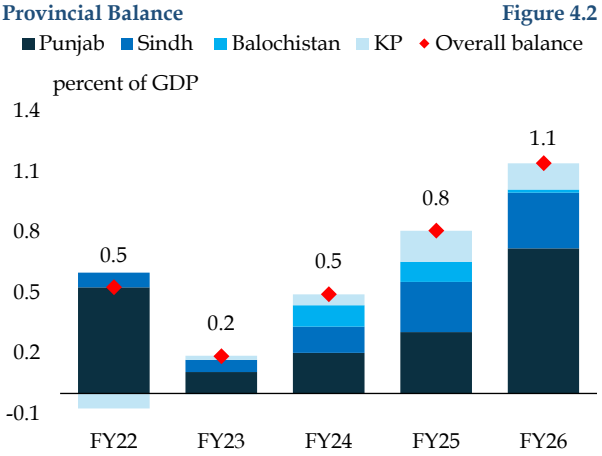
## 4.1 Fiscal Trends and Policy Review

Fiscal consolidation continued for the fourth consecutive year in FY26. Both fiscal and primary balances improved in terms of GDP compared to the previous year and outperformed their respective budget estimates for FY26 **(Figure 4.1a and 4.1b).** This improvement was driven by a sharp decline in total expenditure, led by substantial reduction in markup payments, which more than offset the decline in total revenue in terms of GDP.[1] Importantly, the provincial surplus continued to increase, providing support to the consolidated fiscal balance **(Figure 4.2)**.

The decline in total revenue (in terms of GDP) in FY26 was primarily due to lower non-tax revenue, while tax collections (in terms of GDP) slightly improved from last year's level. The decline in non-tax revenue was on account of lower, though still sizeable SBP profit, while Petroleum Development Levy (PDL) collection increased in terms of GDP.

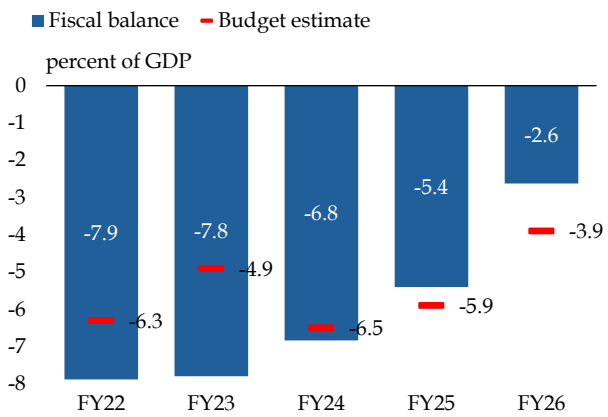
The marginal increase in tax-to-GDP ratio stemmed from incremental gains in provincial revenues, whereas growth in FBR taxes slowed amidst moderation in economic activity in Q4-FY26, reflecting the impact of Middle East conflict.[2] The deceleration in growth of FBR taxes was despite the additional revenue mobilisation measures announced in the FY26 budget and administrative efforts by the government. FBR missed its initial target (budget estimate) but achieved the revised (lower) target for FY26. Nonetheless, for the first time since FY01, the share of direct taxes in total FBR tax collection surpassed that of indirect taxes in FY26.

**Provincial Balance** **Figure 4.2**



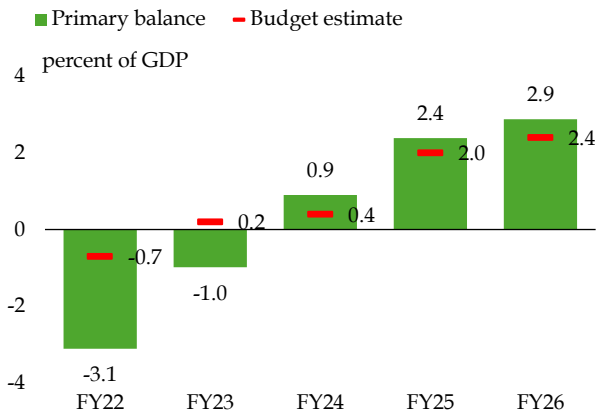

Source: MoF

**Fiscal Balance** **Figure 4.1a**




Source: MoF

**Primary Balance** **Figure 4.1b**




[1] A large statistical discrepancy also contributed to the higher primary surplus in FY26. However, the primary surplus remained higher in FY26 compared to the last year, adjusted for statistical discrepancy.

[2] The fourth quarter of the fiscal year usually records higher growth in FBR taxes i.e., the last 5-year's average is 22.5 percent. However, the growth in Q4-FY26 was just 12.6 percent, reflecting the impact of Middle East conflict on revenue mobilisation.

**Consolidated Fiscal Operations** **Table 4.1**

values in billion Rupees, growth in percent

| | Values | | Percent of GDP | | Growth | |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | FY25 | FY26 | FY25 | FY26 |
| **1. Total revenue (a+b)** | **17,997** | **19,774** | **15.8** | **15.6** | **35.6** | **9.9** |
| (a) Tax revenue | 12,723 | 14,219 | 11.1 | 11.3 | 26.2 | 11.8 |
| o/w FBR taxes | 11,744 | 13,010 | 10.3 | 10.3 | 26.1 | 10.8 |
| (b) Non-tax revenue | 5,275 | 5,555 | 4.6 | 4.4 | 65.7 | 5.3 |
| **2. Total expenditure (a+b+c)** | **24,166** | **23,087** | **21.2** | **18.3** | **18.0** | **-4.5** |
| (a) Current expenditure | 21,529 | 20,686 | 18.9 | 16.4 | 15.9 | -3.9 |
| o/w Mark-up payments | 8,887 | 6,948 | 7.8 | 5.5 | 8.9 | -21.8 |
| (b) Development expenditure & net lending | 2,966 | 3,254 | 2.6 | 2.6 | 42.7 | 9.7 |
| o/w PSDP | 2,983 | 3,428 | 2.6 | 2.7 | 47.2 | 14.9 |
| (c) Statistical discrepancy | -329 | -853 | -0.3 | -0.7 | 89.6 | 159.4 |
| **3. Fiscal balance** | **-6,168** | **-3,313** | **-5.4** | **-2.6** | **-14.4** | **-46.3** |
| **4. Primary balance** | **2,719** | **3,634** | **2.4** | **2.9** | **185.4** | **33.6** |
| **5. Revenue balance** | **-3,531** | **-912** | **-3.1** | **-0.7** | **-33.4** | **-74.2** |
| **6. Provincial balance** | **921** | **1,450** | **0.8** | **1.1** | **77.8** | **57.3** |
| **7. Financing (a+b)** | **6,168** | **3,313** | **5.4** | **2.6** | **-** | **-** |
| a) External (net) | 619 | 1,178 | 0.5 | 0.9 | - | - |
| b) Domestic (net) | 5,549 | 2,136 | 4.9 | 1.7 | - | - |

Note: 1) Fiscal balance is total revenue minus total expenditure; primary balance is fiscal balance excluding mark-up payments; revenue balance is total revenue minus total current expenditure

Source: MoF

Total expenditure to GDP recorded a notable decline in FY26. This was led by a substantial reduction in current expenditure, primarily mark-up payments. Non-interest expenditure also edged down, mainly owing to decrease in subsidies and provincial expenditure.

The budget financing mix continued to remain tilted towards banking system during FY26, with net retirements to non-bank sources and minor contribution from privatisation proceeds. Financing from external resources also witnessed a notable increase.[3]

With sustained fiscal consolidation, lower interest payments and appreciation of PKR against US dollar, public debt to GDP ratio dropped by 1.9 percentage points to 68.6 percent at end-June 2026. This, together with the strategic shift towards financing through medium- to long-term instruments, improved the overall public debt profile. Particularly, the average time to maturity (ATM) lengthened and the interest rate risk declined.

The improving debt dynamics along with higher foreign exchange earnings, continued build-up in foreign exchange reserves and significant decline in interest payments enhanced the repayment capacity and solvency indicators. However, liquidity indicators showed deterioration due to reclassification of US$ 8.5 billion long-term external debt into short-term during FY26.

The recent fiscal consolidation was mainly achieved on the back of notable contribution from non-tax revenue and significant reduction in interest payments. Tax to GDP, however, remained close to its long-term average of around 10 percent.[4] While substantial non-tax revenue and reduction in interest payments have provided the necessary support for consolidation, sustaining fiscal consolidation would be challenging without increasing tax to GDP ratio by broadening tax net. Moreover, the high reliance

[3] This reflects the repayment of US$ 3.5 billion external liability (a non-budgetary support) and the inflow of US$ 3 billion for budgetary support, which became the part of public external debt.

[4] 10-year average tax to GDP ratio from FY17 to FY26.

on levies (PDL) raises energy costs and may impact competitiveness. Meanwhile, privatising or restructuring of loss-making state-owned enterprises and restoring public investment in vital infrastructure should also remain among the key priorities.

## 4.2 Revenue

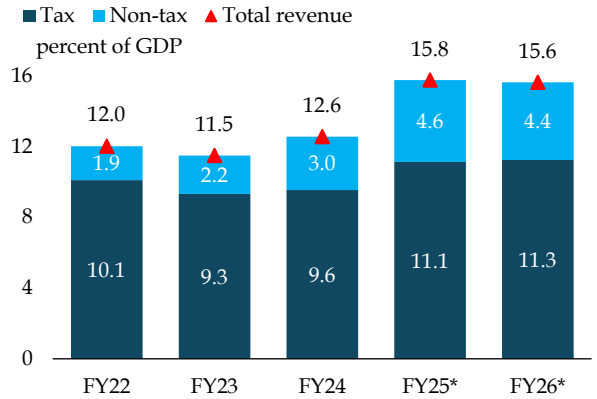
Total revenue declined by 0.1 percentage points (ppt) to 15.6 percent of GDP in FY26.[5] This was primarily due to a drop of 0.2 ppt in non-tax revenue, as tax revenue slightly improved to 11.3 percent of GDP **(Table 4.1 and Figure 4.3)**.

**Tax Revenue**

The slight increase in tax to GDP ratio was contributed by marginal improvement in provincial taxes ratio, whereas federal taxes remained stagnant in terms of GDP. Federal tax collection remained flat at 10.3 percent of GDP in FY26 **(Figure 4.4).** This was primarily due to lower indirect taxes, as direct taxes increased in terms of GDP. In growth terms, there was a broad-based deceleration in FBR taxes **(Figure 4.5)**.

The deceleration was more pronounced in sales tax and customs duty collections, reflecting the impact of the Middle East conflict-related slowdown in domestic sales and imports towards the end of FY26. As a result, FBR missed the initial budget target by Rs 1,120 billion but surpassed its revised target of Rs 12,983 billion by Rs 27.8 billion **(Figure 4.6)**.

**Breakdown of Total Revenue** **Figure 4.3**



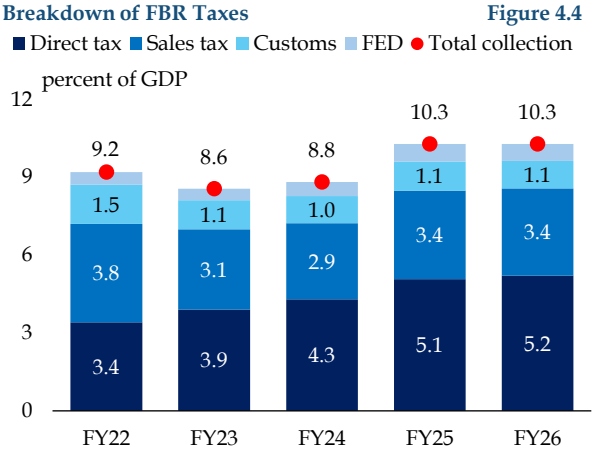

* The numbers might not add up due to rounding off

Source: MoF

***Direct Taxes***

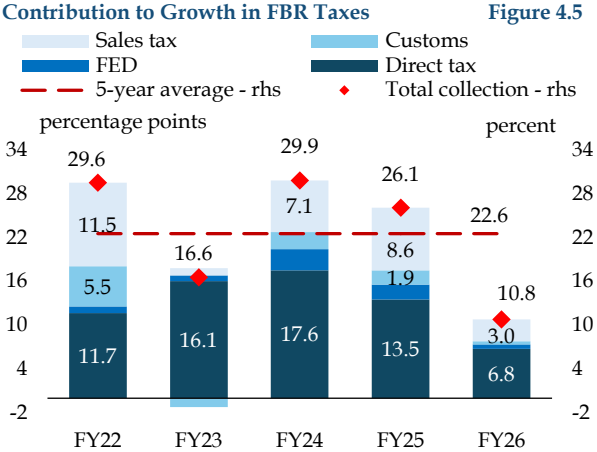
Direct tax collection inched up slightly in terms of GDP in FY26. As a result, the share of direct taxes in total FBR tax collection reached all-time high, and for the first time surpassed the share of indirect taxes **(Figure 4.7)**.[6] The increase in direct taxes was mainly on account of higher collection on demand, while voluntary payments remained at last year's level and withholding tax marginally declined in terms of GDP **(Figure 4.8)**. Collection on demand rose notably on the back of better tax

**Breakdown of FBR Taxes** **Figure 4.4**




Source: FBR

**Contribution to Growth in FBR Taxes** **Figure 4.5**

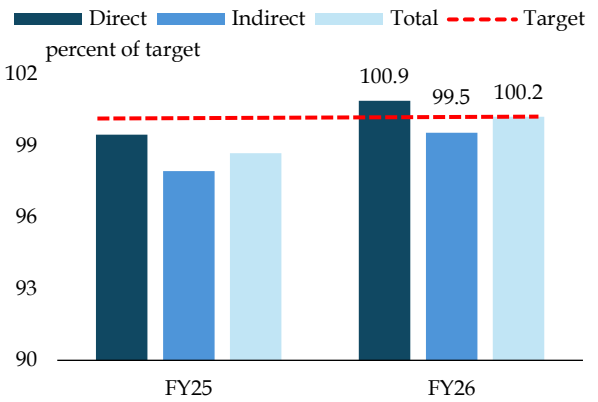



Source: FBR

[5] Exact change in the ratio may not equal the change in numbers of Table 4.1 due to rounding off at single decimal place

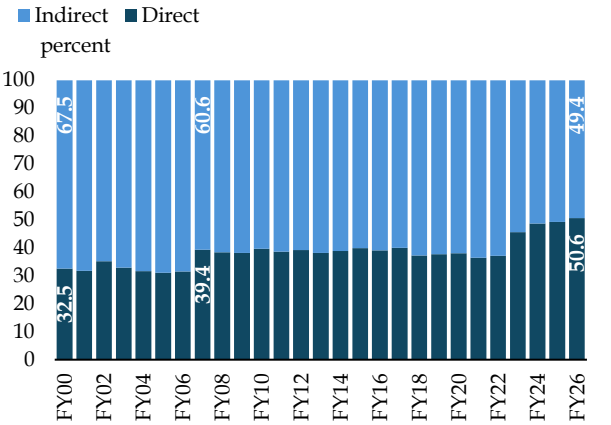
[6] Since publication of fiscal operations data in FY01.

**FBR Taxes (Actual vs. Revised Target*)** **Figure 4.6**




* Below 100 indicates the respective target was missed.
Source: FBR

**Share of Direct and Indirect Taxes in FBR Taxes** **Figure 4.7**

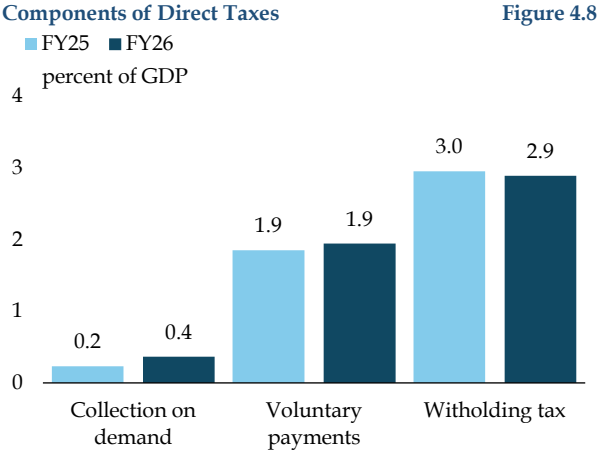



Source: FBR

enforcement and tax dispute resolution by the tax administration.[7]

The withholding tax (WHT) collection marginally declined in terms of GDP in FY26, despite higher rates on sale of immovable property, dividends from certain mutual funds and profit on debt. Moreover, the government also removed exemptions on digital transactions on e-commerce platforms and pensions,[8] adding them into the tax net. Within WHT, unlike the previous year when all major revenue spinners contributed positively, four major revenue spinners dragged collection in FY26.[9] Moreover, the contribution of most other revenue spinners was lower except for sales of property and imports (**Figure 4.9a and Figure 4.9b**). Higher growth in the former was on account of increase in WHT rates, while the latter reflects rise in import values.

**Components of Direct Taxes** **Figure 4.8**

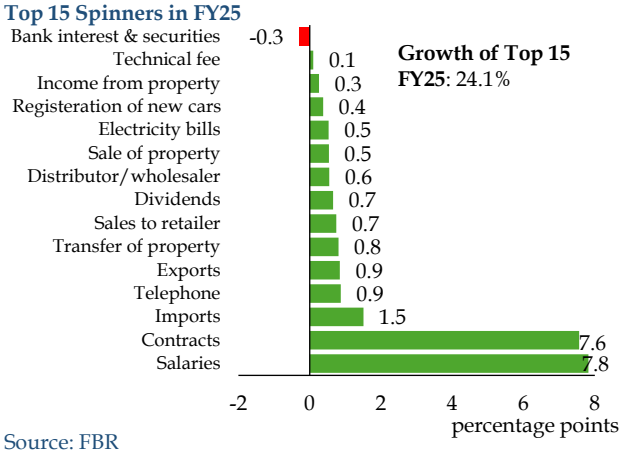



Source: FBR

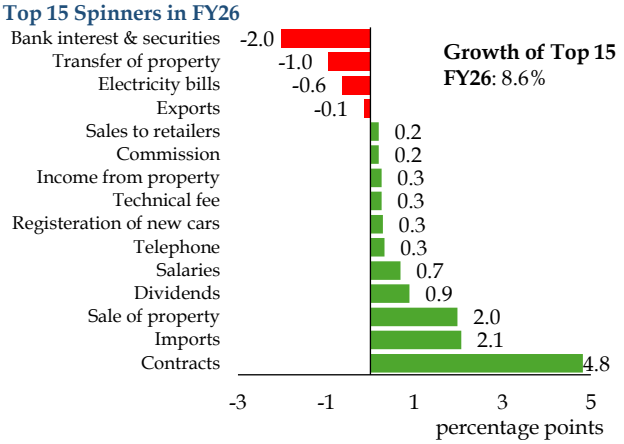
On the other hand, decline in collections under *`bank interest and securities`* was due to lower earnings from deposits amid fall in weighted average deposit rate (WADR) (rate effect), despite an improvement in deposit mobilisation (volume effect).[10] Moreover, WHT on purchase/transfer of immovable property fell due to reduction in tax rates across various slabs of property values. The decline in WHT collection from electricity bills, another major revenue spinner, can be traced to two factors: (i) negative average quarterly tariff adjustments (QTAs)[11]; and ii) a possible drag from solarisation that may have translated into lower electricity consumption from grid.[12] The lower WHT collections from exports can be attributed to

[7] Source: Pakistan-IMF Second Review under the Extended Fund Facility, December 2025.
[8] Pension above Rs 10 million per annum was subject to a final tax of 5 percent. Source: Finance Act 2025, FBR
[9] The top 15 WHT spinners accounted for 95.6 percent share in total WHT collections in FY26. Source: FBR
[10] The average WADR declined from 12.1 percent in FY25 to 8.3 percent in FY26, which more than offset the 14.0 percent growth in interest-earning deposits in the banks. As a result, earnings on deposits (proxied by the banking sector's interest expenses) declined by 22.0 percent in FY26. Source: Financial Soundness Indicators of Banking Sector, SBP
[11] On cumulative basis, the QTA for residential consumers was Rs -7.32/kwh in FY26, as compared to only Rs -1.51/kwh in FY25. Source: NEPRA
[12] Under section 235, WHT is applicable on bill amounting to Rs 25,000 or more per month on non-filer domestic consumers. Source: ITO 2001, FBR

**Contribution to Growth in WHT by Top 15 Spinners in FY25** **Figure 4.9a**




**Contribution to Growth in WHT by Top 15 Spinners in FY26** **Figure 4.9b**




Source: FBR

a decline in exports. Lastly, the government also provided relief in salary slabs up to Rs 3.2 million per annum in FY26 budget, which led to a notable deceleration in growth of WHT on salary income.

***Indirect Taxes***

Indirect tax collection edged slightly lower in FY26 in terms of GDP, mainly due to a marginal decline in customs duty, sales tax and stagnation in FED collection, in terms of GDP **(Table 4.2)**. The slower growth in sales tax collections vis-à-vis nominal GDP growth can be attributed to lower receipt from electrical energy on the back of negative QTAs and reduced electricity consumption in Q4-FY26. On the other hand, FED collection remained almost flat due to lower revenue from cigarettes in FY26, as elevated cigarette prices may have shifted consumption to informal brands, leading to lower cigarette sales in formal sector.[13, 14]

The minor decline in customs duty in terms of GDP, despite an increase in imports, reflects the impact of tariff rationalisation under the National Tariff Policy (NTP) 2025-30.[15] Some of the key measures included reduction in customs duty on numerous tariff lines and elimination or generalisation of concessional rates.[16] These changes resulted in decline in collection from imports of iron and steel, boilers and machinery,[17] organic chemicals, paper, and plastics **(Table**

**Breakdown of FBR Taxes** **Table 4.2**

values in billion Rupees, growth in percent

| | Values | | Percent of GDP | | Growth | |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | FY25 | FY26 | FY25 | FY26 |
| **Direct** | **5,792** | **6,586** | **5.1** | **5.2** | **27.8** | **13.7** |
| **Indirect** | **5,953** | **6,425** | **5.2** | **5.1** | **24.5** | **7.9** |
| Sales | 3,901 | 4,254 | 3.4 | 3.4 | 25.9 | 9.0 |
| Customs | 1,285 | 1,331 | 1.1 | 1.1 | 16.4 | 3.6 |
| FED | 767 | 840 | 0.7 | 0.7 | 32.8 | 9.6 |
| **Total** | **11,744** | **13,011** | **10.3** | **10.3** | **26.1** | **10.8** |

Note: Sales tax, Customs and FED (as percent of GDP) show decline at two decimal places; the rounded off figures should be read in conjunction with the text.

Source: FBR

[13] Source: Yearbook 2024-2025, FBR

[14] In Pakistan, duty-paid cigarette prices (real terms) tend to have a high positive correlation (80 percent) with size of informal market for cigarettes between 2013 and 2023. A 5.2 percent increase in duty-paid cigarette prices (real terms) increased the market share of informal cigarettes to 58.0 percent in 2023 from 23.0 percent in 2013. Source: Oxford Economics (2024). *An Economic Assessment of the Drivers of the Illicit Trade in Cigarettes*, November 2024, Available at: https://www.oxfordeconomics.com/resource/an-economic-assessment-of-the-drivers-of-the-illicit-trade-in-cigarettes/

[15] Imports, in PKR terms, rose by 8.7 percent in FY26 compared to 6.5 percent in FY25. Source: PBS

[16] Source: Customs Act 2026 and Pakistan Customs Tariff (FY25 and FY26), FBR, and National Tariff Policy (2025-30), Ministry of Commerce.

[17] Moreover, the growth in import of machinery group, in rupee terms, notably decelerated, led by sharp slowdown in growth of import of power generating machinery and other machinery, and a decline in import of electrical machinery and apparatus. Source: PBS

**Spinners of Customs Duty** **Table 4.3**

amount in billion Rupees, contribution in percentage points

| | Amount | | Contribution to Growth | |
|---|---|---|---|---|
| | FY25 | FY26 | FY25 | FY26 |
| Photosensitive devices | 69 | 70 | 1.8 | 0.1 |
| Boilers and machinery | 68 | 60 | 2.2 | -0.6 |
| Animal/vegetables fat | 50 | 57 | 0.7 | 0.6 |
| Iron and steel | 77 | 55 | 0.9 | -1.7 |
| Plastics and articles | 48 | 43 | 0.7 | -0.4 |
| Coffee, tea and spices | 30 | 29 | 0.0 | -0.1 |
| Paper and paperboard | 27 | 25 | 0.2 | -0.2 |
| Oil seeds, grains and | 18 | 16 | 0.0 | -0.2 |
| Tanning and dyeing | 14 | 12 | 0.2 | -0.1 |
| Organic chemicals | 15 | 7 | 1.0 | -0.6 |
| Others | 868 | 957 | 9.4 | 6.9 |
| **Total** | **1,285** | **1,331** | **16.4** | **3.6** |

Source: FBR

**4.3)**.[18] Moreover, a slight appreciation of exchange rate also offset the impact of higher import volumes on indirect taxes (**Chapter 5**). As a result, the growth in taxes collected at import stage decelerated to 13.2 percent in FY26 from 23.4 percent in FY25.

Despite this moderation, the base broadening measures provided some support to indirect taxes. These measures included the withdrawal of sales tax exemptions on import and supply of solar panels, and local supply of iron and steel scrap. Moreover, the scope of the sales tax was expanded to several imported items.[19] These tax rationalisation measures are a step in the right direction, as they would further help to reduce tax expenditure and strengthen the country's tax revenue **(Table 4.4**).

**Breakdown of Tax Expenditure** **Table 4.4**

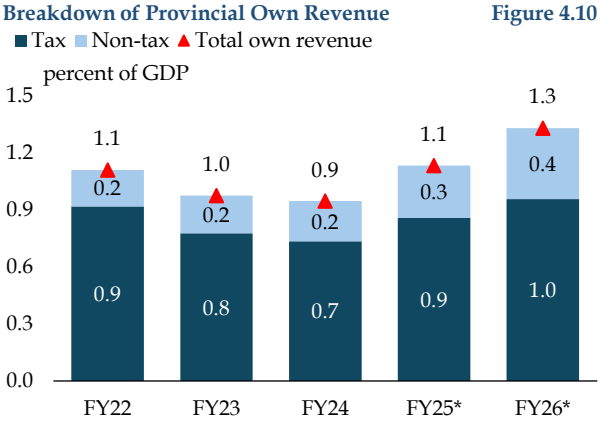
amount in billion Rupees

| | Amount | | Percent of GDP | |
|---|---|---|---|---|
| | FY24 | FY25 | FY24 | FY25 |
| Income tax | 545 | 580 | 0.5 | 0.5 |
| Sales tax | 1,237 | 1,274 | 1.1 | 1.0 |
| Customs duty | 652 | 499 | 0.6 | 0.4 |
| **Total** | **2,435** | **2,353** | **2.1** | **1.9** |

Note: Percent of GDP numbers are based on revised GDP

Source: FBR

**Breakdown of Provincial Own Revenue** **Figure 4.10**




* The numbers might not add up due to rounding off

Source: MoF

In recent years, revenue growth was mainly driven by higher tax rates, an effect that now appears to have faded. This suggests that, instead of relying on raising rates to bring additional revenue, broadening tax base is imperative to lift the low tax to GDP ratio and reduce reliance on regressive indirect taxes.[20]

***Provincial Taxes***

Provincial taxes increased for the second consecutive year to 1.0 percent of GDP in FY26 **(Figure 4.10)**. The improvement mainly stemmed from base broadening efforts, including withdrawal of exemptions on services and subjecting them under the respective general sales tax on services (GSTS) regime.[21] These measures are essential for strengthening provincial own revenue collection and contributing to national resource mobilisation.

**Non-Tax Revenue**

After maintaining the momentum for three consecutive years, non-tax revenue (NTR) declined to 4.4 percent of GDP in FY26 **(Figure 4.11)**. This was mainly due to lower SBP profit, which though surpassed budget estimates but was lower than FY25.[22] However, the robust POL sales

[18] However, in PKR terms, import of iron and steel, iron and steel scrap, plastics, and other chemicals recorded higher growth in FY26, while growth in import of paper decelerated compared to last year. Source: PBS

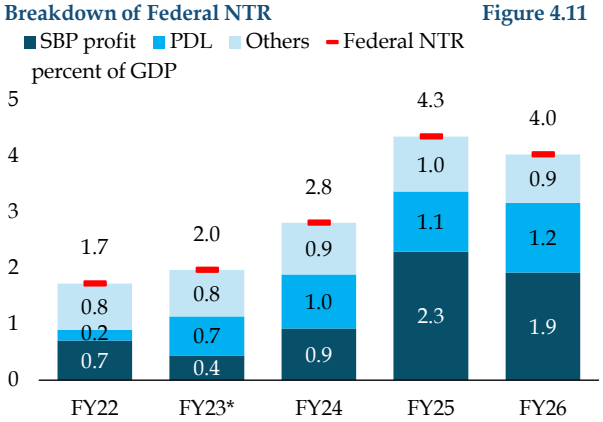
[19] These include imported pet food, chocolates, coffee and cereal bars that are sold in retail packing. Source: FBR

[20] For instance, Corporate Income Tax rate is 29 percent, which is higher than the optimal rate of 26 percent estimated for Pakistan. Source: Mehmood et al. (2022). Does Laffer Curve Exist in Tax Structure of Pakistan? A Threshold Regression Analysis. Journal of Economic Impact, Science Impact Publishers

[21] Source: Pakistan-IMF Second Review under the Extended Fund Facility, December 2025.

[22] The lower SBP profit can be attributed to decline in average interest rate in FY26.

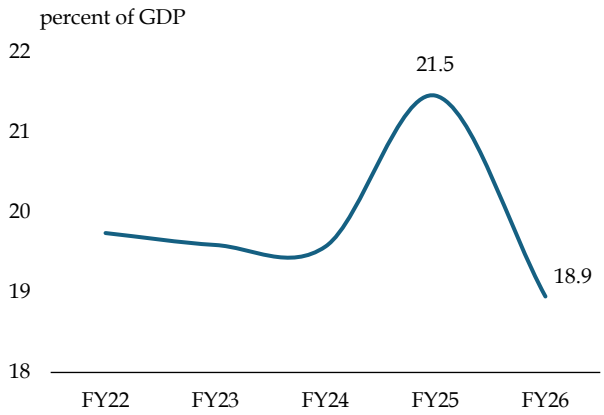
**Breakdown of Federal NTR** **Figure 4.11**




* The numbers might not add up due to rounding off

Source: MoF

**Total Expenditure** **Figure 4.12**




Source: MoF

and higher average PDL rate on petrol supported increase in PDL collection in FY26.[23]

The government increased PDL rates on petrol and HSD to compensate for lower tax collection amid the Middle East conflict in Q4-FY26. However, the government charged relatively higher levy on petrol and lower on HSD to minimise its inflationary implications.

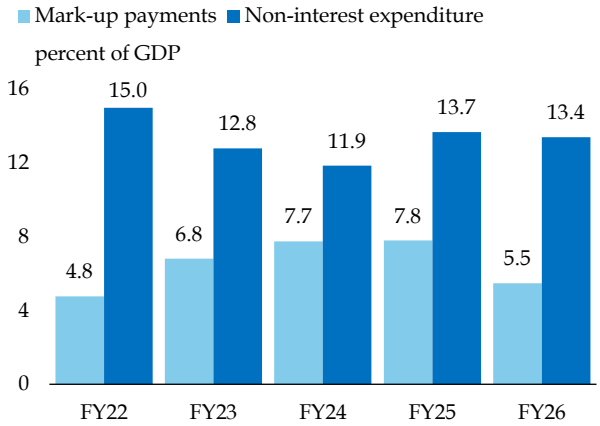
## 4.3 Expenditure[24]

Total expenditure declined to 18.9 percent of GDP in FY26 from 21.5 percent the previous year (**Figure 4.12**). This decline was mainly due to significant reduction in mark-up payments and restrained non-interest expenditure **(Figure 4.13 and Table 4.5)**.

**Interest Expenditures**

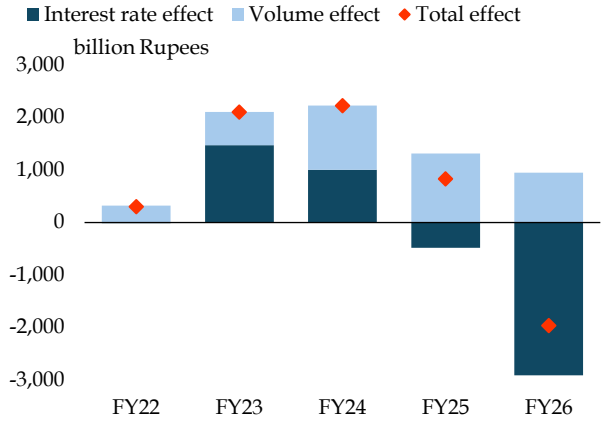
Markup payments fell by 2.3 ppt to 5.5 percent of GDP in FY26 (**Figure 4.13 and Figure 4.14**). The steep reduction in mark-up payments can be attributed to three factors: (i) decrease in average domestic interest rates following the decline in policy rate in FY25,[25] (ii) a deliberate transition towards fixed-rate instruments and zero-coupon long-term bonds, and (iii) early retirement of Rs

**Interest and Non-interest Expenditure** **Figure 4.13**




Source: MoF

**Change in Domestic Mark-up Payments** **Figure 4.14**




Sources: SBP staff calculations based on MoF; SBP

[23] HSD and petrol sales grew by 0.6 percent and 1.3 percent, respectively, in FY26. Average PDL rate on petrol increased from Rs 64.1 in FY25 to Rs 85.4 per litre to FY26, while average PDL rate on HSD fell from Rs 64.4 in FY25 to Rs 63.0 per litre in FY26. Source: OCAC; PSO & OGRA

[24] This section excludes statistical discrepancy, consistent with previous reports.

[25] Average policy rate fell to 11.0 percent in FY26 from 14.3 percent in FY25.

**Breakup of Consolidated Expenditure** **Table 4.5**

amount in billion Rupees, growth in percent

| | Amount | | Percent of GDP | | Growth | |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | FY25 | FY26 | FY25 | FY26 |
| **Total expenditure** | 24,494 | 23,940 | 21.5 | 18.9 | 18.6 | -2.3 |
| **1. Current expenditure (a+b)** | 21,529 | 20,686 | 18.9 | 16.4 | 15.9 | -3.9 |
| **(a) Federal** | 15,696 | 14,449 | 13.7 | 11.4 | 12.4 | -7.9 |
| Mark-up payments | 8,887 | 6,948 | 7.8 | 5.5 | 8.9 | -21.8 |
| Domestic | 7,997 | 6,030 | 7.0 | 4.8 | 11.6 | -24.6 |
| Foreign | 890 | 917 | 0.8 | 0.7 | -10.6 | 3.0 |
| Defense affairs and services | 2,194 | 2,588 | 1.9 | 2.0 | 18.0 | 17.9 |
| Pension | 911 | 1,002 | 0.8 | 0.8 | 12.8 | 10.0 |
| Running of civil government | 892 | 1,034 | 0.8 | 0.8 | 13.7 | 15.9 |
| Subsidies | 1,298 | 1,014 | 1.1 | 0.8 | 21.6 | -21.9 |
| Grants to others | 1,514 | 1,865 | 1.3 | 1.5 | 17.2 | 23.2 |
| **(b) Provincial** | 5,833 | 6,238 | 5.1 | 4.9 | 26.8 | 6.9 |
| **2. Development expenditure & net lending** | 2,966 | 3,254 | 2.6 | 2.6 | 42.7 | 9.7 |
| **(a) Total development expenditure** | 2,983 | 3,428 | 2.6 | 2.7 | 47.2 | 14.9 |
| PSDP | 2,983 | 3,428 | 2.6 | 2.7 | 47.2 | 14.9 |
| Federal | 786 | 727 | 0.7 | 0.6 | 23.7 | -7.4 |
| Provincial | 2,198 | 2,701 | 1.9 | 2.1 | 57.9 | 22.9 |
| **(b) Net lending to PSEs** | -18 | -174 | 0.0 | -0.1 | -134.2 | 886.8 |
| **Memorandum items:** | | | | | | |
| Non-interest (total) expenditure | 15,607 | 16,993 | 13.7 | 13.4 | 25.0 | 8.9 |
| Nominal GDP* | 114,177 | 126,360 | - | - | 8.2 | 10.7 |

* Revised GDP data is used from PBS.

Source: MoF

1.9 trillion debt to SBP.[26] The debt servicing during FY26 was around 15.3 percent lower compared to the budget estimates. This decrease in debt servicing played a key role in reducing the fiscal deficit.

**Non-Interest Expenditure (NIE)**

Non-interest expenditure fell from 13.7 percent to 13.4 percent of GDP in FY26 (**Figure 4.13**). The fall in NIE was led by decline in subsidies and reduced provincial expenditure.[27] However, the notable reduction in subsidies was offset by increases in grants and defense spending. Moreover, spending on pensions and running of civil administration remained almost unchanged in percent of GDP.

Development expenditure increased by 0.1 ppt to 2.7 percent of GDP in FY26. While federal PSDP declined and fell short of budgetary allocation, higher provincial spending more than offset the decline, with Punjab leading the increase, followed by Sindh, KPK and Balochistan. The priorities of provincial PSDP were community development, education, construction and transport, and agriculture, food, forestry and fishing. The federal government, on the other hand, cut PSDP to create room for providing energy relief to vulnerable segments amid the challenges posed by Middle East conflict in H2-FY26.

The decline in subsidies came from lower power sector subsidies, mainly to independent power producers (IPPs) (**Table 4.6**). In FY25, the government had paid an above average[28] subsidies to IPPs to reduce the circular debt. However, in FY26, the government arranged

[26] As a result of these factors, the government saved around Rs 1.97 trillion in domestic debt servicing in FY26 as compared to last year. Source: MoF

[27] From accounting perspective, reduction of provincial expenditure emanated from statistical discrepancy, if this discrepancy is set to zero, total expenditure would be at the last year's level.

[28] Average from FY22 to FY26.

**Breakup of Subsidies and Grants** **Table 4.6**

values in billion Rupees, share of budget and growth in percent

| | Actual Values | | Actual as percent of Budgeted | | Growth |
|---|---|---|---|---|---|
| | FY25 | FY26 | FY25 | FY26 | FY26 |
| **Subsidies** | | | | | |
| **Total** | **1,298** | **1,014** | **95.2** | **85.5** | **-21.9** |
| **Power subsidies** | **1,212** | **796** | **123.1** | **76.8** | **-34.3** |
| o/w: IPPs | 753 | 254 | 350.1 | 267.8 | -66.2 |
| AJK (TDS) | 80 | 87 | 73.8 | 117.0 | 8.5 |
| Inter-disco TDS | 288 | 379 | 104.3 | 152.0 | 31.5 |
| **Non-power subsidies** | **86** | **218** | **22.8** | **145.5** | **152.4** |
| **Others** | | | | | |
| PM austerity fund | - | 127 | - | - | - |
| | | | | | |
| **Grants to provinces** | **119** | **149** | **105.2** | **99.5** | **25.5** |
| **Grants to others** | **1,514** | **1,865** | **91.0** | **104.9** | **23.2** |
| BISP | 592 | 706 | 100.0 | 98.6 | 19.2 |
| AJK and GB | 173 | 225 | 100.0 | 102.1 | 29.9 |
| Charges for remittances | 65 | 120 | 100 | - | 84.9 |
| Daanish education trust | - | 55 | - | - | - |
| **Total grants** | **1,633** | **2,014** | **91.9** | **104.5** | **23.3** |

TDS: Tariff Differential Subsidy

Source: MoF; SBP staff calculations

financing of Rs 1.2 trillion from banking sector to settle outstanding dues related to circular debt.[29] As a result the government made significantly lower payments in subsidies to IPPs during FY26.

Non-power subsidies, on the other hand, recorded a notable increase on account of the PM's Austerity Fund, which aimed to provide targeted relief to vulnerable segments of the population in the face of Middle East conflict. Although this subsidy was not originally budgeted, the government neutralised its impact by taking additional measures and budgetary adjustments.

For this purpose, the government combined internal expenditure cuts, provincial burden-sharing, temporary austerity measures, and additional contribution from salaries of autonomous bodies' employees. Thus, the government was able to minimise the impact of relief measures on fiscal accounts in FY26, limiting subsidies to 0.8 percent of GDP.[30] This was unlike earlier shocks, such as from the Russia-Ukraine conflict, where subsidies ballooned from 0.8 percent in FY21 to 2.3 percent of GDP in FY22.

The containment of subsidies in FY26 not only reflects the moderation in IPP payments, but also a recalibration of compensation to new prosumers of distributed solar. The Prosumer Regulations 2026 introduced in February 2026, replaced one-to-one net-metering framework with a net-billing system that reduced the cross-subsidy burden on the power sector from new prosumer connections, contributing to the medium-term sustainability of power sector finances. The design, fiscal implications, and international precedents for this transition are discussed in **Box 4.3**.

A part of the fiscal space thus created was utilised for enhancing grants. The increase in grants was led by BISP,[31] followed by reimbursement of charges for remittances and Daanish education trust. The robust inflows of remittances in FY26, along with the inclusion of exchange companies in the reimbursement programme, contributed to higher reimbursement grants.[32] The objective of grants related to Daanish education trust was expansion of Daanish schools in other provinces.[33]

Provincial expenditure also declined to 6.8 percent in FY26 from 7.0 percent of GDP in FY25. The decline was due to current expenditure, while development expenditures increased from 1.9 to 2.1 percent of GDP in FY26 as provincial governments continued to increase their allocations for development programmes and projects (**Figure 4.15)**.

Provincial current expenditure fell to 5.0 percent of GDP in FY26 – a decline of 0.2 ppt of GDP. This

[29] The financing agreement includes the restructuring of Rs 660 billion in existing loans and Rs 565 billion in fresh financing to clear overdue payments to power producers. Importantly, this arrangement introduces no new burden on consumers, as repayments will be serviced through the already levied surcharge of Rs 3.23 per unit. Source: Press Information Department (PID), GoP

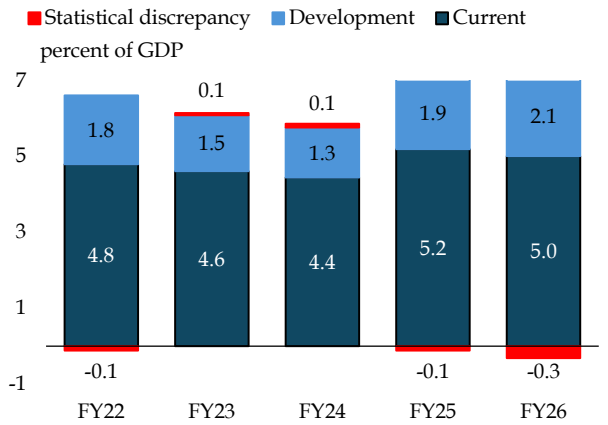
[30] Subsidies fell from 1.1 percent of GDP in FY25.

[31] An inflation adjustment was undertaken in the unconditional cash transfers (UCT) under Kafaalat programme in January 2026, along with planned expansions in Kafaalat and conditional cash transfer programmes - IMF (2026)

[32] Source: EPD Circular Letter No. 4 of 2025

[33] For example, 6 new Daanish schools were approved in Balochistan in FY26. Source: MoPD&SI

**Provincial Disaggregated Expenditures** **Figure 4.15**




Source: MoF

was due to reduced expenditure on General Public Services and Economic Affairs (in terms of GDP). Punjab, KPK and Balochistan spent less than the budgeted amount for General Public Services, while Punjab, Sindh and KPK underutilised their budget for economic affairs. This reduction in current expenditure was matched by an increase in development spending, with major spending on housing and community amenities. Sindh and Balochistan dedicated more spending towards social protection, with 47 and 15 percent of their actual development spending in this category.[34] Despite this increase in development spending, consolidated provincial utilisation was around 88 percent of the budgeted amount.

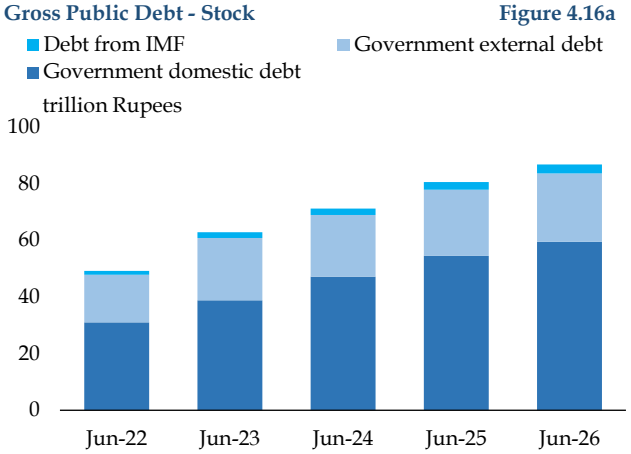
This underutilisation reflects efforts to support federal government efforts in providing energy relief to underserved segments, where provinces shared the burden of relief with the federal government.[35]

Nonetheless, provinces have steadily increased their PSDP expenditure since FY24, which along with contribution to the much-needed investment would also translate into increased job creation. SBP staff estimates show that development spending has relatively higher positive impact on employment (**Box 4.1**).

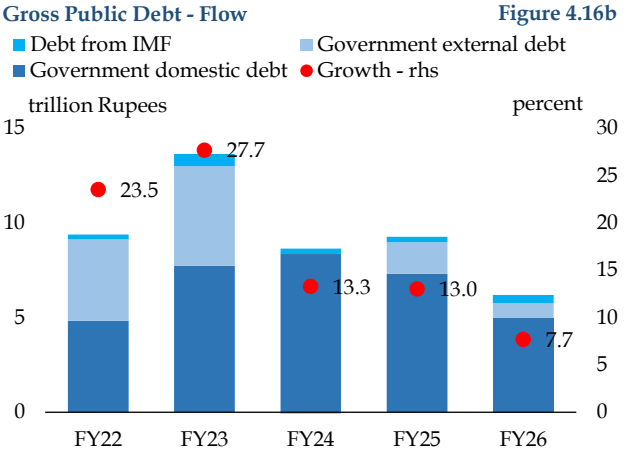
## 4.4 Public Debt

The pace of accumulation in public debt slowed significantly to 7.7 percent during FY26, from 13.0 percent in FY25, and last five years' average of 17.4 percent (**Figure 4.16a, Figure 4.16b and Table 4.7**).[36] The slowdown was broad-based across domestic and external debt. Following slowdown in public debt accumulation and improvement in macroeconomic conditions, debt to GDP ratio also declined to 68.6 percent by the end of FY26 from 70.5 percent at the end of previous fiscal year. The decomposition of change in public debt to GDP ratio depicts that the major contribution came from moderate inflation and a notable primary surplus, followed by better economic growth,

**Gross Public Debt - Stock** **Figure 4.16a**




**Gross Public Debt - Flow** **Figure 4.16b**




Source: SBP

[34] In contrast, Punjab and KPK spent 1 percent and 2 percent in this category, respectively.
[35] Provinces contributed around 48 percent to energy relief fund. Source: Finance Division, MoF
[36] Average of FY21-FY25.

**Summary of Pakistan's Debt and Liabilities** **Table 4.7**

stock and flow in billion Rupees, growth in percent

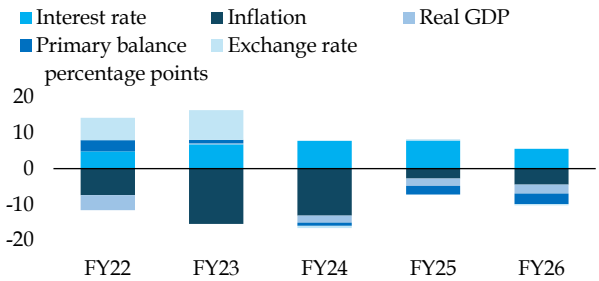
| | Stock | | | Flow | | Growth | |
|---|---|---|---|---|---|---|---|
| | Jun-24 | Jun-25 | Jun-26 | FY25 | FY26 | FY25 | FY26 |
| **Total debt & liabilities** | **87,122** | **96,041** | **101,301** | **8,919** | **5,260** | **10.2** | **5.5** |
| **Gross public debt (I+II+III)** | **71,246** | **80,518** | **86,715** | **9,272** | **6,197** | **13.0** | **7.7** |
| I. Government domestic debt | 47,160 | 54,472 | 59,441 | 7,311 | 4,970 | 15.5 | 9.1 |
| II. Government external debt | 21,754 | 23,417 | 24,201 | 1,663 | 784 | 7.6 | 3.3 |
| III. Debt from IMF | 2,332 | 2,630 | 3,073 | 298 | 443 | 12.8 | 16.8 |
| IV. External liabilities | 3,266 | 3,392 | 2,414 | 127 | -978 | 3.9 | -28.8 |
| V. Private sector external debt | 5,467 | 5,253 | 5,253 | -214 | 1 | -3.9 | 0.0 |
| VI. PSEs external debt | 2,068 | 2,200 | 2,184 | 132 | -16 | 6.4 | -0.7 |
| VII. PSEs domestic debt | 2,105 | 2,016 | 2,238 | -89 | 223 | -4.2 | 11.0 |
| VIII. Commodity operations | 1,378 | 1,067 | 1,009 | -312 | -58 | -22.6 | -5.4 |
| IX. Intercompany external debt | 1,592 | 1,595 | 1,487 | 3 | -108 | 0.2 | -6.8 |
| | *percent of GDP* | | | | | | |
| Gross public debt | 67.5 | 70.5 | 68.6 | - | - | - | - |
| Government domestic debt | 44.7 | 47.7 | 47.0 | - | - | - | - |
| Government external debt | 22.8 | 22.8 | 21.6 | - | - | - | - |
| Total external debt and liabilities | 34.6 | 33.7 | 30.6 | - | - | - | - |

Source: SBP

reduction in effective interest rate and PKR appreciation against US dollar, respectively **(Figure 4.17)**.

Public debt profile also improved owing to higher issuance of medium- to long-term securities during FY26**.** As a result, refinancing and interest rate risks declined, supported by longer ATM and an increased share of fixed-rate securities. In addition, the investors' base was broadened through gradual increase in the share of Sukuk in government securities.[37]

**Major Factors Contributing to Change in Gross Public Debt to GDP*** **Figure 4.17**




*Based on methodology of Escolano, J. (2010). *A practical guide to public debt dynamics, fiscal sustainability, and cyclical adjustment of budgetary aggregates* (Vol. 2). Washington, DC: International Monetary Fund

Source: SBP staff calculations

Furthermore, the sizeable reduction in fiscal deficit, higher foreign exchange earnings and the significant build-up in SBP FX reserves have improved repayment capacity of the government and solvency indicators. Nonetheless, the liquidity indicators deteriorated mainly due to reclassification of external long-term bilateral and commercial loans to short-term during FY26.

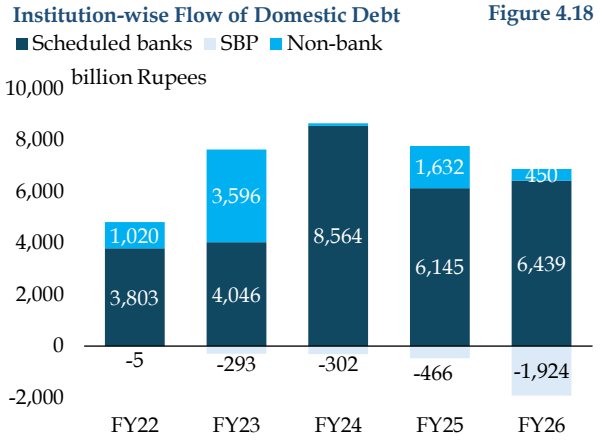
### Domestic Debt

Growth in domestic debt decelerated to 9.1 percent during FY26, from 15.5 percent in FY25.[38] This deceleration can be attributed to notable decline in interest payments and consistent increase in primary surplus. Moreover, buyback of the government securities and early retirement of

[37] Share of non-bank (including provincial government) in domestic government securities increased to 21.7 percent by end FY26 from 21.1 percent in FY25. Since its inception in December 2023, total issuances (realised value) of Shariah-compliant government securities amounted around Rs 6 trillion till end FY26. Source: SBP and PSX

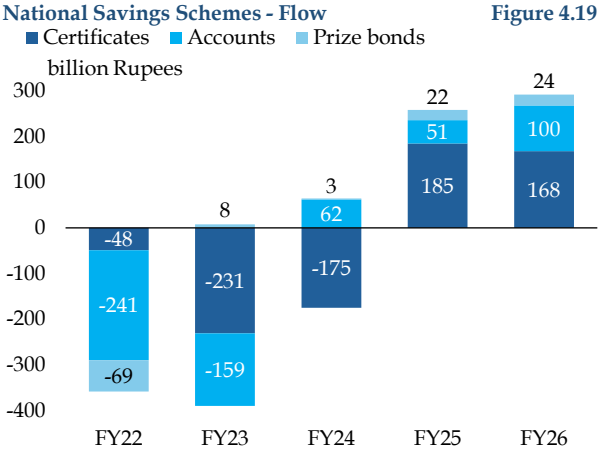
[38] The stock of domestic debt reached Rs 59.4 trillion, by end FY26.

**Institution-wise Flow of Domestic Debt** **Figure 4.18**




Source: SBP

**National Savings Schemes - Flow** **Figure 4.19**




Source: SBP

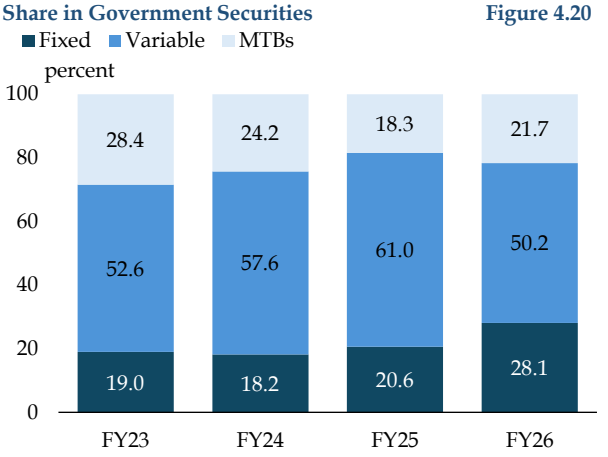
some of the SBP debt also contained growth in domestic debt during FY26.[39, 40]

Domestic debt was mainly raised from commercial banks as non-bank financing witnessed lower increase whereas the government continued to make net retirement to SBP during FY26 **(Figure 4.18)**. The relatively higher borrowing from the banks in FY26 reflects the reversal of ADR-linked tax on banks' income from government securities, in which, banks (to improve their ADR ratios) lent to NBFIs, which then invested in government securities. This was reflected in a significant increase in budgetary financing from non-bank sources in H1-FY25 and retirement in H2-FY25.

Nonetheless, within the non-bank sources, the government raised relatively higher financing from National Savings Schemes (NSS) including prize bonds **(Figure 4.19)**.[41] The investment in NSS during FY26 was mainly concentrated in Behbood Savings Certificates (BSC), Regular Income Certificates (RIC) and Pensioners Benefit Account (PBA).

An important aspect of the improvement in public debt was significant increase in the share of fixed rate securities and higher proportion of domestic borrowing through Sukuk **(Figure 4.20)**.[42] Within PIBs, the proportion of fixed rate PIBs increased to 40.4 percent by end of FY26 from 29.3 percent at end of FY25. This rising share of fixed rate instruments bodes well for containing interest rate risk and easing the problem of domestic original sin - a concept generally defined as country's inability to borrow in local currency at longer

**Share in Government Securities** **Figure 4.20**




Source: SBP

[39] Buyback amounted to Rs 996 billion in FY26 compared to Rs 1,299 billion in FY25. The government also retired Rs 1.9 trillion to SBP during FY26. Source: SBP

[40] The government used SBP profit to retire its debt to lower gross financing requirements. This strategy aligns with IMF programme, which mandates debt retirement in case of SBP profit exceeding 1.0 percent of GDP in any fiscal year. Source: Pakistan-IMF First Review under the Extended Fund Facility, May 2025.

[41] NSS registered net inflows of Rs 268.5 billion during FY26, higher than Rs 236.5 billion in the previous year. Source: SBP

[42] Around 35 percent of the increase in domestic debt and liabilities was contributed by Sukuk during FY26, higher than 20.4 percent in the same period last year.

maturities with a fixed interest rate (**Box 4.2 in the State of Pakistan's Economy, Annual Report FY2024-25**). Moreover, relatively lower interest rates on long term instruments during FY26 also helped the government to contain domestic debt servicing (**Figure 4.21**). Besides, the government expanded the available pool of government debt instruments, especially that of Shariah-compliant and diversified the sources of financing (**Box 4.2**).

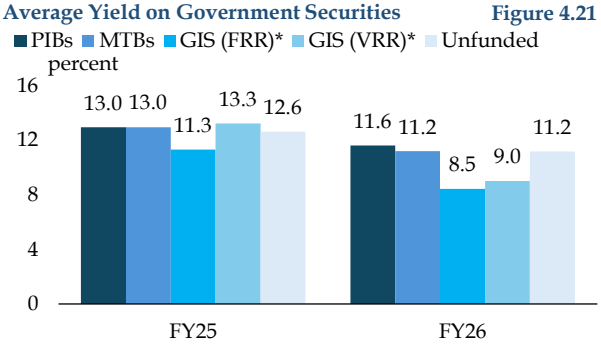
As the government raised financing via longer-tenor securities, the maturity profile of domestic debt further improved during FY26. The overall ATM of domestic debt improved to 3.9 years by end March 2026 from 3.8 years in June 2025 **(Figure 4.22)**.[43]

Nonetheless, after February 2026, investors' preferences shifted towards shorter-tenor instruments amid increased uncertainty associated with the Middle East conflict. As a result, the share of MTBs (in incremental domestic debt) rose from 17.0 percent in Jul-Feb FY26 to 65.4 percent in Mar-Jun FY26.

**Domestic Debt Servicing**

Amid the decline in domestic interest rates, servicing of domestic debt dropped to Rs 6.0 trillion during FY26 from Rs 8.1 trillion in the last year **(Figure 4.23)**. The reduction mainly came

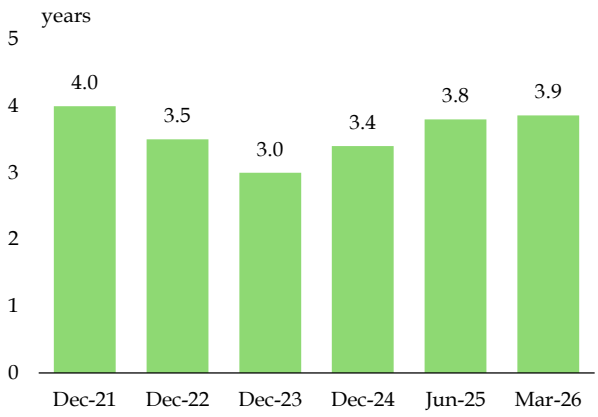
**Average Yield on Government Securities** **Figure 4.21**




Note: PIB= Pakistan investment bond; MTB= Market treasury bill; GIS= Government Ijarah sukuk; FRR= Fixed rental rate; VRR= Variable rental rate
* Estimated from cutoff rates
Sources: SBP; PSX

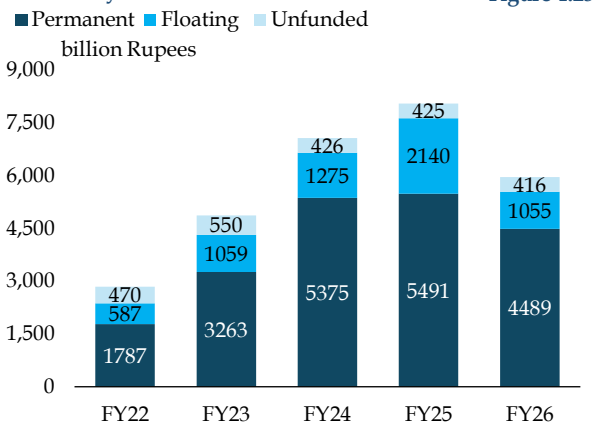
from a notable decrease in interest payments on floating debt, followed by permanent debt. Within the floating debt, significant reduction was registered in interest payments against 12-month T-bills. Likewise, owing to its high share in domestic debt, the reduction in interest payments against permanent debt was mainly associated with PIBs. The reduction in interest payments on unfunded debt majorly emanated from Defence Saving Certificates (DSCs).[44] Moreover, buybacks and early retirement of government securities also reduced the interest cost. As a result of decline in debt servicing cost, the domestic debt repayment capacity of the government substantially improved during FY26 **(Figure 4.24).**[45]

**Average Time to Maturity of Domestic Debt** **Figure 4.22**




Source: MoF

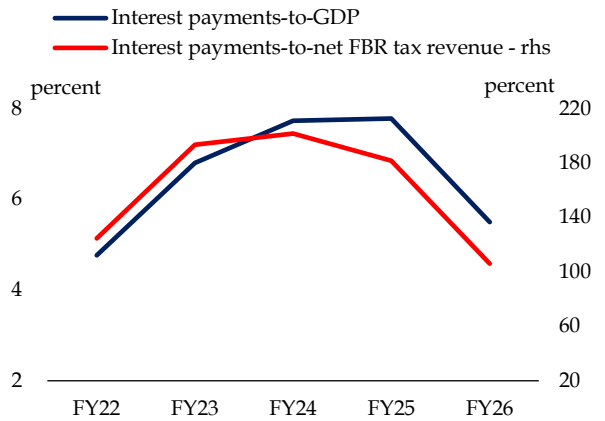
**Interest Payments on Domestic Debt** **Figure 4.23**




Source: SBP

[43] Economic Survey 2025-26.
[44] Interest payments on unfunded debt dropped to Rs 26.7 billion during FY26 from Rs 61.1 billion in the previous year. Source: SBP
[45] The repayment capacity is proxied by Domestic Interest Payments (DIP) to net FBR taxes and DIP to Gross Domestic Product.

**Repayment Capacity of the Government** **Figure 4.24**



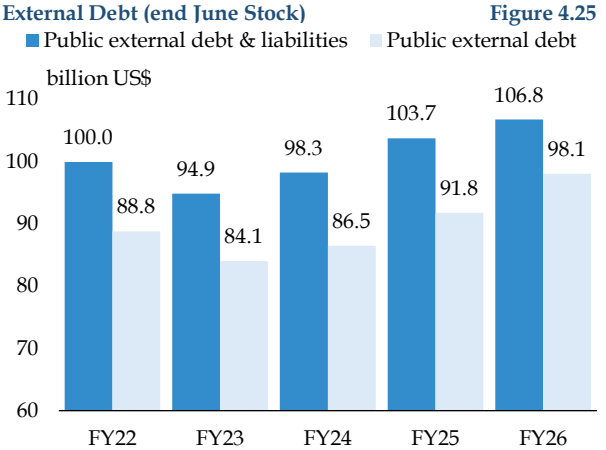

Sources: MoF; SBP

**Public External Debt and Liabilities**

Public external debt and liabilities (PEDL) rose by US$ 3.0 billion in FY26 to US$ 106.8 billion by end-June 2026, which was lower than US$ 5.5 billion increase last year. The repayment of external liabilities (central bank deposits) of US$ 3.5 billion contained the total increase in PEDL during FY26. However, Public External Debt (PED) rose by US$ 6.3 billion during FY26, compared to US$ 5.3 billion in the previous year **(Figure 4.25)**.[46]

The increase in PED was mainly on account of US$ 1.8 billion from IMF, followed by US$ 1.6 billion loans from multilateral creditors. Moreover, investment in Naya Pakistan Certificates (NPCs) and local currency debt securities also recorded an uptick in FY26. On the other hand, principal repayment to NPC holders, multilateral creditors, commercial loans and Eurobonds substantially contained the pace of PED accumulation. Currency movement also turned favourable, as appreciation of US dollar against other currencies, reduced PED by US$ 369 million in FY26. Furthermore, short-term public external debt increased by US$ 9.1 billion during FY26. This largely reflected reclassification of US$ 8.5 billion long-term bilateral and commercial loans into short-term debt during FY26.[47]

**External Debt (end June Stock)** **Figure 4.25**




Source: SBP

**External Disbursements**

Amid improving macroeconomic conditions and progress under the IMF programme, external disbursements increased to US$ 16.2 billion during FY26, compared to US$ 12.1 billion in the previous year. Multilateral creditors remained the largest source of external disbursements, followed by investment in NPCs, time deposits from a friendly country, loans from commercial banks and bilateral sources. Within multilateral sources, Asian Development Bank (ADB), International Development Association (IDA) and Islamic Development Bank (IsDB) contributed around 86 percent of multilateral loans. Moreover, Saudi Arabia, China and Denmark provided the major chunk of bilateral loans for external financing during FY26.

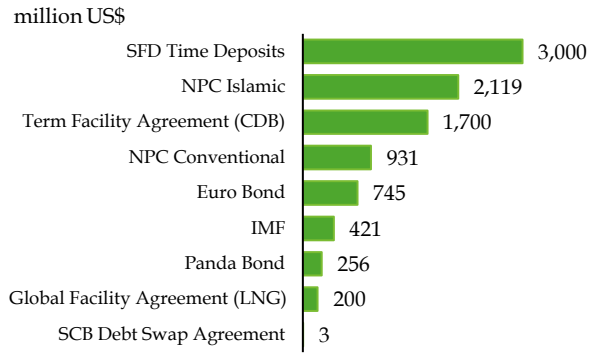
The rise in external disbursements reflects improved confidence of external creditors and investors after continued progress on reforms and better outlook of the economy as manifested in Pakistan's rating upgrades by international rating agencies (**Chapter 5**).

Breakdown of external disbursements by purpose depicts that around 80 percent of the loans were provided for non-project financing. Within the non-project financing, the predominant portion of US$ 9.4 billion (73.7 percent of total non-project disbursements) was meant to provide budgetary

[46] Owing to the repayment of US$ 3.5 billion external liabilities, the accumulation in PEDL remained lower than the rise in PED. Source: SBP

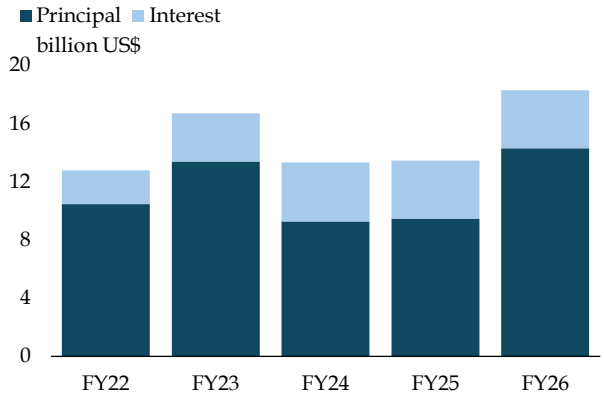
[47] Previously, some of the bilateral shorter-tenor (up to one year) time deposits placed for a fixed term were classified as long term.

**Disbursements for Budgetary Support in FY26** **Figure 4.26**




Note: SFD= Saudi fund for development; CDB=China development bank; SCB= Standard chartered bank
Source: SBP

**Debt Servicing of PEDL*** **Figure 4.27**




* Public external debt & liabilities
Source: SBP

support **(Figure 4.26)**. Whereas the project-wise composition of external disbursements indicates that these loans are scattered across various projects led by flood-related reconstruction activities and power generation.

A relatively higher portion of funding was disbursed to the Sindh Flood Housing Reconstruction Project, which aims to reconstruct and restore 350,000 housing units damaged during the 2022 floods. In parallel, multilateral institutions provided support for both the Sindh Flood Emergency Rehabilitation and the Sindh Emergency Housing Reconstruction Projects.

These initiatives primarily focused on restoring infrastructure, recovering essential services, and rebuilding homes particularly for vulnerable and low-income households. Beyond immediate flood recovery, inflows were directed toward long-term development projects: the Dasu Hydropower Transmission Line to expand hydropower capacity, the Pakistan Multi-Mission Communication Satellite System to strengthen national communication networks, and the Second Power Transmission Enhancement Investment Programme to improve country's electricity grid (**Table 4.8**).

### External Debt Servicing

External debt servicing (including principal and interest payments) was higher at US$ 18.3 billion during FY26 compared to US$ 13.5 billion in the previous year **(Figure 4.27)**. The increase in repayment against PED is mainly driven by principal repayments to multilateral creditors, NPC holders, Eurobond holders, and commercial creditors. In addition, repayment of foreign exchange liabilities (central bank deposits) of US$ 3.5 billion remained the major component of principle repayment during FY26.

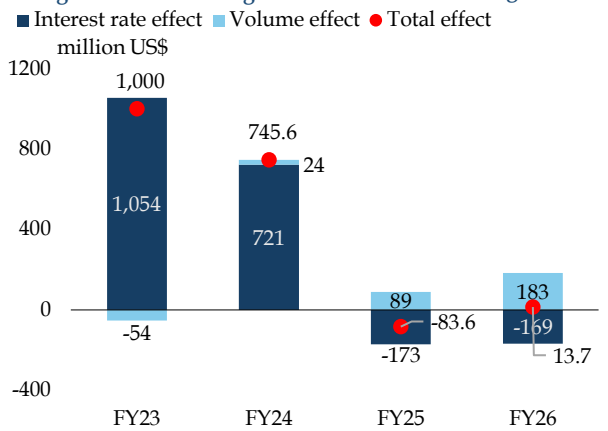
Interest payments, including expense against liabilities, amounted to US$ 3.9 billion, up by US$ 13.7 million compared to FY25. Major payments

**Purpose of External Disbursements** **Table 4.8**
million US$

| Purpose | Type | Grants | Loans | Total |
|---|---|---|---|---|
| Non-project | Budgetary support | 3 | 9,371 | 9,374 |
| | IsDB (short term) | | 1,019 | 1,019 |
| | Programme | 44 | 1,285 | 1,329 |
| | SFD oil facility | | 1,000 | 1,000 |
| | **Sub total** | **47** | **12,676** | **12,723** |
| Project | Sindh housing reconstruction | | | 268 |
| | Dasu hydro transmission line | | | 130 |
| | Pakistan-MM1 satellite | | | 98 |
| | Sindh emergency house reconstruction | | | 96 |
| | Flood assistance | | | 71 |
| | Jamshoro power generation | | | 63 |
| | SEC power transmission enhancement | | | 60 |
| | CAREC corridor | | | 57 |
| | **Sub total*** | **102** | **3,333** | **3,435** |
| | **Grand Total** | **150** | **16,008** | **16,158** |

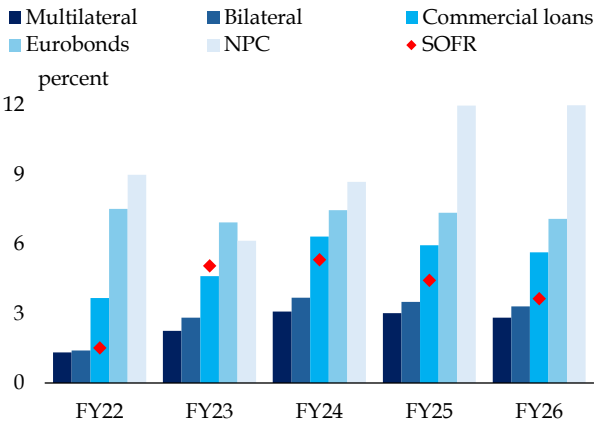
* Includes all projects
Source: EAD

**Change in Debt Servicing of PEDL** **Figure 4.28**




Source: MoF

**Effective Interest Rates on Public External Debt** **Figure 4.29**




Source: SBP

were made to multilateral creditors, bilateral sources, Eurobonds and commercial loans. Additionally, interest payments to IMF and on central bank deposits also added to the overall interest expense on public external debt and liabilities.

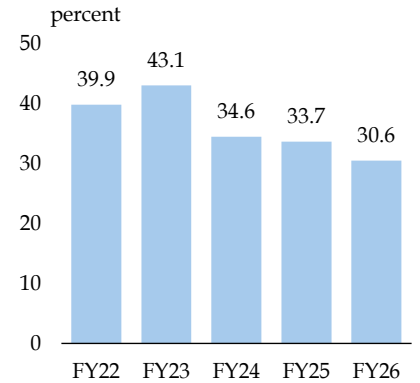
The increase in interest payments can be attributed to the volume effect **(Figure 4.28)**. The effective interest rates across most of the external debt categories, barring NPCs, declined during FY26. This reflected the downward trend in global interest rates, as indicated by Secured Overnight Financing Rate (SOFR) **(Figure 4.29)**.

**External Debt Sustainability**

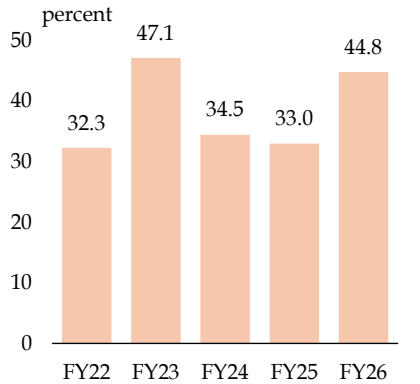
External debt sustainability indicators posted a mixed picture during FY26. The solvency indicator, measured by Total External Debt and Liabilities (TEDL) to Gross Domestic Product (GDP) ratio, continued its declining trend, indicating improvement in external debt sustainability. In contrast, the other two indicators, i.e., External Debt Servicing (EDS) to Foreign Exchange Earnings (FEE) and EDS to Exports Earnings (EE), reflect deterioration in repayment capacity. The latter could be attributed to higher external debt servicing, mainly principal repayment of US$ 3.5 billion foreign exchange liabilities, during FY26 **(Figure 4.30a, 4.30b and 4.30c).**

Moreover, liquidity indicators based on Short-term Public External (STPED) to Public External Debt & Liabilities (PEDL) and STPED to SBP FX reserves, also suggest deterioration in external

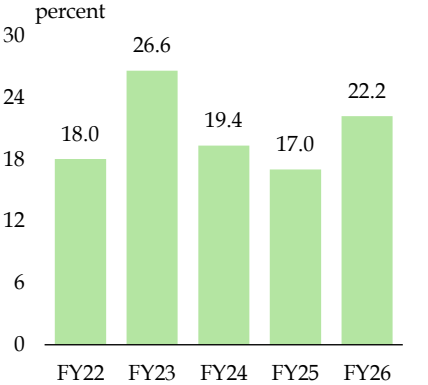
**TEDL as percent of GDP** **Figure 4.30a**




**EDS as percent of EE** **Figure 4.30b**




**EDS as percent of FEE** **Figure 4.30c**




Note: TEDL= Total external debt & liabilities; EDS= External debt servicing; EE= Export earnings; FEE= Foreign exchange earnings

Source: SBP

debt sustainability (**Table 4.9**).[48] The deterioration mainly emanated from the reclassification of US$ 8.5 billion long-term loans into short-term debt during the period under review and needs careful interpretation in the backdrop of a significant build-up in SBP FX reserves and improved economic conditions.

**Liquidity Indicators** **Table 4.9**

| | FY22 | FY23 | FY24 | FY25 | FY26 |
|---|---|---|---|---|---|
| STPED/PEDL | 1.3 | 0.2 | 0.8 | 0.7 | 9.2 |
| STPED/total reserves (liquid) | 8.7 | 1.7 | 5.4 | 3.8 | 42.3 |
| STPED/SBP reserves | 13.7 | 3.6 | 8.1 | 5.1 | 53.5 |

Source: SBP

**Box 4.1: Composition of Government Spending and Employment Generation in Pakistan**

Employment remains a persistent economic challenge in Pakistan. While private sector plays a key role in generating employment opportunities across the world, the role of government is also important in developing countries like Pakistan. The literature shows that government spending can generate employment, however, its magnitude depends on composition of public spending, and the sectors that ultimately benefit from the spending. This is usually referred to as multiplier impact on growth that may translate into higher employment.

The literature shows that government spending can generate employment through several interconnected channels. First, public investment creates direct or first-round employment by increasing demand for labour through government-funded projects, such as development in physical infrastructure, with the impact on employment depending on the size, sectoral composition and labour intensity of spending (IMF, 2020, Antonopoulos et al., 2010). Second, spending generates indirect or second-round employment, as contractors and sub-contractors place orders for inputs and intermediate goods and their manufacturers hire additional workers. These jobs can further increase household consumption, generating spillover demand and additional employment across the economy (Wilson, 2012). For example, in case of Pakistan, the Ministry of Planning estimated that development spending led to 289,153 direct and 424,052 indirect employment opportunities during FY26.

To assess the impact of government spending on employment, we estimated spending multipliers and employment elasticities with respect to real GDP (Jha, 2009; PIDE, 2019; SBP, 2026). The results suggest that government spending has become increasingly less effective in generating employment over time, with fewer jobs generated for every one percent increase in spending. Consistent with the existing literature, development spending was found to be relatively more effective in generating jobs than current spending in Pakistan (**Table 4.1.1**). During 2000-25, results depict that a one percent increase in current and development expenditures may increase employment by 0.03 percent and 0.05 percent, respectively.

**The Impact of 1 percent Increase in Government Spending on Employment** **Table 4.1.1**

| Scenario | 1972-78 | 1978-87 | 1990-00 | 2000-10 | 2011-18 | 2000-18 | 2000-25 |
|---|---|---|---|---|---|---|---|
| **Elasticity and multiplier values** | | | | | | | |
| a) Current spending multiplier | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 |
| b) Development spending multiplier | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 |
| c) Employment elasticity of growth | 0.64 | 0.36 | 0.41 | 0.23 | 0.25 | 0.20 | 0.11 |
| **Impact on employment (percent)** | | | | | | | |
| d) Current expenditure (a)*(c) | 0.15 | 0.09 | 0.10 | 0.06 | 0.06 | 0.05 | 0.03 |
| e) Development expenditure (b)*(c) | 0.27 | 0.15 | 0.17 | 0.10 | 0.11 | 0.08 | 0.05 |

Source: SBP staff calculations

Conversely, to push employment by 1 percent, current and development expenditure should be increased by 17.0 percent and 12.0 percent, respectively. This suggests that development expenditure would likely be relatively more effective from an employment perspective. The results are consistent with the literature. For example, Antonopoulos et al. (2010) estimates that a US$ 50 billion investment in social care would generate around 1.2 million jobs, compared with 556,000 jobs from an equivalent investment in infrastructure construction, showcasing that the composition of spending is an important determinant of employment creation.

[48] Adjusting for reclassified short-term debt back into long term debt, the liquidity indicators reflect slight deterioration.

The results imply that the fiscal consolidation should be characterised with reduction in current expenditure rather than development expenditure for sustained employment generation in Pakistan.

**The contribution of Muhammad Musab Imran and Ali Ahmed Shah is acknowledged in writing this box.*

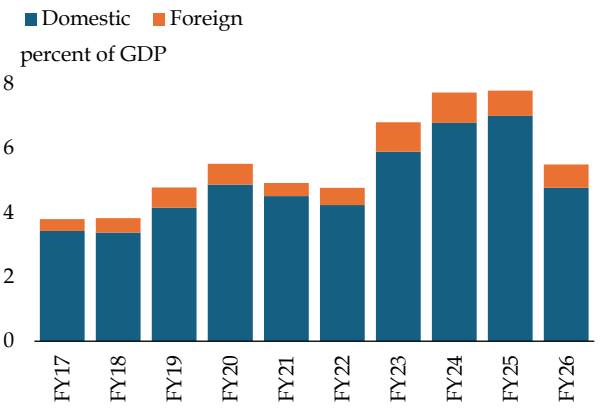
**References**

i. Antonopoulos, R., Kim, K., Masterson, T., & Zacharias, A. (2010). Investing in Care: A Strategy for Effective and Equitable Job Creation. Bard College Levy Economics Institute Working Paper, (610)
ii. International Monetary Fund. (2020). Fiscal monitor: Policies for the Recovery. International Monetary Fund. https://doi.org/10.5089/9781513552705.089
iii. Jha, V. (2009). The Effects of Fiscal Stimulus Packages on Employment. Employment Working Paper No.34, International Labour Office.
iv. Wilson, D. J. (2012). Fiscal Spending Jobs Multipliers: Evidence from the 2009 American Recovery and Reinvestment Act. *American Economic Journal: Economic Policy*, 4(3), 251-282.
v. Ministry of Planning, Development & Special Initiatives (2026). Monthly Development Update, Government of Pakistan.

**Box 4.2: Expanding the Pool of Public Debt Instruments and Diversifying the Sources of Financing**

Pakistan has navigated a challenging macroeconomic environment characterized by high inflation and a tight monetary policy stance in recent years. This has led to rising public debt servicing (**Figure 4.2.1**). Moreover, the share of variable rate bonds in government domestic securities rose to 61.0 percent by end of FY25, which raised sensitivity of government securities to changes in interest rates. The government heavily financed its budget deficit through the banking system—ranging from 74.0 percent to 99.9 percent of budgetary needs during the last two years i.e., FY24 to FY25. This concentration not only increased banks' balance sheet exposure to government but also squeezed space for expansion in private sector credit.

**Trend in Debt Servicing Expenditure of Pakistan** **Figure 4.2.1**




Source: MoF

To address these challenges, the government introduced specialised instruments designed to manage cash flow and diversify the funding sources. These are discussed below:

1. **Long-term Zero-Coupon Bonds:** The issuance of 2-year, 15-year zero-coupon Pakistan Investment Bonds (PIBs) and 10-year zero-coupon fixed-rate Sukuk allowed the government to defer interest and profit payments until the maturity. Since its introduction on May 29, 2025, the government has issued fixed rate-zero coupon Sukuk of around Rs 176 billion (realised value), while it raised Rs 678 billion and Rs 801 billion (realised amount) from fixed rate-zero coupon PIBs (2 and 10-year combined) in FY25 and FY26, respectively. These bonds offer an attractive avenue to long-term institutional investors, such as insurance companies and pension funds.

2. **Fixed Rate Ijarah Sukuk Issued at Discount:** These instruments offer a shariah-compliant alternative to treasury bills and are available up to 1-year tenors. From its first issuance in December 2023 till March 2026, these Sukuk were issued on Ijarah structure. However, from April 2026 onwards, these Sukuk are available on Hybrid Structure (Ijarah and Commodity Murabaha). The government mobilised Rs 826 billion (realised value) in FY26, compared to Rs 455 billion in FY25, which reflects the increasing acceptability of this instrument among market participants.[49]

[49] Detailed transaction structure is available at: https://www.psx.com.pk/psx/themes/psx/uploads/1-Year-Fixed-Rate-Discounted-GIS-Transaction-Structure-18-03-26.pdf and https://www.psx.com.pk/psx/themes/psx/uploads/3--6-Month-Short-term-GHS-Transaction-Structure-17-07-26.pdf

3. **Government Hybrid Sukuk:** The government launched the Government Hybrid Sukuk (GHS) on April 17, 2026. The GHS combines Murabaha (cost-plus-profit) and Ijarah (lease-based) structures. The GHS allows the government to leverage limited physical assets while accessing large-size funding and offers a sustainable financing instrument to manage debt. This instrument is also helpful for promotion of Shariah-compliant finance.

4. **Green Sukuk:** Combining shariah-compliant mechanism with environment, sustainability and governance (ESG) principles, the government issued its first Green Sukuk amounting to around Rs 32 billion on May 19, 2025, which received an overwhelming response from investors. Resources from these instruments aim at building resilience of the economy against climate and transition towards a green economy. Besides climate considerations, it is expected to help in promoting the Islamic capital market by targeting climate sensitive investors.

5. **Broadening the Investors' base via digital platforms:** A key pillar of the diversification strategy is the transition of "sophisticated investors" away from traditional bank deposits toward direct government securities. SBP launched a Web Portal named 'InvestPak', to digitise the process of investment in government securities for individuals and corporate customers, maintaining PKR accounts with banks.[50] On July 06, 2026, SBP formally launched the **"InvestPak"** a dedicated web portal and mobile application ecosystem to allow retail and corporate investors to invest directly in government securities.[51] To encourage this shift, effective August 1, 2026, SBP restricted the applicability of minimum deposit rate on saving deposits of individuals with balances under PKR 10 million.[52]

6. **Encouraging micro savings**: In late FY26, the government in collaboration with SBP and microfinance banks allowed digital wallet holders to invest in government securities. Customers having a digital wallet such as JazzCash can invest a minimum of Rs 5,000 in treasury bills. This effort represents an important step in broadening the investors' base of government securities and allowing retail investment in government securities.

7. **Re-entry into international capital markets:** Building on improved credit ratings in FY26 and August 2026, Pakistan successfully ended a four-year hiatus from international capital markets by issuing Eurobonds and first ever Panda Bonds and Eurobonds.[53] This is expected to diversify foreign currency borrowing and reinforce foreign exchange buffers against external shocks (**Chapter 5**).

8. **Global Medium-Term Note (GMTN) programme**: Pakistan launched an enhanced Global Medium-Term Note (GMTN) programme in May 2026 and in July 2026. The programme aims to broaden Pakistan's global investor base, optimise sovereign borrowing costs, and reinforce its long-term presence in international debt markets. In this regard, Pakistan has selected international bank consortium to lead a three-year tenure programme. The GMTN program would enable frequent international debt issuances over a multi-year horizon. The programme covers issuance of conventional Eurobonds, Islamic financing instruments, and PKR-denominated USD-settled bonds.

**Implications:** While the introduction of new debt instruments and diversification of financing sources are steps in the right direction, greater acceptability of these instruments would depend on financial literacy among public. Investing in government securities is different from traditional saving accounts. To make informed decisions, it is important for investors to understand various aspects of investing in government securities. Specifically small savers who are accustomed to plain vanilla and liquid saving products like a bank saving account, need to know that investing in government securities would lock the funds till their maturity. Further, adoption may vary across different demographic segments, geographically spread investor base within the country. The availability of Shariah-compliant products will be helpful in needs of faith-sensitive customers, particularly through the aggressive expansion of Shariah-compliant instruments like Government Ijarah Sukuk alongside conventional Treasury Bills.

[50] DMMD circular No. 08 of 2025
[51] Source: SBP formally launches InvestPak portal for investment in government securities, SBP press release dated July 06, 2026
[52] BPRD circular letter No 15 of 2026
[53] Pakistan issued Eurobonds amounting to US$ 750 million in April 2026 and Panda bonds of US$ 250 million in May 2026. Further, the government raised US$ 3 billion of dual tranche Eurobond on September 02, 2026.

Nonetheless, these initiatives are expected to reduce sovereign's reliance on commercial banks, thereby encouraging bank lending to private sector and improving price discovery in the secondary market. These developments are expected to reduce rollover risk for the issuer (the government) and reduce its cost of debt by increasing participation of retail investors. A coordinated operational alignment between the central bank, primary dealers, and mobile operators can permanently shift domestic household savings away from informal channels directly into national finance.

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

**Box 4.3: Pakistan's Prosumer Regulations 2026 – Global Precedent, Cross-Subsidy Reform, and Power Sector Implications**

Pakistan's solar expansion over the past five years ranks among the fastest in the developing world,[54] driven by rising grid electricity tariffs and decline in solar panel prices, along with a favourable regulatory regime such as the Net Metering Regulations 2015. Under this regime, households with rooftop solar could offset electricity imports with exports to the national grid, with net exports effectively valued at the retail tariff. This policy (net metering) is desirable in situations when the distributed solar is at early stage of adoption.

However, as distributed solar capacity scaled to nearly 7,319 MW of registered net-metered capacity by March 2026,[55] it increased challenges for the power sector: it reduced grid purchases, while much of the tariff, including capacity payments, remained fixed. These fixed costs, transmission and distribution charges and capacity payments to power plants, were increasing burden on non-solar consumers and contributing to the cross-subsidy embedded in electricity tariffs. In response, the government introduced the Prosumer Regulations 2026, notified in February 2026,[56] replacing the one-to-one net-metering framework with a net-billing system under which new solar connections are compensated for exported electricity at a lower reference price. This box examines the policy reform in a global context, provides an indicative range of cross-subsidy reduction under different adoption-rate scenarios, and the parallel structural reforms without which the full benefit of the transition cannot be realised.

***A mainstream global policy response.*** The transition from net-metering to net-billing is in line with the regulatory frameworks adopted by matured distributed solar markets worldwide. According to REN21 data, 116 policy instruments supporting distributed solar were active across 93 countries in 2024, with 11 countries already operating net billing frameworks and 6 having recently completed the transition from net metering: Jamaica, Latvia, Lithuania, Portugal, South Africa, and Spain. California's Net Energy Metering 3.0 (NEM 3.0), implemented in April 2023, is a particular case in point due to stark similarities with Pakistan's experience. Both markets experienced rapid solar penetration driven by rising electricity tariffs and falling panel prices; both reached a scale at which one-to-one net-metering cross-subsidy became financially unsustainable;[57] and both chose the same policy instrument of reducing export compensation from retail rate to avoided cost while grandfathering existing consumers.[58] This implied that the one-to-one regime was meant to be reoriented in a financially sustainable manner considering the scale of adoption.

***Cross subsidy relief dimensions.*** The Prosumer Regulations 2026 reduced the export compensation, i.e. the differential between the old retail rate and the new reference price, applied to future exported generation volumes.

[54] According to BloombergNEF's Climatescope 2025, Pakistan is ranked one of the Asia Pacific's fastest-growing solar markets after adding around 13 GW of solar capacity in 2024, which accounts for roughly 11 percent of all new installations in emerging markets.
[55] Pakistan Economic Survey, 2025-26 (Chapter 14) available at https://www.finance.gov.pk/survey/chapter_26/14_Energy.pdf
[56] These were subsequently amended in April 2026 to provide transitional protection for existing net-metering agreements.
[57] California's Public Advocates Office estimated the annual cross-subsidy burden at US$ 8.5 billion by end-2022, up from US$ 3.4 billion in 2021. Pakistan reached a comparable threshold earlier than anticipated as NEPRA estimated an impact of Rs 101 billion in FY24 alone on just 4,500-5,000 MW of registered net-metered capacity.
[58] California's Public Utilities Commission (CPUC) replaced the retail-rate crediting mechanism with an Avoided Cost Calculator compensating exports at approximately US$ 0.08/kWh (down from around US$ 0.30/kWh under the old regime, and around 27 percent of the retail rate), while retaining full retail-rate billing for imported electricity, and grandfathering all existing contracts for 20 years. Pakistan's Prosumer Regulations 2026 mirror this architecture precisely with new consumers to receive a reference price resembling avoided cost (approximately 20 percent of the retail tariff at prevailing rates), while existing 2015 net-metering contracts are grandfathered until expiry, and imported electricity continues to be billed at full retail rates.

The scale of this reduction is scenario-dependent: across plausible ranges of new prosumer connections (4,000–8,000 MW per year)[59] and accounting for uncertainty in reference price evolution and self-consumption ratios, the yearly cross-subsidy reduction falls within a range of approximately 7.0 – 14.0 percent of total power sector subsidy in FY26 (**Table 4.3.1**).[60] It implies that the financial benefit of the reform could be reflected in lower tariffs for non-solar consumers, a reduction in the tariff differential subsidy, or slower accumulation of circular debt, rather than generating a direct revenue gain for the government.

**Estimated Cross-Subsidy Savings** **Table 4.3.1**

| | Expected Yearly Impact |
|---|---|
| Assumed new capacity *(MW)* | 4,000 - 8,000 |
| Annual generation *(GWh)* | 5,956 - 11,912 |
| Exported units *(GWh, 30 percent)* | 1,787 - 3,574 |
| **Annual savings** = Difference b/w per unit cost under old (net-metering) and new (net-billing) rates *(billion Rupees)* | **71 - 143** |
| Saving as percent of Budgeted Power Subsidies (FY26 = *Rs 1,036 billion)* | 7.0 – 14.0 |
| Saving as percent of GDP *(FY26 GDP = Rs 126.4 trillion)* | 0.06 - 0.11 |

Note: Numbers have been rounded off.
Source: SBP staff calculations

***Required parallel structural reforms.*** The Prosumer Regulations 2026 addresses the cross-subsidy embedded in export compensation for new connections. However, the deeper structural vulnerabilities of Pakistan's power sector remain unaddressed. The design of regulations promotes consumers' self-consumption with minimal export to grid to maximise their financial return. The recent trend in battery imports reflects consumers are already working on viability of their solar investments. As a result, grid consumption may likely decline, requiring the tariffs to increase to meet fixed capacity payment obligations. This implies that tariff/subsidy relief produced by the reform may be offset depending upon the proportion of solar generation consumed on-site versus exported to the grid.

Sustainable distributed solar policy therefore requires a parallel structural reform agenda. This could involve renegotiating IPP contracts on performance-based frameworks and improving DISCOs' operational efficiency – without which the long-term financial viability of any prosumer compensation mechanism remains contingent on continued fiscal support.

* *The contribution of Ravi Kumar is acknowledged in writing this box.*

**References**


i. NEPRA Prosumer Regulations, 2026, accessed via https://www.ke.com.pk/wp-content/uploads/2026/04/8.-NEPRA-Prosumer-Regulations-SRO-251I2026-09-02-26.pdf
ii. REN21. 2025. Renewables 2025 Global Status Report Collection, accessed via https://www.ren21.net/gsr-2025/
iii. Yousuf, M.U. (2026), "From net metering to net billing: Insights from Pakistan's 2026 prosumer regulatory reform", *Next Energy*, Vol. 13, 100871.
iv. NEPRA / SAARC Webinar Presentation, Energy Advisor to the Power Division, Engr Syed Faizan Ali (2026) accessed via https://www.saarcenergy.org/wp-content/uploads/2026/07/Faizan-Presetation-on-Net-metering.pdf
v. California Public Utilities Commission (CPUC) (2022). *Decision on Net Billing Tariff (NEM 3.0)*, CPUC Decision 22-12-056, adopted December 2022, effective April 15, 2023. Available at: www.cpuc.ca.gov.
vi. Lawrence Berkeley National Laboratory (LBNL) (2024). *Tracking the Sun: NEM 3.0 Market Impact Assessment*. Berkeley: LBNL, 2024. See also: SEIA/Wood Mackenzie (2024). *U.S. Solar Market Insight, Q2 2024*.
vii. Bialek-Gregory, S., Gregory, J., Pals, B. and Revesz, R.L. (2019). "Grandfathering: Environmental Uses and Impacts", *Review of Environmental Economics and Policy*, Vol. 13, No. 1.


[59] The range is constructed around the net-metering uptake in FY26, with the lower bound (conservative) assumes (4,000 MW new connections per year), and upper bound (optimistic) assumes (8,000 MW/year), reflecting the possible policy effects in the wake of prosumer regulations 2026.

[60] Solar capacity factor is assumed at 17 percent, based on 4–5 peak Sun hours per day and consistent with NEPRA technical standards and AEDB solar resource data. The export ratio (share of generation exported to the grid versus self-consumed on-site) is assumed at 30 percent, based on NEPRA prosumer metering data.



5

# Balance of Payments

*Pakistan's balance of payments position continued to strengthen. SBP's foreign exchange reserves increased further and comfortably surpassed the end-June 2026 target of US$18 billion. Moreover, SBP's swap and forward liabilities also came down significantly. The improvement in FX buffers was despite the current account posted a marginal deficit, as imports increased while exports declined. Nonetheless, robust workers' remittances nearly financed the deficits in goods and services trade and primary income accounts. In financial account, besides multilateral and bilateral inflows, the government also raised funds through issuances of Euro and Panda bonds. The overall macroeconomic stability supported Pakistan's successful return to international capital markets. These favourable developments supported SBP in build-up of foreign exchange reserves through significant FX purchases. The strong external position was also reflected in a slight appreciation of USD-PKR exchange rate during FY26.*

**Foreign Exchange Buffers**

(FX reserves in billion US$, Import cover in number of months)



# 5 Balance of Payments

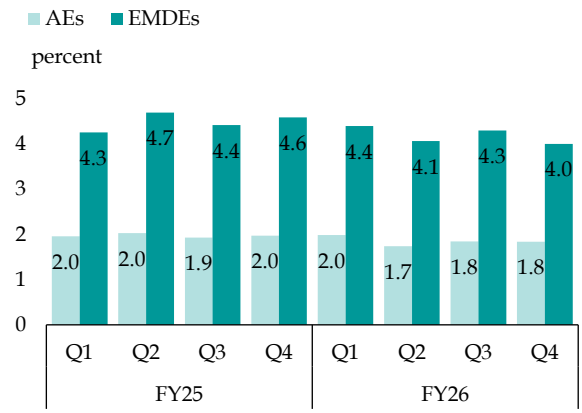
## 5.1 Global Economic Review

Global economic growth moderated in FY26 amid elevated economic policy uncertainty and the Middle East conflict **(Figure 5.1)**. The conflict caused supply chain disruptions, and raised energy prices, freight charges and insurance premiums. The resultant increase in production and transportation costs **(Figure 5.2)** translated into increased inflationary pressure, which forced central banks to remain cautious.

The economic impact of the conflict was uneven across advanced economies (AEs) and emerging and developing economies (EMDEs), depending on each economy's exposure to the conflict, geographic location, reliance on energy imports, and position in global technology value chain. The supply-chain disruptions led to cost-push inflation and dampened both consumer and business confidence, and moderated GDP growth. These effects were more pronounced in EMDEs,[1] while increase in technology-related capital spending supported growth in AEs.

Nonetheless, global trade volumes increased in FY26, as tariff-related uncertainties eased and

**Real GDP Growth** **Figure 5.1**

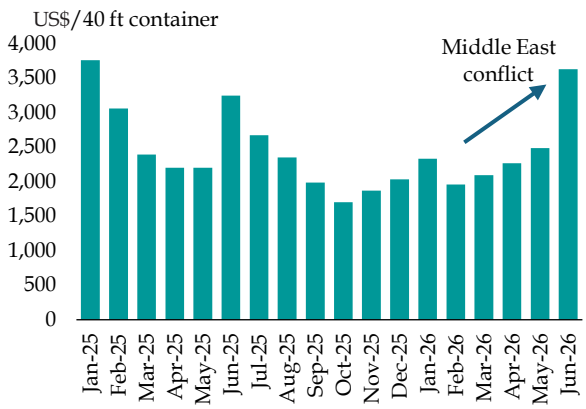



Source: IMF

economies gradually adapted to the changing trade policy landscape, supported in part by free trade agreements (FTAs) among major economies **(Figure 5.3)**.[2] Technology-intensive goods remained a key source of trade momentum.[3]

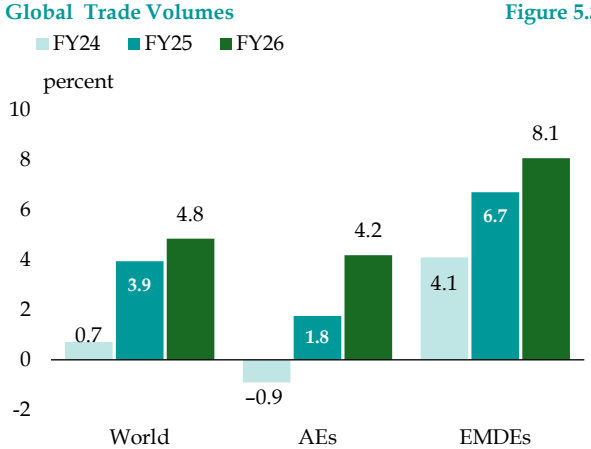
Energy prices, which had declined in H1-FY26, rose sharply as the conflict disrupted energy flows the most. Crude oil prices surged as the conflict intensified, with benchmark prices briefly rising above US$ 100 per barrel before moderating

**Global Shipping Cost** **Figure 5.2**




Source: Bloomberg

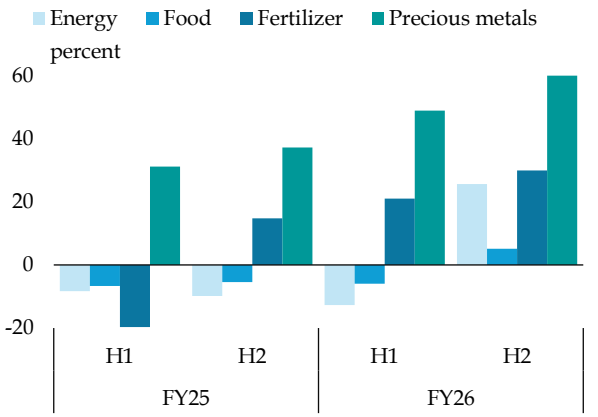
**Global Trade Volumes** **Figure 5.3**




Source: CPB World Trade Monitor

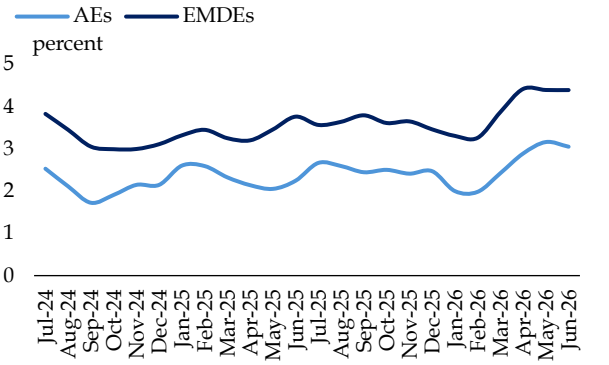
[1] IMF (2026). World Economic Outlook Update, July 2026, International Monetary Fund.
[2] New Zealand, UK, India, Switzerland, Norway, Iceland, and Liechtenstein entered in regional trade and partnership agreements.
[3] In Q1-CY26, global trade in semiconductors, batteries and electric vehicles increased by 25, 15 and 11 percent, respectively, while trade in ICT products rose by 14 percent; UNCTAD Global Trade Update (July/August 2026)

**Global Commodity Prices** **Figure 5.4**




Source: WB

**Headline Inflation*** **Figure 5.5**




* Median inflation of each group; the sample includes 30 AEs and 44 EMDEs.

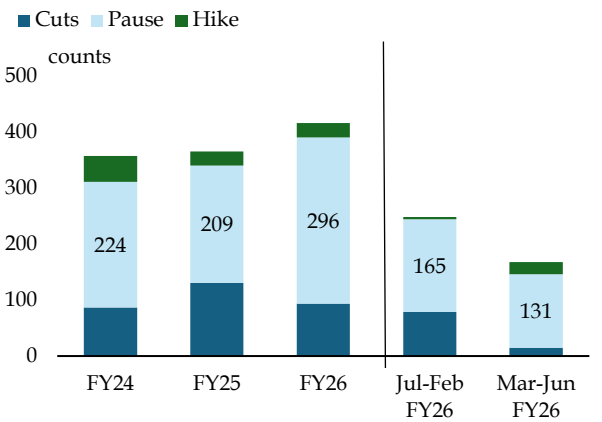
Source: Haver

towards the end of FY26. Natural gas prices also increased substantially following disruptions to Qatar LNG exports - roughly a fifth of the world's LNG supply.[4] The resulting increase in gas prices also put pressure on fertiliser prices, as Gulf economies are major producers and exporters of natural gas-based fertilisers, particularly urea and DAP.[5] Prices of precious metals, meanwhile, extended their earlier rally on the back of strong safe-haven demand **(Figure 5.4)**.

The energy shock posed a significant challenge to price stability across AEs and EMDEs owing to higher energy and input costs **(Figure 5.5)**. As a result, the pace of policy rate cuts slowed, with some central banks even raising the policy rates **(Figure 5.6)**.

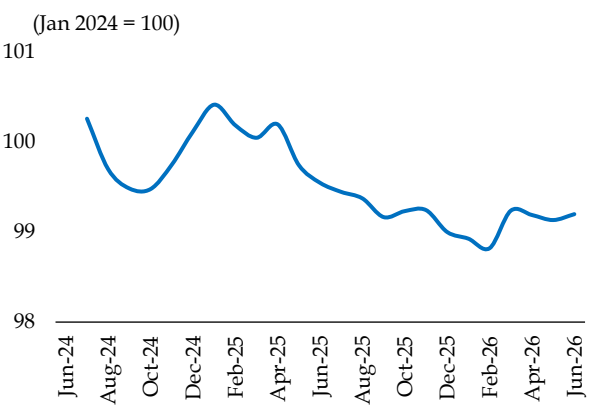
Consequently, the global financial conditions, which had been easing since January 2025, started to tighten from March 2026 onwards **(Figure 5.7)**. This, together with rise in inflation expectations, pushed up bond yields in major AEs. The financial conditions in EMDEs also tightened, leading to falling equity prices. While risk sentiment improved following the announcement of ceasefire in June 2026, they remained elevated relative to pre-conflict levels amid continued uncertainty. These developments are likely to

**Changes in Central Banks' Policy Rates** **Figure 5.6**




Sources: CB Websites; WIRP – Bloomberg

**Global Financial Conditions Index** **Figure 5.7**




Source: Bloomberg

[4] Qatar's exports accounted for approximately 18.7 percent of total global LNG trade in CY25, with the country exporting 81.5 million tons. Source: International Gas Union (IGU), World LNG Report 2026.

[5] Gulf region economies supplied 24.8 percent of global nitrogenous fertiliser exports and 11.4 percent of phosphatic fertiliser exports, Source: WTO Data Blog, July 2026.

affect the economic outcomes, as reflected in the latest projections by multilateral rating agencies.[6]

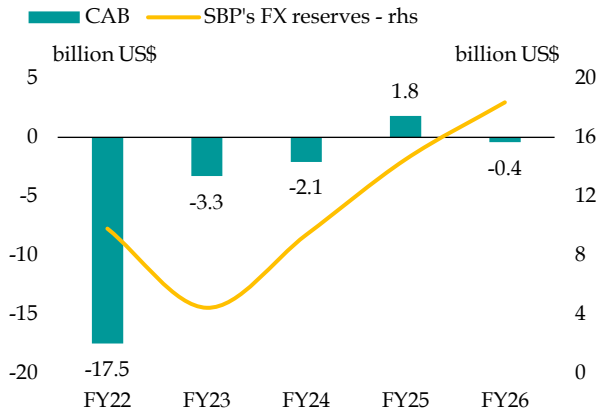
Expected slower global growth, increased inflationary pressures and tightened financial conditions specifically during Mar-Jun FY26 have implications for global economy, particularly for energy-importing economies like Pakistan. The emerging economies faced common pressures from higher import bills, elevated inflation, fiscal deficits, and higher borrowing costs.

## 5.2 Pakistan's Balance of Payments

Pakistan's external account remained resilient to energy price shock and trade disruptions stemming from the Middle East conflict. The overall balance of payments position strengthened further in FY26. This improvement reflected continued prudent macroeconomic policies, SBP's proactive FX purchases, and successful reviews under the IMF program. Moreover, workers' remittances remained strong, despite being vulnerable to the conflict as gulf region accounts for 54.2 percent of total remittance inflows. These, together with rising IT exports helped contain current account deficit (CAD) to 0.1 percent of GDP, close to the lower bound of its projected range of 0 – 1 percent of GDP.

It is worth highlighting that current account balance, excluding interest payments, remained in surplus. Moreover, the financial account also posted net inflows, supported by official multilateral and bilateral inflows, and investment in Naya Pakistan Certificates (NPCs), while other private inflows continued to remain subdued **(Table 5.1)**. The strengthened external position and improved macroeconomic conditions also helped Pakistan raise around US$ 1 billion through issuance of Eurobond and first ever

**CAB and SBP's FX Reserves** **Figure 5.8**




Source: SBP

issuance of Panda bond – as Pakistan re-entered global capital markets after four years.[7]

Supported by SBP's foreign exchange purchases and non-debt creating inflows, SBP reserves increased markedly from US$ 14.5 billion at end-FY25 to US$ 18.4 billion by end-FY26. In addition, SBP reduced its forward liabilities by US$ 1.6 billion to US$ 0.9 billion. Stronger external buffers considerably eased pressure on exchange rate.

## 5.3 Current Account Balance

The current account balance posted a marginal deficit of about US$ 391 million, as compared to a surplus of US$ 1.8 billion in FY25 **(Figure 5.8).** The deficit was mainly due to deterioration in trade in goods and services balance, while primary income deficit narrowed and surplus in secondary income account increased. The surplus in secondary income balance, primarily reflecting record workers' remittances, almost entirely financed the combined deficit in goods and services trade and primary income.

**Trade in Goods[8]**

Pakistan's merchandise trade deficit increased by US$ 7.2 billion to US$ 39.6 billion in FY26. This

[6] IMF (2026) World Economic Outlook Update, January and July 2026; and WB (2026). Global Economic Prospects, January and June 2026.

[7] Pakistan capitalised on its improved external position and credit ratings and entered Chinese bond market with first ever Panda bond to raise US$ 250 million. https://www.adb.org/news/adb-aiib-support-first-panda-bond-issuance-green-projects-pakistan

[8] 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, which is reported in Sections 5.2 and 5.4. For details on difference between these two data series, see Annexure on Data Explanatory Notes.

**Pakistan's Balance of Payments** **Table 5.1**

million US$

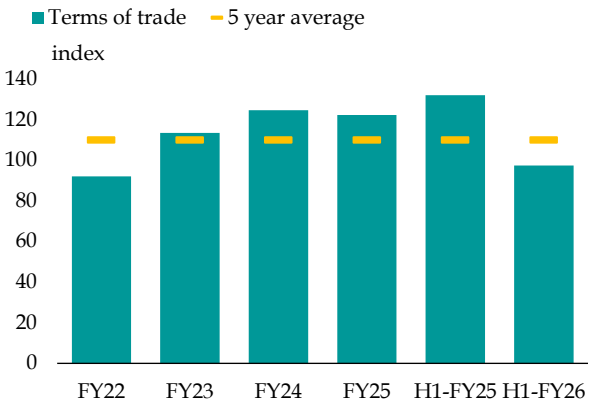
| | FY24 | FY25 | FY26 |
|---|---|---|---|
| **Current account balance** | **-2,072** | **1,838** | **-391** |
| **Balance on trade in goods** | **-22,177** | **-26,803** | **-33,691** |
| Exports (FOB) | 30,980 | 32,343 | 30,836 |
| Imports (FOB) | 53,157 | 59,146 | 64,527 |
| **Balance on trade in services** | **-3,110** | **-2,836** | **-1,891** |
| Exports of services | 7,691 | 8,450 | 10,047 |
| o/w ICT exports | 3,223 | 3,814 | 4,600 |
| Imports of services | 10,801 | 11,286 | 11,938 |
| **Balance on primary income** | **-8,986** | **-8,838** | **-8,497** |
| Profit & dividends | 2,215 | 2,220 | 2,305 |
| **Balance on secondary income** | **32,201** | **40,315** | **43,688** |
| o/w Workers' remittances | 30,251 | 38,300 | 41,585 |
| **Capital account balance** | **195** | **168** | **131** |
| **Financial account balance*** | **-5,370** | **-1,585** | **-2,029** |
| Direct investment (net)*^ | -2,126 | -2,462 | -1,450 |
| Portfolio investment (net)* | 376 | 720 | 1,176 |
| Other investment* | -3,610 | 159 | -1,770 |
| Build-up in FX assets abroad* | -381 | 82 | 388 |
| FX loans & liabilities | 3,229 | -77 | 2,158 |
| Central bank | 999 | 0 | -3,455 |
| Banks | 715 | -1,536 | 1,061 |
| General government | 1,565 | 2,346 | 5,220 |
| Disbursements | 6,044 | 9,544 | 8,556 |
| Amortisation | 6,727 | 7643 | 6,823 |
| Other liabilities (net) | 2,248 | 445 | 3,487 |
| Other sectors | -50 | -887 | -668 |
| Disbursements | 2,419 | 688 | 1,094 |
| Amortisation | 1,905 | 1,689 | 1,688 |
| **Net errors and omissions** | **-631** | **153** | **65** |
| **Overall balance** | **-2,862** | **-3,744** | **-1,834** |
| **SBP's liquid FX reserves (end-period)** | **9,390** | **14,506** | **18,378** |

*as per BPM6, negative sign means net FX inflow into Pakistan and vice versa; ^FDI (net) = net FDI inflows - net FDI outflows

Source: SBP

widening in trade deficit is attributed to deterioration in terms of trade, a sharp rise in merchandise imports amid a pick-up in domestic demand and national tariff rationalisation, and a decline in exports (**Figure 5.9**).

**Pakistan's Terms of Trade (2017-18 = 100)** **Figure 5.9**

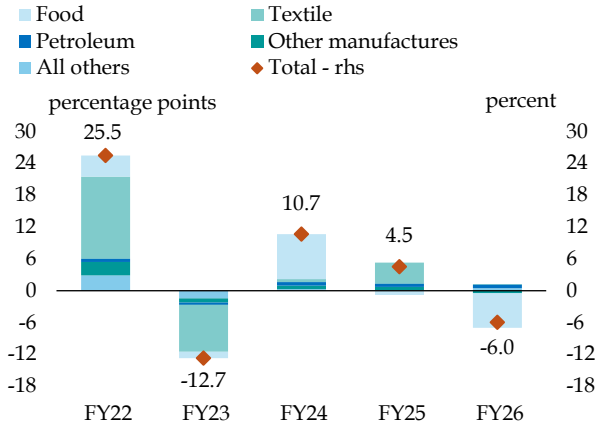



Source: PBS

## Exports

Exports declined by 6.0 percent, primarily due to non-textile exports, particularly food and other manufactures, while textile exports recorded a marginal increase (**Figure 5.10).** Moreover, negative volume effect dominated across major commodities, particularly rice, that indicate lower demand for Pakistani exports **(Figure 5.11)**.

**Contribution to Export Growth** **Figure 5.10**




Source: PBS

Furthermore, US reciprocal tariffs and supply chain disruptions due to geopolitical tensions in the Middle East and closure of western borders also exerted pressure on export volumes. Domestic factors may also have weighed on exports by raising production costs. These include: i) elevated energy costs due to levy on gas supply to off grid captive power plants;[9] and ii) change in taxation from final to normal tax regime that affected operating margin and cash flows of exporters.[10,11]

The subdued performance of exports also highlights structural weaknesses, especially lack of product and market diversification, low research and development, energy and infrastructure bottlenecks, anti-export bias, quality controls and limited integration into global value chain. As a result, Pakistan's rank on ECI remains low, reflecting that the country's export basket comprises of less sophisticated products compared to regional peers **(Figure 5.12)**.

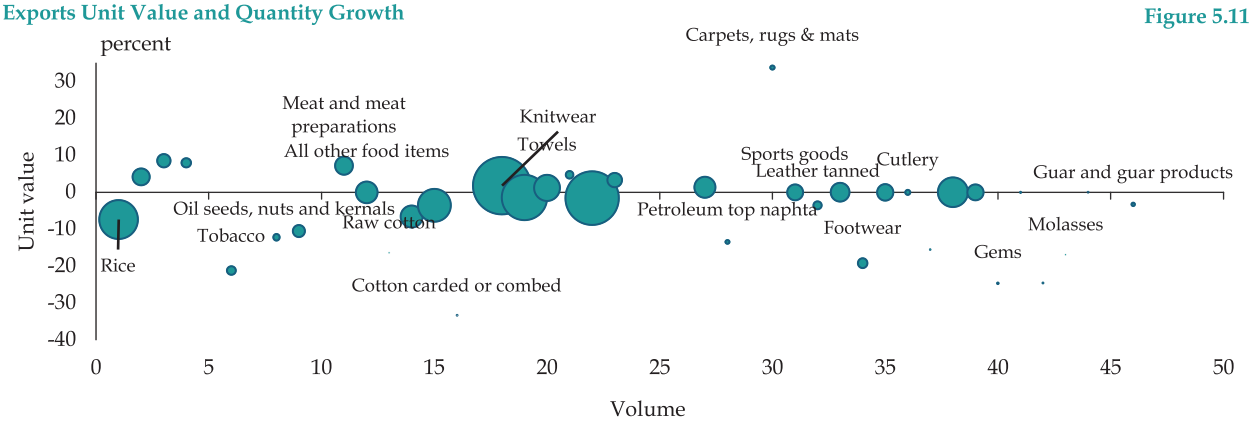
***Food***

Food exports declined for the second consecutive year, falling further to US$ 5.0 billion in FY26 from US$ 7.1 billion in FY25. About half of this decline was due to rice. Moreover, exports of oil seeds, nuts and vegetables also witnessed a significant decline (**Table 5.2**).

*Rice exports fell sharply in FY26, due to intensified competition in global markets*

Pakistan's rice exports fell to US$ 2.3 billion in FY26 from US$ 3.4 billion last year. This decline in rice exports is primarily attributed to record high global production of 546 MMT that created glut in

**Exports Unit Value and Quantity Growth** **Figure 5.11**




Note: size of bubble shows share of commodity in total exports

Sources: PBS; SBP staff calculations

[9] The levy on gas supplied to off-grid captive plants rose from Rs 1,243 to Rs 1,406 per MMBtu, a 15 percent increase, under the Off-Grid Captive Power Plants Levy Act 2025. Textile sector consumes 28 percent of industrial electricity consumption and 29 percent of industrial gas consumption. Due to unreliable grid supplied electricity, a considerable share of the electricity demand for textile manufacturing is met through captive generation in large textile mills. Source: World bank, Textile Sector: Energy Efficiency and Decarbonisation (EE&D) Opportunities (August 2025).

[10] Effective from July 2025, exporters have to pay a minimum advance tax irrespective of profitability. This change resulted into higher tax collection in FY26 despite declining exports, implying that the effective tax rate on exporters has increased.

[11] SBP's business confidence survey suggests that capacity utilisation of exporting sectors remained significantly lower during FY25 and FY26 compared to the historic average. Source: SBP staff calculation based on PBS.

**Pakistan's Merchandise Exports** **Table 5.2**

million US$

| | Value | | Change (FY26) | | Volume Effect | Price Effect |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | Absolute | Percent | | |
| **Exports** | **32,130.0** | **30,130.1** | **1,910.3** | **-6.0** | - | - |
| **Textile,** *of which* | **17,887.0** | **17,932.3** | **45.3** | **0.3** | - | - |
| Apparel | 9,139.0 | 9,253.9 | 115.0 | 1.3 | 23.8 | 91.2 |
| Home textile | 4,195.5 | 4,174.2 | -21.3 | -0.5 | 11.2 | -32.5 |
| Cotton yarn | 680.7 | 765.1 | 84.4 | 12.4 | 138.5 | -54.0 |
| **Non-textile,** *of which* | **14,153.3** | **12,197.7** | **-1,955.6** | **-13.8** | - | - |
| Rice | 3,353.0 | 2,291.7 | -1,061.3 | -31.7 | -877.1 | -184.2 |
| Basmati | 830.6 | 843.2 | 12.6 | 1.5 | -13.8 | 26.4 |
| Others | 2,522.5 | 1,448.6 | -1,073.9 | -42.6 | -759.5 | -314.4 |
| Meat | 495.1 | 530.2 | 35.1 | 7.1 | 9.8 | 25.3 |
| Vegetables | 367.6 | 162.8 | -204.8 | -55.7 | -216.9 | 12.1 |
| Oil seeds | 384.6 | 260.5 | -124.0 | -32.3 | -92.5 | -31.6 |
| Petroleum products | 463.6 | 718.2 | 254.6 | 54.9 | 212.7 | 41.9 |
| Pharmaceutical | 465.2 | 319.0 | -146.2 | -31.4 | -119.9 | -26.3 |
| Footballs | 229.8 | 256.7 | 26.9 | 11.7 | 32.2 | -5.4 |
| Cement | 318.9 | 343.2 | 24.3 | 7.6 | -13.0 | 37.3 |

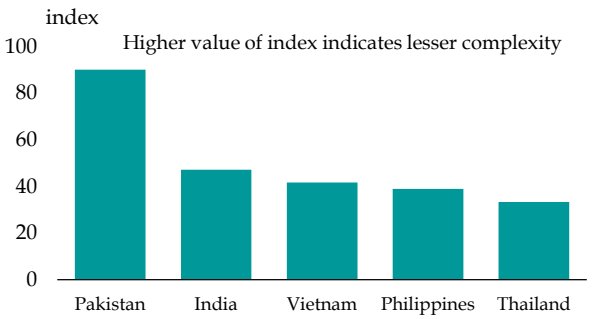
Source: PBS

the global market. Moreover, India, the biggest producer with global share of 28 percent, reentered the global market with increased supply to recapture its share in global rice exports, particularly non-basmati rice.[12] As a result, benchmark rice prices decreased by 19.7 percent in FY26 **(Figure 5.13).**

Basmati rice exports increased by 1.5 percent in FY26, mainly driven by price effect that more than offset the negative volume effect. The exports recovered towards the end of FY26, which coincided with the government's Drawback of Local Taxes and Levies (DLTL) scheme.[13]

Country-wise analysis of the market loss suggests that decline in rice exports was mostly concentrated in Indonesia and Philippines due to their policies of attaining domestic self-sufficiency.[14] Moreover, Pakistani non-basmati rice - low to medium grade broken rice - partly lost markets such as the UK, Saudi Arabia, Oman and some African countries to India and China **(Figure 5.14)**.

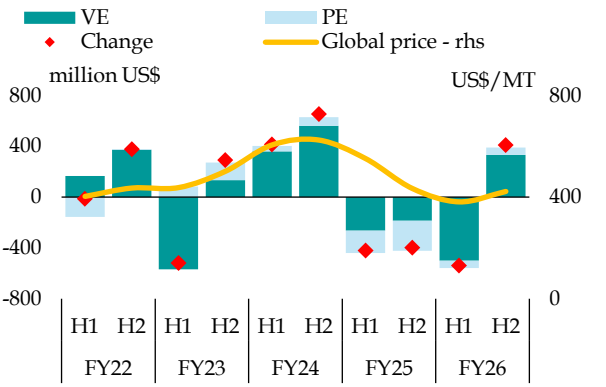
**Economic Complexity Ranking of Exports Basket (Average 2020-2024)** **Figure 5.12**




Note: the economic complexity of a country is calculated based on the diversity of exports a country produces and their ubiquity, or the number of the countries able to produce them.

Source: The Atlas of Economic Complexity

**Change in Rice Exports** **Figure 5.13**




Note: VE: volume effect; PE: price effect

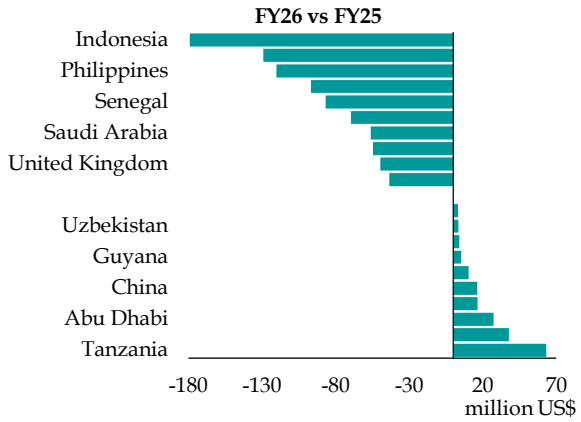
Sources: PBS; SBP staff calculations

[12] USDA and S&P global

[13] Under this scheme GoP provided a tax rebate of up to 9 percent for basmati and higher quality rice, and 3 percent for lower quality rice. GoP also removed the ceiling cap price of US$ 1,275 per ton FOB to support the exporters under the DLTL scheme.

[14] Indonesia and Philippines banned imports of rice to support the domestic produce.

**Pakistan's Rice Exports: Markets Lost vs Gained** **Figure 5.14**




Source: SBP

Exports of other major food commodities – oil seeds, vegetable, and nuts – also declined due to supply chain disruptions and production related losses. Among these, exports of oil seed decreased by 32 percent in FY26, driven by decline in export of sesame seed to China. This was because of re-entry of the major international players, Ethiopia and Sudan, as well as reduction in domestic production due to shifting of acreage towards major crops.[15]

The decline in exports of vegetables by 55.7 percent was mainly due to onions and potatoes owing to lower global prices. Onions and potatoes lost their major markets - Malaysia, Sri Lanka and GCC countries – due to excess supply of the cheaper Indian onions and trade disruptions. Moreover, the closure of Afghanistan border also affected exports to Afghanistan and Central Asian markets.[16]

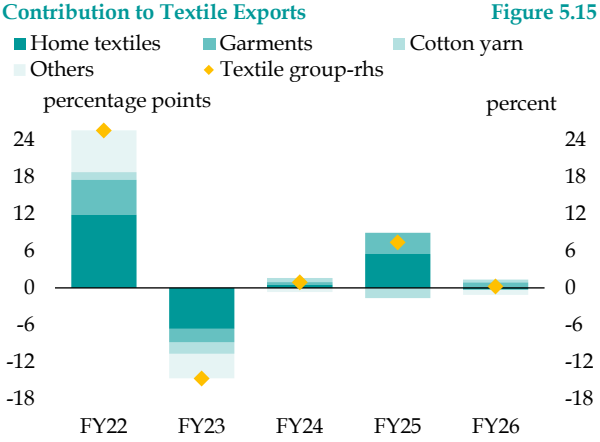
***Textile***

Textile exports grew marginally by 0.3 percent in FY26 as gains from apparel, particularly readymade garments, cotton yarn and other textile materials were partially offset by decline in exports of cotton cloth, knitwear and towels **(Figure 5.15).** Apparel exports increased by 1.3 percent in FY26, led by readymade garments. This largely reflected price effect, while volumes decreased due to removal of tariff differential benefit, elevated energy cost and change in tax regime. These factors compressed the exporters' margins and scope of competitive pricing. Home textile exports witnessed a marginal decline of 0.5 percent in FY26. Within the category, exports of towels declined owing to lower volumes, while bedwear exports remained flat, with volume and price effects offsetting each other. The weak performance of home textile exports is attributed to at least three factors: (i) demand softened from US; (ii) increase in production costs following the rise in energy prices stemming from the captive power gas levy; and (iii) higher insurance and freight costs.

Pakistan retained its share in its two largest markets for textile products, US and EU. Pakistan's share in US textile imports slightly improved, mainly due to a significantly higher decline in overall US imports of textiles **(Table 5.3).** While Pakistan's textile export volume to EU increased by 0.9 percent, the unit values declined by 8.2 percent, which was the sharper than the decline recorded for peer countries. In this context, the recent India-EU free trade agreement (FTA) could have significant implications for Pakistan's textiles exports to EU **(Box 5.1)**.

Cotton yarn exports increased by 12.4 percent to US$ 765 million in FY26. The growth was mainly

**Contribution to Textile Exports** **Figure 5.15**




Source: PBS

[15] Oilseed production in Pakistan decreased by around 6 percent to 2.75 million metric tons in FY26. Source: USDA (2026) Oilseeds and Products Annual, April 2026 and PBS.
[16] MNFSR (2026). Pakistan Food Group Trade Performance Review 2024-25 vs 2025-26.

**Textile Imports by US and EU for the Period FY25 vs FY26** **Table 5.3**

**US Imports**

| Country | Unit Value (US$/ square meter) | | | Volume (million square meter) | | |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | Percent change | FY25 | FY26 | Percent change |
| Bangladesh | 2.8 | 2.8 | -3.1 | 1,343 | 1,335 | -0.6 |
| Cambodia | 2.8 | 2.6 | -6.5 | 931 | 1,081 | 16.2 |
| India | 0.7 | 0.8 | 23.3 | 7,761 | 4,767 | -38.6 |
| Pakistan | 1.2 | 1.1 | -5.0 | 1,698 | 1,650 | -2.8 |
| Vietnam | 2.5 | 2.3 | -7.2 | 3,518 | 3,638 | 3.4 |
| **World** | **1.0** | **1.0** | **1.6** | **54,685** | **44,882** | **-17.9** |

**EU Imports**

| Country | Unit Value (EUR/kg) | | | Volume ('000 tonnes) | | |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | Percent change | FY25 | FY26 | Percent change |
| Bangladesh | 14.4 | 13.1 | -9.3 | 1,308 | 1,274 | -2.6 |
| China | 12.9 | 11.9 | -7.9 | 2,492 | 2,653 | 6.5 |
| India | 9.6 | 8.5 | -11.7 | 556 | 587 | 5.5 |
| Cambodia | 17.2 | 16.7 | -3.0 | 238 | 243 | 2. |
| Pakistan | 8.5 | 7.8 | -8.2 | 661 | 667 | 0.9 |
| Vietnam | 17.1 | 17.7 | 3.1 | 256 | 255 | -0.4 |
| **World** | **12.5** | **11.8** | **-5.1** | **4,950** | **5,056** | **2.1** |

Sources: Otexa; Eurostat

volume driven as shipments increased by 20.3 percent in the year. Cotton yarn exporters focused on external markets because of weaker demand from domestic apparel and home textile manufacturers, who shifted towards imported yarn.[17]

***Other Manufactures***

Exports of other manufactures recorded a decline of 3.7 percent in FY26, led by pharmaceuticals and plastic products. The decline in exports of pharmaceuticals was driven by both lower prices and volume. The decline in the latter is partly attributed to the closure of western border.[18] Among other exports, sports goods and cement showed improvement. Specifically, football exports increased by 11.7 percent to US$ 257 million in FY26, coinciding with the run-up to Football World Cup held in June 2026.

Cement exports also increased by 7.6 percent in FY26, mainly owing to significant rise in unit value as shipments declined. After the closure of western border since September 2025 and loss of biggest market, Afghanistan, Pakistani cement exporters focused on African and Gulf markets.

***Petroleum Group and Coal***

Petroleum exports witnessed a sharp increase, driven by petroleum products excluding naphtha, which increased by 54.8 percent and was supported by both volume and price effects. The government's decision to increase petroleum and climate support levies coupled with change in power generation mix and austerity measures implemented in Q4-FY26 reduced domestic demand. Moreover, higher refining output led to surplus, prompting refineries to higher export of petroleum products.[19, 20]

## Imports

Imports maintained their upward trajectory in FY26 amid pick-up in economic activity and national tariff rationalisation. Nonetheless, import growth ticked to 8.1 percent from 7.7 percent witnessed in FY25. However, the import growth was broad-based, with all groups recording higher import values, except for textiles (**Table 5.4**).

The import growth in FY26 was mainly driven by non-energy groups, particularly intermediate goods, reflecting the pickup in domestic economic

[17] APTMA

[18] Afghan authorities announced a ban on pharmaceutical goods imports from Pakistan in November 2025 and stopped customs to process after February 9, 2026.

[19] Finance Act 2025 and Petroleum Products (Petroleum Levy) and Climate Support Levy Ordinance, 1961.

[20] In FY26 the refinery production of energy products increased by more than 11 percent to 11.7 MMT. Source: OCAC

**Pakistan's Merchandise Imports** **Table 5.4**

million US$

| | Value | | Change (FY26) | | Volume Effect | Price Effect |
|---|---|---|---|---|---|---|
| | FY25 | FY26 | Absolute | Percent | | |
| **Imports** | **64,507** | **69,728** | **5,221** | **8.1** | - | - |
| **Food,** *of which* | **8,195** | **9,151** | **955** | **11.7** | - | - |
| Palm oil | 3,393 | 3,786 | 393 | 11.6 | 284 | 108 |
| Sugar | 4 | 175 | 171 | - | - | - |
| All other food items | 2,287 | 3,012 | 725 | 31.7 | - | - |
| **Energy,** *of which* | **15,943** | **16,863** | **920** | **5.8** | - | - |
| POL | 5,964 | 6,386 | 422 | 7.1 | -29 | 449 |
| Crude | 5,446 | 7,166 | 1,720 | 31.6 | 696 | 1,024 |
| LNG | 3,476 | 2,221 | -1,255 | -36.1 | - | - |
| LPG | 1,055 | 1,089 | 34 | 3.2 | - | - |
| **Machinery,** *of which* | **10,307** | **10,920** | **613** | **5.9** | - | - |
| Electrical | 3,898 | 2,919 | -979 | -25.1 | - | - |
| Textile | 526 | 581 | 55 | 10.5 | - | - |
| Power generating | 689 | 797 | 108 | 15.7 | - | - |
| Telecom | 2,102 | 2,690 | 588 | 28.0 | - | - |
| **Textile,** *of which* | **7,356** | **6,462** | **-894** | **-12.2** | - | - |
| Raw cotton | 2,693 | 1,528 | -1,165 | -43.3 | -615 | -550 |
| Other textile items | 2,972 | 3,154 | 183 | 6.1 | - | - |
| **Agro chemical,** *of which* | **9,644** | **10,324** | **680** | **7.1** | - | - |
| Plastic material | 2,627 | 2,863 | 236 | 9.0 | 429 | -193 |
| Medicinal products | 1,205 | 1,351 | 146 | 12.1 | 450 | -304 |
| **Transport,** *of which* | **2,443** | **4,084** | **1,640** | **67.1** | - | - |
| CBU | 393 | 673 | 280 | 71.3 | - | - |
| CKD/SKD | 1,591 | 2,785 | 1,194 | 75.1 | - | - |
| **Metal,** *of which* | **5,631** | **6,310** | 680 | 12.1 | - | - |
| Iron and steel | 2,297 | 2,605 | 308 | 13.4 | 629 | -321 |

Source: PBS

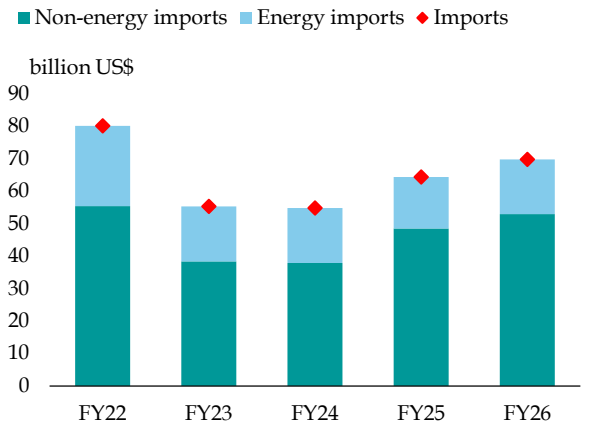
activity. Energy imports increased in Q4-FY26 driven by higher international energy prices, though the impact was partially offset by lower import volumes resulting from government's austerity measures. In contrast, the non-energy imports rose, with non-food non-energy imports increasing to US$ 44 billion (**Figure 5.16**).

The composition of non-energy imports also shifted notably, as import of transport group rose sharply, while import of textiles declined (**Figure 5.17**). Moreover, tariff rationalisation under the National Tariff Policy 2025-2030 also influenced the pattern of imports by changing the relative incentives across products and sectors in FY26.[21]

***Food***

Food imports increased by 11.7 percent to US$ 9.2 billion during FY26, primarily driven by palm oil and '*all other food items*'.[22] Palm oil import rose owing to both higher prices and volumes, while import of soybean oil declined mainly due to lower volumes.

**Merchandise Imports** **Figure 5.16**

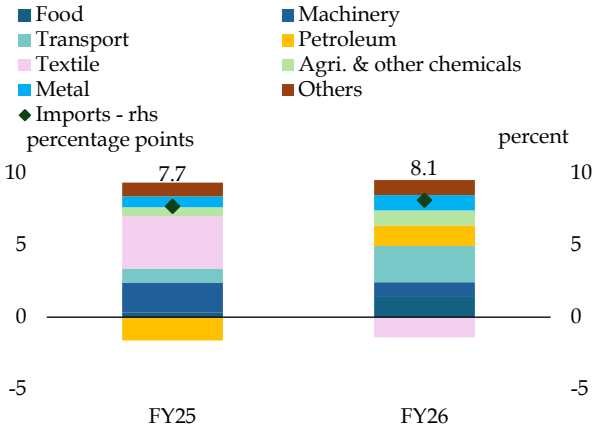



Source: PBS

[21] In Federal Budget 2025-26, the custom duty was reduced from 11.9 to 11.3 percent, additional custom duty from 3.7 percent to 1.8 percent and regulatory duty from 4.6 to 3.7 percent. For more details on national tariff rationalisation impact on different sectors, see Chapter 5 of H1-FY26 State of Economy Report, State Bank of Pakistan

[22] All other food items constitute around 33 percent of the total food imports. All other food items include different seeds, premium fruits, formula milk, inputs such as preservative and emulsifiers for processed food.

**Contribution to Import Growth** **Figure 5.17**




Source: PBS

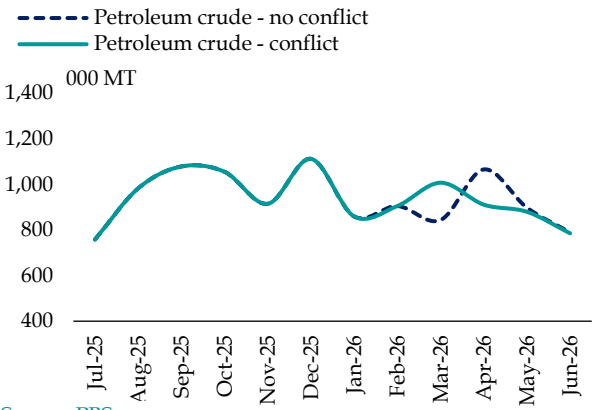
Global palm oil prices remained elevated as higher crude oil prices strengthened the demand for palm oil as a biodiesel feedstock. In addition, the rising prices of competing vegetable oils[23] and relatively tight global supply conditions reinforced the upward pressure on palm oil prices.[24] On the domestic front, import volumes expanded to meet growing demand from vanaspati ghee, cooking oil, bakery fats, feed and processed food industries.

Imports of '*all other food items*' increased, with higher import of oil seeds as National Biosafety Committee allowed import of genetically modified seeds. Moreover, lower domestic production also drove higher import of oilseeds.[25] Soyabean seeds dominated the oilseed imports as custom duty on soyabean seeds was reduced to 'zero' in FY26. The increase in seed imports also reflects rising demand from the edible oil crushing and livestock feed industries. Meanwhile, higher imports of premium edible oils and fruits (apples, grapes, dates and apricots) suggest increasing consumer demand for high value food products.

***Energy***

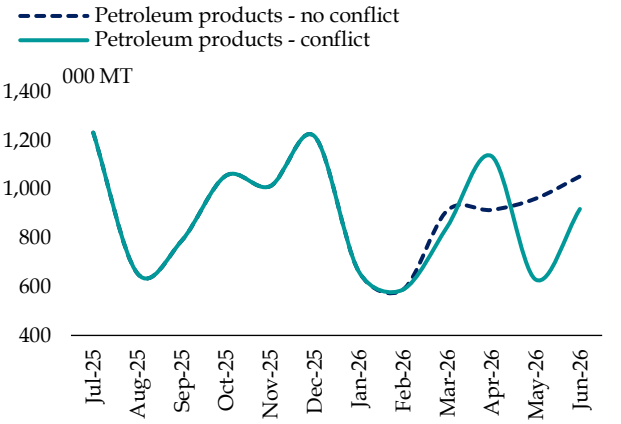
Energy imports increased across all categories, except LNG, primarily reflecting a spike in international prices.[26] While the impact of higher prices was partly offset by a decline in import volumes of petroleum products amid the ongoing conflict in the Middle East, crude oil import volumes remained relatively steady (**Figure 5.18a and b**). The counterfactual analysis[27] of prices and import volumes of crude and petroleum products shows that the Middle East conflict (Mar-June 2026) affected the energy import bill primarily

**Impact of Conflict on Import Volume of Petroleum Crude** **Figure 5.18a**




Source: PBS

**Impact of Conflict on Import Volume of Petroleum Products** **Figure 5.18b**




[23] Based on Jul-May HS-8 level PBS data, unit price of palm oil imported by Pakistan was around US$ 1.09/kg, soyabean oil (US$ 1.2/kg), sunflower oil (US$ 1.3/kg), vegetable oil (US$ 2.3/kg), margarin oil (US$ 2.5/kg), and virgin oil (US$ 3.6/kg)

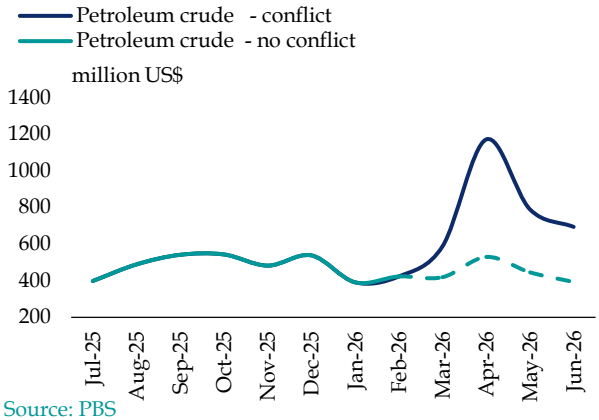
[24] Indonesia's finance ministry raised the country's crude palm oil export levy to 12.5 percent on March 1, 2026, from 10 percent. As a result, Indonesia's total export tax and levy on CPO rose to US$ 241.36/mt from US$ 165.85/mt. (Source: S&P Global) Moreover, Indonesia's B35-B40 biodiesel mandates are expected to consume more of its domestic supply, limiting export availability.

[25] Oilseeds and Products Update 2026, US Department of Agriculture, Foreign Agriculture Service.

[26] As per World Bank, average price of brent increased from US$ 74.6 in FY25 to US$ 79.4 in FY26.

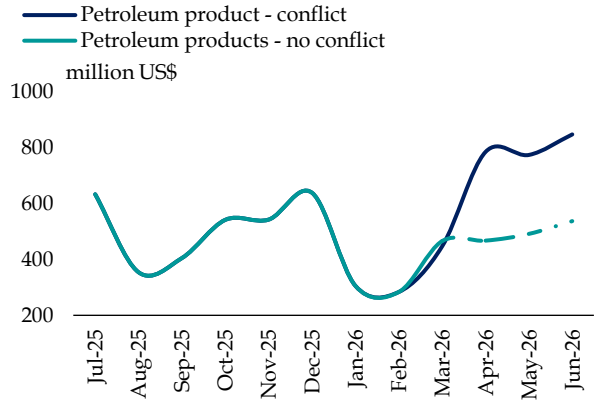
[27] For counter factual analysis, in Figure 5.18a&b, the reference volumes were assumed at the level of same month last year. While in Figure 5.19a&b, the unit value for Mar-Jun 2026 were replaced with average of Jul-2025 to Feb-2026.

**Impact of Conflict on Import Value of Petroleum Crude** **Figure 5.19a**




Source: PBS

**Impact of Conflict on Import Value of Petroleum Products** **Figure 5.19b**




through higher prices, while changes in import volumes were negligible (**Figure 5.19a and b**).[28] Overall, in FY26, higher crude imports also reflected higher refinery throughput.[29]

In contrast, the imports of LNG declined in FY26, primarily due to lower demand for imported gas, particularly from the power sector. The continued reliance on lower-cost generation sources, including coal, RFO and rapidly expanding rooftop solar, reduced LNG use in power generation (**Figure 5.20**).

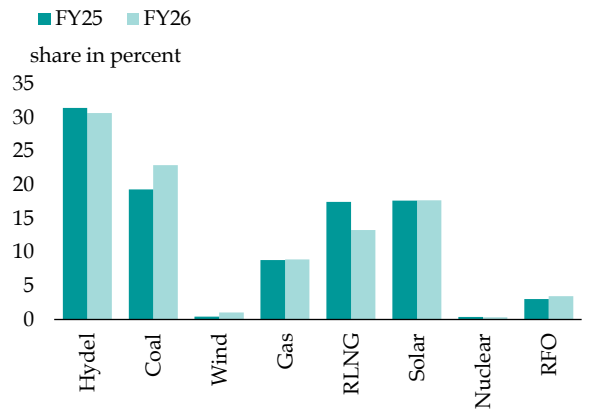
Lower industrial demand and deferral of surplus contracted LNG cargoes contributed to the decline in LNG imports, even though the average international RLNG price was lower during the year.[30] Moreover, the expansion of rooftop solar has begun to moderate Pakistan's dependence on imported fuels, with estimated annual savings of around US$ 4.5 – 5.5 billion in FY26 (**Table 5.5**). This may also have contributed to contain country's energy import bill during the last few years.

*Declining global cotton prices trimmed the textile import bill*

The decline in textile imports reflected the combined impact of lower prices and reduced import volumes. The price effect was mainly driven by lower international cotton prices, while the decline in volumes was partly attributable to a shift towards synthetic fiber and yarn as inputs, in line with increasing demand for man-made fiber (MMF) based garments.

In addition, the imposition of 18 percent sales tax on imported cotton may have encouraged greater reliance on domestically produced cotton, while the corresponding tax on domestically produced cotton has incentivised underreporting of ginned cotton.[31]

**Energy Generation by Source** **Figure 5.20**




Source: NEPRA

[28] As per SBP staff calculation, the price effect was dominant during the conflict period.
[29] As per OCAC data.
[30] The average RLNG price was US$9.13 per mmbtu in FY25 and US$8.38 per mmbtu in FY26. The disruption to LNG supplies from Qatar during the Middle East conflict, increased uncertainty in supply availability, which temporarily increased the spot prices for replacement cargoes.
[31] USDA (2025). Cotton and Products Update, United States Department of Agriculture.

**Import Savings Due to Solarisation – FY26** **Table 5.5**

| | Methodology/Calculation | FY26 Estimate |
|---|---|---|
| Installed solar capacity (FY2025) * | Pakistan Electricity Review Report | 38GW |
| Installed solar capacity (March 2026) * | Pakistan Electricity Review Report | 51GW |
| Average installed and operational capacity (FY26)^ | (38 + 51)/2 | 44.5GW |
| Capacity Factor** | Assumed | 17- 20 percent |
| Annual solar electricity generation | 44.5* 8760 hours * (17-20) | 66 - 78 TWh |
| Weighted average fuel cost of displaced generation**** | RLNG (Rs 34/KWh), Coal (Rs 16/KWh) and RFO (Rs 58/KWh) | Rs 24.9/KWh |
| Estimated annual energy import savings | 77.964 billion kWh × Rs 24.9/kWh | Rs 1,649.99 - 1,941.3 billion |
| **Estimated Total Annual Energy Import Savings*** ** | Average exchange Rate, Rs 281 | US$ 5.9 - 6.9 billion |
| **Estimated Total Annual Import Savings Net of Imports of Solar Panels, Batteries, Inverters^** | Solar panel (US$ 819 million) + Batteries (US$ 254 million) + Solar Inverters (US$ 344 million) | US$ 4.5 - 5.5 billion |

Note: *values of estimated distributed solar deployment is taken from Pakistan electricity review report 2026
**average of last 5 years capacity factors taken from Pakistan electricity review report 2026. Solar capacity utilisation factor remains resource-driven, bounded solar irradiance, weather impact, reflecting daytime generation.
***it may be noted that reflecting ongoing solarisation drive, import of solar panels and solar-related components (inverters, batteries, etc.) recorded at around US$1.4 billion in FY26 which is reflected in machinery import bill.
**** weighted average of RLNG, Coal and RFO based on recent shares in the generation mix
^as per PBS HS 8 latest available data.
Sources: SBP staff estimates based on PBS HS 8 import data; Pakistan electricity review report; performance evaluation reports of operational power plants NEPRA; China's Solar PV Exports | Ember, Shedding light on Pakistan's distributed solar revolution

### *Modernisation and capacity expansion underpinned higher machinery imports*

Import of machinery registered a broad-based increase across most segments, except for electrical machinery. Import of electrical machinery declined primarily due to falling solar panel prices; though Q4-FY26 witnessed some upward price adjustment, it was partially offset by the decline in the import volume of solar panels in FY26. This decline reflects a slowdown in the pace of capacity additions following the exceptionally strong growth in recent years and, to a certain extent, a response to the prosumer's regulation issued in February 2026. However, imports of lithium-ion batteries have risen rather sharply, reflecting second phase of solarisation where consumers are adding battery storage.

The increase in office machinery import reflects ongoing digitalisation, IT modernisation and capacity expansion, while the rise in agricultural machinery imports was on the back of provincial government's initiatives aimed at promoting farm mechanisation (**Chapter 2**).[32] Similarly, higher infrastructure requirements, driven by network fiberisation, rising international bandwidth capacity, and the forthcoming 5G spectrum rollout, supported growth in telecom equipment imports.[33]

### *Imports of transport group increased significantly*

The increase in imports of transport group broadly mirrors trends in domestic production and sales of automobiles amid tariff rationalisation. The increase was mostly concentrated in CKD motor cars, which grew by around 96.8 percent to US$ 2.2 billion in FY26. Similarly, import of CBU cars increased by 32.0 percent to US$ 367 million. A relatively slower growth in import of CBU compared to CKD cars suggests that the increase in motor cars imports was driven by factors other than tariff, including a recovery in domestic demand and the introduction of new models with enhanced quality and advanced features.

FY26 also marked a notable transition in Pakistan's automotive, with investment and market activity increasingly shifting towards new energy vehicles (NEVs) alongside conventional

[32] 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/
[33] 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.

**Trade in Services** **Table 5.6**

million US$

| | Import (M) | | | Export (X) | | | Balance (X-M) | | |
|---|---|---|---|---|---|---|---|---|---|
| | FY25 | FY26 | Change | FY25 | FY26 | Change | FY25 | FY26 | Change |
| **a) Transport** | **4,699.1** | **5,002.9** | **303.8** | **995.4** | **1,233.4** | **238.0** | **-3,703.7** | **-3,769.5** | **-65.8** |
| Sea freight | 2,268.7 | 2,527.1 | 258.4 | 93.0 | 118.5 | 25.5 | -2,175.7 | -2,408.6 | -232.9 |
| Air passengers | 1,410.0 | 1,529.6 | 119.6 | 404.8 | 398 | -6.8 | -1,005.2 | -1,131.6 | -126.4 |
| Air freight | 34.3 | 47.4 | 13.1 | 28.5 | 55.9 | 27.4 | -5.8 | 8.5 | 14.3 |
| **b) Travel** | **2,405.8** | **2,887.7** | **481.9** | **729.1** | **1,116.0** | **386.9** | **-1676.7** | **-1,771.8** | **-95.1** |
| Education expenses | 623.3 | 627.4 | 4.1 | 18.9 | 23.2 | 4.3 | -604.4 | -604.2 | 0.2 |
| Religious travel | 598.6 | 867.5 | 268.9 | 5.4 | 5.3 | -0.1 | -593.2 | -862.2 | -269.0 |
| Other (other personal) | 1157.4 | 1,358.8 | 201.4 | 680.8 | 1,069.9 | 389.1 | -476.7 | -288.9 | 187.7 |
| **c) ICT Services** | **492.9** | **683.1** | **190.2** | **3,819.7** | **4602.4** | **782.7** | **3,326.8** | **3,919.3** | **592.5** |
| Software consultancy | 196.1 | 247.1 | 51 | 1,107.9 | 1,277.20 | 169.3 | 911.8 | 1,030.1 | 118.3 |
| Other computer services | 25.6 | 121.9 | 96.3 | 1,534.4 | 1,958.50 | 424.1 | 1,508.8 | 1,836.6 | 327.8 |
| *o/w freelance services* | - | - | - | 779.5 | 1,164.80 | 385.3 | - | - | - |
| Export/Import of Telecommunications | 146.1 | 241.8 | 95.7 | 593.9 | 655.8 | 61.9 | 447.8 | 414.0 | -33.8 |
| | 116.4 | 56.6 | -59.8 | 553.8 | 698 | 144.2 | 437.4 | 641.4 | 204.0 |
| **d) other business services** | **1,323.9** | **1,245.20** | **-78.7** | **1,691.4** | **2,197.1** | **505.7** | **367.5** | **951.9** | **584.4** |
| *o/w other freelance services* | - | - | - | 205.5 | 592.9 | 387.4 | - | - | - |
| **Total services** | **11,290.2** | **11,930.20** | **640.0** | **8,446.8** | **10,055.8** | **1609.0** | **-2,843.3** | **-1,874.4** | **969.0** |

Source: SBP

ICE models.[34] Moreover, importers also appear to have accelerated CBU shipments amid market expectation of higher sales tax and withdrawal of existing fiscal concessions (*reduced GST rates*) for EVs/PHEVs in the budget. This frontloading was pronounced in Q4-FY26.[35]

*Imports of agriculture and other chemicals increase*

The increase in imports of agricultural and other chemicals was led by plastic materials and medicinal products. Plastic materials imports rose, particularly of polyethylene and other polymers of ethylene. Both materials are used in domestic manufacturing particularly in packaging, construction and consumer goods, suggesting continued strength in downstream industrial activity. While import of pharma products, particularly Active Pharmaceutical Ingredients (APIs), increased in line with capacity expansion under API policy as well as abolition of customs duty on raw materials for life saving medicines and initiatives to localise national immunisation programs.

**Trade in Services**

The services trade deficit narrowed for the second consecutive year in FY26 **(Table 5.6)**. The improvement owes to relatively higher growth in exports of services compared to imports. The imports growth was primarily driven by increased payments for transport, travel, and other businesses services. While ICT services contributed more than one third of the services export during FY26.

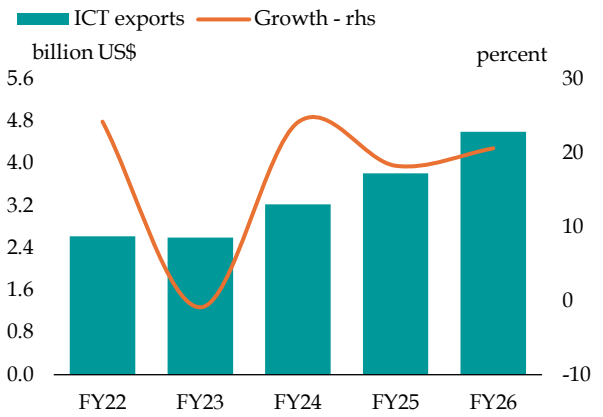
ICT exports maintained strong growth trajectory, rising by 20.5 percent to US$ 4.6 billion in FY26 **(Figure 5.21)**, and became the second largest export earner after knitwear. Freelancing was the dominant driver of growth in ICT exports. The strong growth of ICT exports is the outcome of various government and SBP initiatives to support ICT exporters and freelancers. For instance, SBP simplified documentation requirements to encourage use of formal channel for inward receipts and outward remittances.[36]

[34] The shift is evidenced by the entry of major Chinese NEV manufacturers. Moreover, under the NEV Policy 2025–30, the government proposed a PKR 100 billion subsidy package to accelerate EV adoption and expand EV charging infrastructure. Also see Box 2.3 on Pakistan's NEV Policy, SBP's The State of Pakistan's Economy Half Year Report 2025-26.

[35] Data and key insights have been taken from reports of equity market brokerage houses.

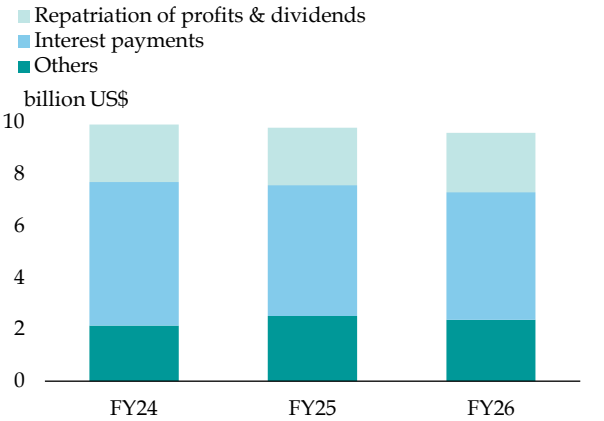
[36] The requirement for IT exporters to submit Form R for each transaction has been replaced with a one-time declaration at the time of opening the account. Source: SBP EPD Circular Letter No. 07 April 2026

**Pakistan's ICT Exports** **Figure 5.21**




Source: SBP

**Primary Income Account - Major Payments** **Figure 5.22**




Source: SBP

Moreover, SBP also raised the minimum reporting threshold[37] and set maximum one working day for inward receipts and outward remittances for process through Exporters' Special Foreign Currency Accounts (ESFCAs). In addition, freelancers and IT exporters were allowed to retain 50 percent of the export proceeds or US$ 5,000 per month, whichever is higher in ESFCAs, for import of equipment.[38] However, despite the strong growth in ICT exports, the limited upgrading of firms into larger-scale operations remains a structural challenge for the sector **(Box 5.2)**.

The increase in imports of transport services in FY26 is primarily attributable to higher sea freight payments resulting from increased imports of goods, as well as elevated risk insurance costs associated with the Middle East conflict.[39] Meanwhile, transport services' receipts also recorded an increase, reflecting increased port activity during the year.

Similarly, travel-related payments rose by 20 percent in FY26,[40] reflecting 10.8 percent increase in airfares due to higher global oil prices.[41] Moreover, increase in Hajj costs due to mandatory health insurance, which is included in visa cost, also added to travel payments.

**Primary Income Account**

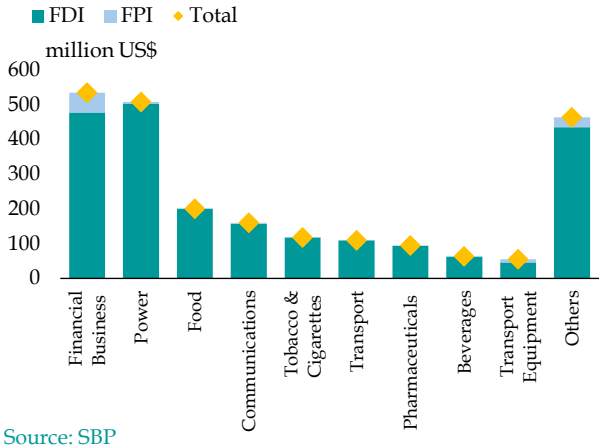
Primary income deficit narrowed by US$ 341 million in FY26 **(Figure 5.22).** This improvement was mainly on the back of lower interest payments. The decline, despite an increase of 6.6 percent in public debt stock excluding FX liabilities, is attributed to improved external debt profile and lower interest cost owing to easing global financial conditions in FY26 compared to FY25.

The decomposition of changes in interest payments shows that lower interest rates drove the decline which was partly offset by the larger debt stock. This contrasts with previous years when rising interest rates were the main driver of interest payments **(Box 5.3)**.

Repatriation of profits/dividends, which is another major component of primary income account, increased by US$ 0.1 billion to US$ 2.3 billion in FY26. The repatriation of profits/dividends was mainly led by financial businesses (US$ 534 million), and power sector (US$ 508 million), respectively **(Figure 5.23)**.[42]

[37] The minimum threshold was raised to US$ 25,000 from US$ 10,000
[38] EPD Circular Letter No. 06
[39] https://www.spglobal.com/energy/en/news-research/latest-news/shipping/072226-middle-east-shipping-insurance-costs-rise-on-hormuz-risks-marsh
[40] Religious, education and personal tourism related travel payments primarily constitute the overall travel payments.
[41] Global airfare increased to US$ 461 on June 2026 compared to US$ 416 in Jun2025. Source: OAG
[42] Government cleared payments to Chinese IPPs in August 2025, as part of circular debt reduction plan.

**Sector wise Repatriation of Profit - FY26** **Figure 5.23**




Source: SBP

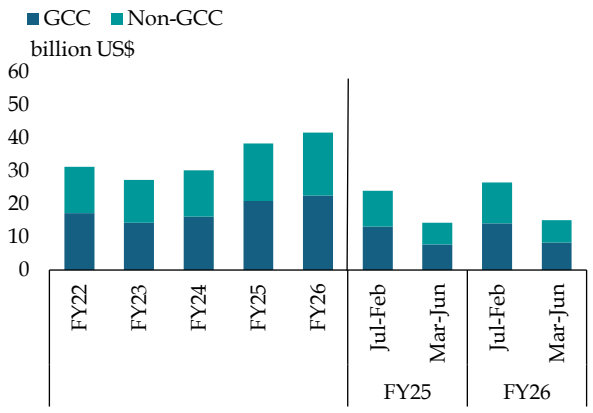
**Secondary Income Account**

Secondary income account showed a record surplus, mainly contributed by workers' remittances. Workers' remittances grew by 8.6 percent to US$ 41.6 billion in FY26. Several factors contributed to this strong performance, including increased labor emigration, and government and SBP's initiatives aimed at encouraging the use of formal remittance channels. Geographically, the Gulf region continued to be the main source of workers' remittances, with Saudi Arabia and the UAE accounting for around 45 percent of total remittance inflows **(Figure 5.24)**.

The UAE emerged as the largest contributor to the increase in FY26, adding nearly US$ 978 million compared to the previous year. Other significant contributors included Saudi Arabia, EU and the United Kingdom. Moreover, economic activity in UAE remained strong before the conflict, which was supported by non-oil sectors.[43] In case of Saudi Arabia, Pakistan and KSA have formalised a long-term labour mobility strategy aligned with Saudi Arabia's Vision 2030 non-oil diversification agenda,[44] which reinforced structural, non-oil-linked demand for Pakistani labour force. Since Pakistani workers in both economies are concentrated outside the oil sector,[45] with a large share of un-skilled labour **(Figure 5.25),** the slowdown in oil sector had a relatively limited direct impact on their employment and earnings.

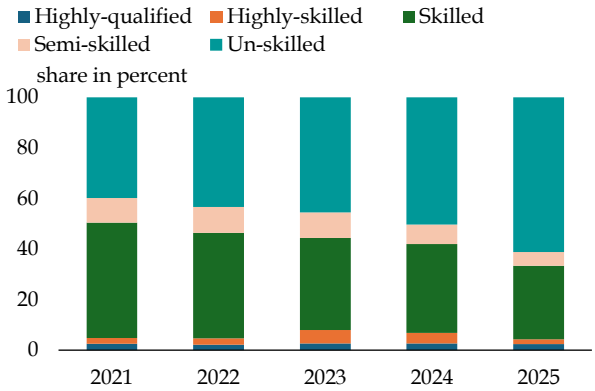
Importantly, remittance growth remained robust even after discontinuation of cost-related incentives.[46] SBP continued to strengthen the

**Workers' Remittance Inflows** **Figure 5.24**




Source: SBP

**Skill Composition of Registered Workers Going Abroad** **Figure 5.25**




Source: BE&OE

[43] UAE non-oil GDP grew 4.8 percent YoY in Q1-2026, raising its share of national output to 79.4 percent from 78.0 percent in 2025. Source: The National, "UAE economy grows 3 percent in first quarter" (Aug. 4, 2026).

[44] Under the Human Resource Deployment Plan (2025–2039), Pakistan targets deployments of 1 million worker to Saudi Arabia by 2030 across construction, hospitality, healthcare, IT, logistics, aviation and infrastructure sectors, aligned with Saudi Vision 2030.

[45] Pakistani workers in Saudi Arabia are concentrated in construction, skilled trades (electricians, HVAC technicians, plumbers, welders), transport/logistics and domestic services. In UAE, Pakistani workers are primarily in construction, retail, hospitality and transportation. Source; DITRC, "Top 7 Countries that Employ Pakistani Workers".

[46] Under the Incentive Scheme for Marketing of Home Remittances, financial institutions received a per-dollar cash incentive of Rs 1, Rs 2 and Rs 3 for incremental remittance growth of up to 5 percent, between 5 and 10 percent, and above 10 percent, respectively.

capacity of exchange companies to mobilise and manage remittance inflows. In this regard, SBP amended the regulatory framework for Exchange Companies in April 2026 to give them greater flexibility in managing foreign exchange positions linked to remittance inflows.[47] This measure complements the formal-channel framework by reducing operational constraints faced by exchange companies in mobilising remittances.

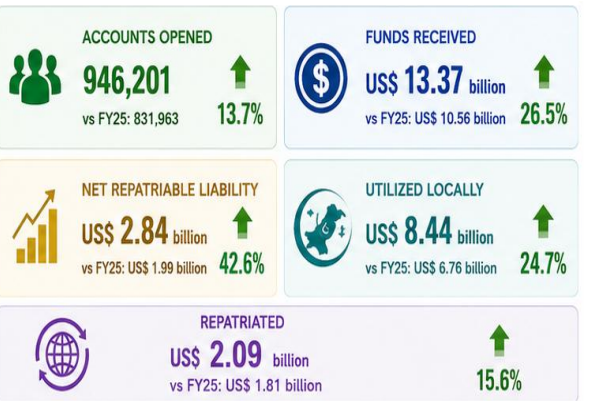
While these measures have strengthened the formalisation and resilience of remittance flows, an important policy question is whether remittances can be leveraged beyond household consumption to support savings, investment, and productive activity; **Box 5.4** attempts to shed light on the question. This is also worth highlighting that remittances help finance external imbalances and support domestic consumption, they cannot permanently compensate for weak export performance and low investment.

## 5.4 Financial Account

With current account almost in balance, the net financial inflows of US$ 2.0 billion in FY26, compared to US$ 1.6 billion in FY25, helped in reserve build-up and support the overall external position. The slight moderation in net financial inflows was primarily due to relatively lower foreign private investment, while net official disbursements increased mainly due to lower amortisation in FY26.[48]

Multilateral development partners remained the largest source of external financing.[49] Bilateral disbursements also amounted to US$ 1.4 billion. Meanwhile, KSA provided US$ 3 billion-time deposits in April 2026,[50] which facilitated Pakistan to repay US$ 3.45 billion to UAE in April 2026.

**Roshan Digital Accounts** **Figure 5.26**




Source: SBP

Moreover, Roshan Digital Accounts (RDAs) maintained a strong momentum, with cumulative inflows, and account openings, and steady increase in net repatriable liabilities (**Figure 5.26**). The net repatriable liabilities rose to US$ 2.8 billion, with Naya Pakistan Certificates (NPCs), particularly Islamic NPCs, attracting US$ 1.9 billion. To further attract non-resident investment, SBP expanded the scheme to non-resident foreign entities and added major Gulf currencies (Saudi Riyal and UAE Dirham), alongside highly competitive profit rates.[51]

*FDI declined amid elevated global uncertainty*

Net FDI declined to US$ 1.5 billion in FY26 from US$ 2.5 billion in FY25, reflecting weaker inflows across major sectors, particularly power and grid transmission. Gross FDI in Pakistan also decreased by 22.7 percent to US$ 3.3 billion, while gross FDI outflows increased by around 15.8 percent to US$ 1.5 billion (**Figure 5.27**).

The scheme was discontinued with effect from July 1, 2025, per SBP EPD Circular Letter No. 06 of 2025, which withdrew the scheme established under EPD Circular Letter No. 15 of 2023.

[47] SBP, EPD Circular Letter No. 08 of 2026 (Apr. 10, 2026), allowing Exchange Companies to enter for sale transactions with Authorized Dealers against receipt of home remittances for up to five working days, by amending Para 7, Chapter 7 of the Regulatory Framework for Exchange Companies.

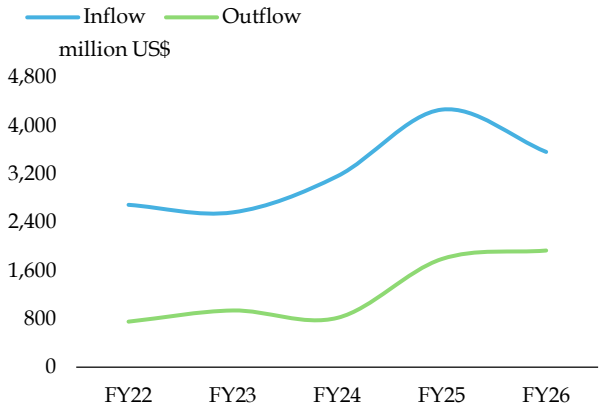
[48] This does not include repayment of Eurobond, which is reflected in FPI in financial account.

[49] International Islamic Trade Finance Corporation (ITFC) arranged the largest syndicated financing for Pakistan over the last 3 years. The proceeds are used for energy imports.

[50] This was in addition to the US$ 5 billion-time deposits provided to Pakistan in FY25.

[51] Finance Division vide Gazette notifications No. S.R.O. 482(I)/2026 dated March 16, 2026, and Gazette notifications No. S.R.O. 483(I)/2026 dated March 16, 2026. Finance Division vide Gazette Notification No. S.R.O.870(I)/2026, dated May 15, 2026.

**Foreign Direct Investment** **Figure 5.27**




Source: SBP

Direct investment abroad by Pakistanis rose from US$ 15 million in FY25 to US$ 342 million in FY26, indicating that some firms are finding overseas markets more attractive for deploying incremental capital. The phenomenon extends beyond cyclical movements, highlighting concerns over corporate taxes, policy predictability, regulatory certainty, energy costs, infrastructure and institutional capacity.[52] Moreover, the global FDI landscape is shifting from cost-driven investment towards strategic considerations, including supply-chain resilience, technology and industrial policy. For Pakistan, this raises the bar for attracting FDI. A large market and low-cost labour are no longer sufficient without reliable infrastructure, skill, policy predictability and stronger integration into regional and global value chains.[53]

*FDI remains uneven across key sectors*

Financial business and power sector remained the principal recipients of FDI in FY26. The *financial business* was the only major sector to record a relatively higher net inflow, US$ 806 million in FY26 compared to US$ 702 million last year. The increase was supported by continued foreign participation in banking and other financial services, including Islamic banks, digital banks and fintech providers.[54]

The FDI in fintech and digital banking broadly reflects the global trend, which is reinforced by SBP's initiatives on developing digital infrastructure and technology ecosystems in the financial sector. At the same time, there is a considerable scope for Pakistan to attract FDI in cloud-based banking platforms, and AI-driven financial services.

*Power sector FDI slows, primarily due to lower investment in hydel projects*

The net FDI inflows in power sector declined from US$ 1,178 million in FY25 to US$ 958 million in FY26, despite higher net inflows in the thermal and coal-based[55] power projects. The decline was primarily driven by the fall in investment in hydropower projects from US$ 736 million in FY25 to US$ 422 million in FY26. The inflows in FY26 were largely sourced from China, accounting for nearly three-quarters of total FDI in hydel power, followed by Republic of Korea.

The decline in FDI in hydel projects reflects not only weaker project-level investment but also a broader transition in the power sector policy from capacity expansion towards consolidation. The investment pipeline also reflects this shift. As of June 2026, the Azad Pattan and Kohala hydro projects remained on hold, despite having received Letter of Support.[56] The PPIB portfolio also places the Mahl project on hold, with pending approval of IGCEP 2025-2035.[57] Together, these developments suggest that the key constraint is

[52] The State of Pakistan's Economy, Half Yearly Report FY26

[53] As per UNCTAD World Investment Report 2026 report, global FDI flows rose by 6 per cent, to US$ 1.6 trillion. Inflows increased by 11 percent in developed economies and by 2 percent in developing economies. The FDI shift is concentrating investment in strategic sectors while leaving many developing countries behind.

[54] Notable developments included the expansion of UAE-based Mashreq Bank's digital banking operations and the establishment of Kuwait-backed Raqami Islamic Digital Bank. UAE has also increased its investment in Mobilink bank. Source: SECP

[55] 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

[56] PPIB website: https://www.ppib.gov.pk/cpec.html

[57] IGCEP (2025–35) is Pakistan's 10-year least-cost power-generation plan, and it affects hydropower projects by determining whether and when proposed projects are included in the least-cost generation pipeline based on projected demand, costs and system requirements. Source: https://nepra.org.pk/Admission Notices/2025/08 Aug/IGCEP_2025-35_R2.pdf

not the availability of identified hydropower resources, but the ability to establish a sufficiently predictable, financially viable and policy-consistent framework for converting projects in the pipeline into investible opportunities.

*Grid and transmission investment lags despite rising needs*

Chinese companies accounted for nearly all FDI in the grid and transmission segment. The FDI composition within the power sector has remained skewed towards generation, with FDI inflows into electric machinery (*including grid and transmission upgradation*), [58] has consistently remained lower despite its critical role in ensuring the reliability and efficient utilisation of generation capacity. The gap became more pronounced in FY26, as FDI in electric machinery further slowed. This limited FDI is particularly notable as the rapid expansion of distributed solar in Pakistan, is altering demand patterns and power flows. This is increasing the need for grid modernisation, flexibility and enhanced transmission infrastructure.

*Upstream investment slows amid structural issues*

Meanwhile, FDI in oil and gas exploration decreased to US$ 111 million compared to inflows of US$ 250 million last year, reflecting the sector's persistent commercial and operational challenges, including the capital-intensive nature of exploration, declining production from mature fields and security risks in frontier areas.[59] Nevertheless, the resumption of offshore and online licensing in the last quarter of FY26 signals renewed efforts to revive upstream investment.

*Global supply-chain shifts weigh on export-oriented FDI sectors*

FDI inflows into export-oriented industries also weakened, particularly textile, other chemicals, food processing and pharma, reflecting both domestic competitiveness constraints and a less favourable global investment environment for supply-chain intensive manufacturing. The global greenfield investment announcement in supply-chain intensive sectors, - textiles, processed food, electronics and automotive - declined sharply amid tariff uncertainty, geopolitical tensions, and multinational efforts to de-risk supply chains.[60] This global shift is particularly relevant for Pakistan, where export-oriented FDI remains concentrated in relatively low-value manufacturing and has yet to establish a strong position in higher-value global value chains.

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

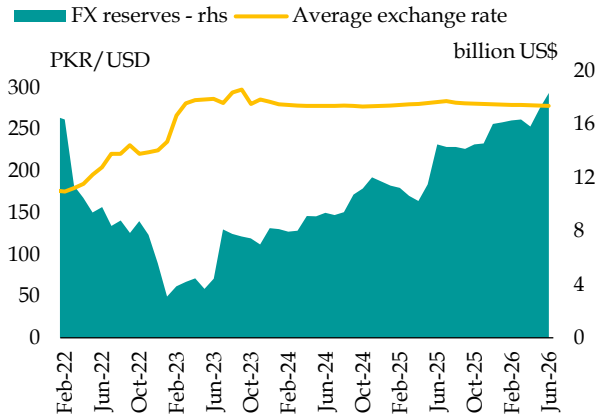
Net FPI recorded an outflow of US$ 1.2 billion during FY26, compared to an outflow of US$ 0.7 billion in FY25.[61] This largely reflected repayment of maturing Eurobonds. At the same time, Pakistan regained access to international capital markets after a four-year gap and raised US$ 750 million through a three-year-Eurobond in April 2026. Moreover, Pakistan raised US$ 250 million through first Panda bond[62] in May 2026, with the latter being oversubscribed by five times. The successful issuances were supported by improved sovereign credit worthiness, following rating upgrades by Moody's and S&P during FY26, alongside continued macroeconomic stability and progress under the IMF programme.[63]

## 5.5 Exchange Rate and FX Reserves

SBP's liquid foreign exchange reserves increased by US$ 3.9 billion during FY26 to US$ 18.4 billion by end June 2026 (**Figure 5.28).** SBP also reduced its forward/swap liabilities by US$ 1.6 billion

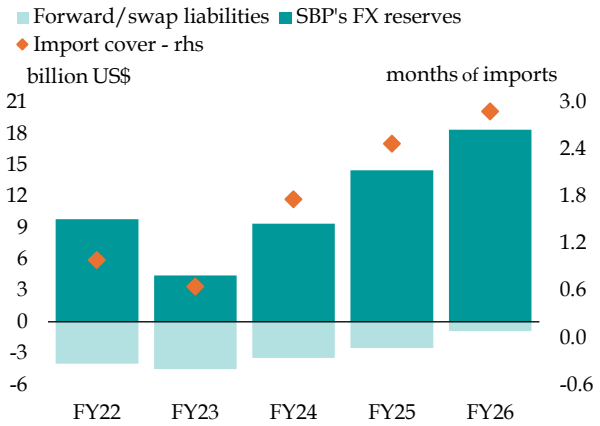
[58] All the investment in this segment was dominated by a single project named Pak Matiari–Lahore Transmission Company. PMLTC functions as an Independent Transmission Company (ITC) under a long-term concession, earning regulated transmission charges approved by Pakistan's power regulator. It addresses the transmission bottleneck by transporting electricity from power plants in southern Pakistan to major demand centers in Punjab.
[59] Source: https://petroleum.gov.pk/NewsDetail/NzFlYWI0YjYtODAxNi00MTVkLTk5ZDQtNzY4YjdiMDVhNzJh
[60] UNCTAD Global Investment Report.
[61] This reflects repayment of US$ 500 million Eurobond repayment in September 2025 and US$ 1.3 billion Eurobond in April 2026.
[62] Issued in the Chinese capital market at an interest rate of 2.5 percent, with a three-year maturity
[63] S&P Global upgrade to B- from CCC+ in July 2025, Moody's upgraded Pakistan from Caa2 to Caa1 in August 2025.

**FX Reserves and Exchange Rate** **Figure 5.28**




Source: SBP

**Forward/Swap Liabilities and Import Cover** **Figure 5.29**




Source: SBP

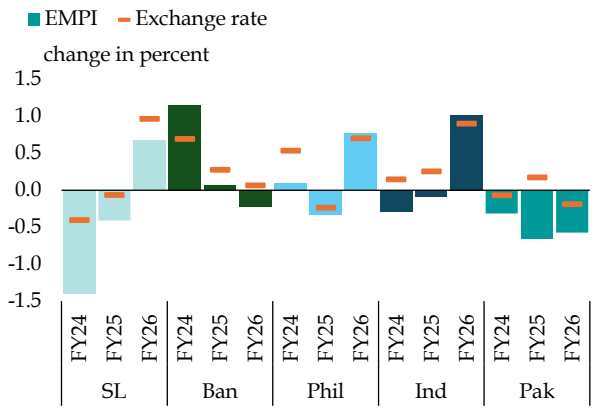
**(Figure 5.29)**. As a result, reserve adequacy – as measured by import coverage of FX reserves – rose to 2.9 months of imports, the highest in the last five years and the 3-month benchmark**.** This build-up in external buffers reflects not only a significant increase in the quantum of reserves, but also a qualitative improvement.

The key factor contributing to the build-up of FX buffers contained current account deficit, in fact a surplus current account balance excluding interest payments. This together with private financial inflows helped SBP to make net purchases of US$ 8.1 billion during FY26. In addition, net official inflows and disbursements from the IMF under EFF and RSF also contributed to reserve build-up.

These, together with improved external debt profile, i.e. shift from short-term to the longer tenor deposits, eased exchange market pressures, as indicated by lower exchange market pressure index (EMPI).[64] The EMPI indicates net appreciation pressures for last three years compared to peer economies **(Figure 5.30),** which explains relative stability in forex market.

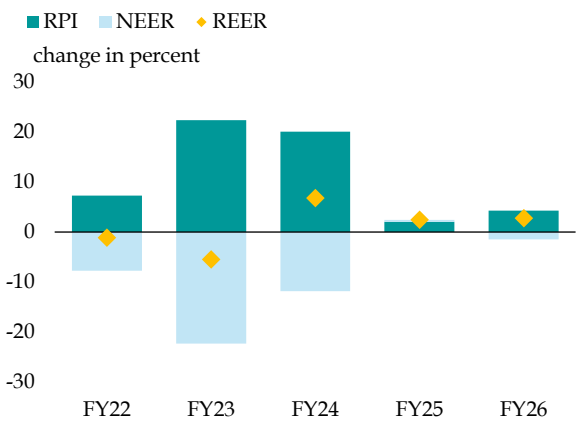
The nominal effective exchange rate (NEER) depreciated by 1.5 percent against competitors'

**Exchange Market Pressure Index** **Figure 5.30**




Sources: IMF; SBP staff calculations

**REER, NEER and RPI** **Figure 5.31**




Source: SBP

[64] The Exchange Market Pressure Index (EMPI) measures underlying pressures in the foreign exchange market by combining exchange rate movements with changes in official foreign exchange reserves. Higher values indicate greater pressure on the domestic currency, while lower values indicate weaker market pressures. Sources: Khan 2010 and SBP staff calculations.

and trading partners' currencies. However, a relatively sharp increase in relative prices index (RPI) of 4.3 percent due to higher domestic inflation vis-à-vis competitors and trade partners, more than offset the nominal depreciation (**Figure 5.31**). As a result, the real effective exchange rate was appreciated by 2.8 percent on average in FY26.

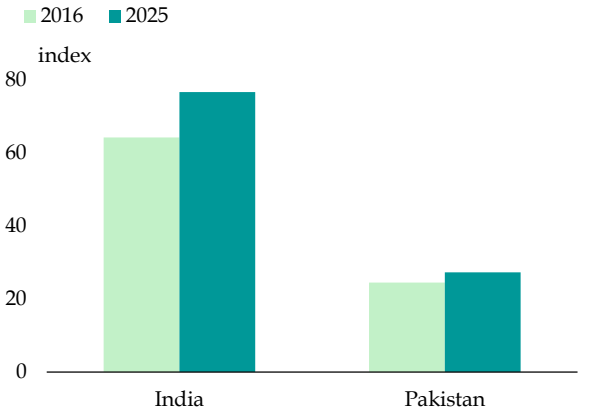
**Box 5.1: India-EU Free Trade Agreement: Implication for Pakistan and the Way Forward**

Pakistan has benefitted from EU GSP+ preference since 2014, under which more than 85 percent of Pakistani exports, including textile and clothing, enter the EU duty-and-quota free. The EU is Pakistan's second largest trading partner.[65] In 2025, Pakistan's exports to the EU amounted to US$ 10.1 billion, with around 72 percent comprising textile-based products. On the other hand, India's exports to EU stood at US$ 75.9 billion dominated by non-textile/non-agricultural exports. In this context, the conclusion of negotiations of the India-EU Free Trade Agreement (FTA) in January 2026, marks a significant shift in the competitive landscape facing other South Asian exporters. The agreement will provide India with substantially improved and more predictable access to the EU market.[66] Importantly for Pakistan, most EU tariffs on Indian textiles and apparels are scheduled to be removed. Although the India-EU FTA does not alter Pakistan's existing preferential access to the EU, it would reduce Pakistan's historical tariff in the EU advantage to Pakistan. This is particularly significant because India and Pakistan compete in several similar labor-intensive export categories in EU market.

**From preferential advantage to competitive neutrality**

For over a decade, Pakistan's GSP+ status provided a tariff advantage over India in several products in the EU market, which allowed Pakistani exporters to compete despite relatively high domestic costs, weak infrastructure and limited product diversification. With the implementation of the India-EU FTA, this tariff cushion will progressively narrow (**Table 5.1.1**). Analysis shows that Pakistan's trade complementarity index (TCI) with EU is significantly below India's and has remained stagnant over the last decade. This is because of Pakistan's exports are concentrated in textiles, whereas India's export basket is more diversified (**Figure 5.1.1**).[67]

**Trade Complementarity Index** **Figure 5.1.1**




Source: SBP staff calculations based on data of ITC trademap

***Quadrant Analysis based on Export Portfolio Diversification Matrix (EPD)***

The lower TCI of Pakistan's export basket points to a broader structural challenge, but it does not shed light on the products that offer scope for expansion; the existing strengths are becoming vulnerable; or loss of opportunities in growing EU markets. To identify these product level differences, we use EPD matrix (**Figure 5.1.2**). It assesses where Pakistan is gaining or losing ground in the EU market, by comparing the growth of Pakistan's exports across product categories vis-à-vis growth in EU demand in those product categories. This distinction is particularly important, because strong Pakistani export growth does not necessarily indicate a promising market. Pakistan may be expanding in products for which overall EU demand is stagnant and vice versa. The analysis first separates products into four quadrants[68]: rising stars, falling stars, losing opportunities, and retreat. Then, Pakistan's market share is used to assess the economic significance of each category.

[65] Accounted for around 14 percent of Pakistan's total trade in 2025.

[66] The EU will eliminate or reduce tariffs on over 90 percent of tariff lines, corresponding to 91 percent of the trade value, while India will liberalize 86 percent of tariff lines, covering 93 percent of the trade value.

[67] The TCI measures the degree to which a country's export profile matches the import profile of its trading partner. A score closer to 100 suggests a perfect match (high potential for trade), while a score closer to 0 suggests no complementarity.

[68] **Rising Star:** EU CAGR ≥6 percent and Pakistan CAGR ≥0 percent; **Lost Opportunity:** EU CAGR ≥6 percent and Pakistan CAGR <0 percent; **Falling Star:** EU CAGR <6 percent and Pakistan CAGR ≥0 percent; **Retreat:** EU CAGR <6 percent and Pakistan CAGR <0 percent. The 6 percent is used as a cutoff/benchmark used in this analysis. Pakistan 0 percent CAGR is the natural threshold separating export growth from decline, while market share is treated as a separate indicator of the economic important of each product.

**India–EU FTA and Pakistan's Competitive Position in the EU Market** **Table 5.1.1**

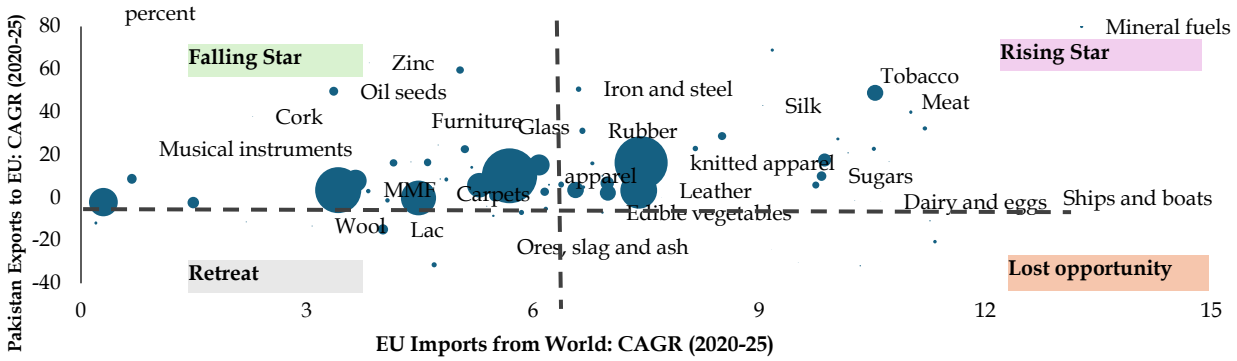
| Dimension | Pakistan under GSP+ | India under EU-India FTA | Implication for Pakistan |
|---|---|---|---|
| Tariff Access | Preferential/duty-free access on large share of eligible exports | Tariffs eliminated or reduced across almost the entire trade basket | Historical tariff advantage will narrow |
| Home Textile & Apparel | Under GSP+, 66 percent of tariff lines are covered for this segment. Moreover, Pakistan's exports are fragmented and cotton heavy.<br><br>Pakistan's textile export unit value in FY26 was 7.8 Euro/kg. | Tariffs removed on India's home textile and apparel imports in EU on 100 percent of tariff lines. India's exports are vertically integrated and have higher MMF capability.<br><br>India's textile export unit value in FY26 was 8.5 Euro/kg. | Pakistan loses its historical 10–12 percent price cushion. Direct competition in Pakistan's main export commodity will intensify |
| Rules of Origin and Supply Chain Competitiveness | To move into high value MMF, Pakistan often needs to import yarn or fabric. Under GSP+ "Double Transformation"[69] rules, Pakistan does not qualify for duty-free access. | Indian manufacturers can import technical textiles or luxury yarns, turn them into finished products, and send them back to the EU at 0 percent duty. | Pakistan may lose in high value MMF segment as India can easily move into high value MMF textile segment, due to supply chain flexibility. |
| Coverage | More than 85 percent of exports | More than 90 percent of exports covered | Pakistan has relatively lower market access |
| Policy Certainty | Preference remains subject to GSP+ eligibility and monitoring. Will be reviewed in December- 2027 for renewal[70] | Binding bilateral FTA framework | Greater certainty for Indian exporters |
| Services & digital trade | Limited preferential framework | Dedicated services and digital trade provisions. | Pakistan may not gain from service exports compared to India |

Source: SBP staff assessment based on Euro commission website

**Rising stars:** Pakistan has a relatively broad set of products in this quadrant, including knitted apparel, leather, toys and sports goods, footwear, beverages and pharma products.

**Lost opportunities:** The most concerning category, where EU demand is expanding but Pakistan's exports are declining. This quadrant includes cereals, hides and skin, soaps, edible vegetables. The challenges facing these export

**Export Portfolio Diversification Matrix** **Figure 5.1.2**




**Note:** size of the bubble shows Pakistan's market share of each commodity/product in EU. percent
**Rising Star:** EU CAGR ≥6% and Pakistan CAGR ≥0%; **Lost Opportunity:** EU CAGR ≥6% and Pakistan CAGR <0%; **Falling Star:** EU CAGR <6% and Pakistan CAGR ≥0%; **Retreat:** EU CAGR <6% and Pakistan CAGR <0%.

Source: SBP staff calculations based on ICT Trademap data

[69] Double transformation requires that both the yarn and fabric used in a textile product are produced within the eligible countries for the product to qualify for preferential tariff treatment.

[70] It is important to note that the EU has revised its Generalised Scheme of Preferences Plus (GSP+) framework, ending the automatic extension of trade preferences starting in January 2027. Therefore, Pakistan will have to formally apply for an extension and submit an action plan covering 32 UN conventions.

segments need to be explored regarding their productive capacity, standards and certification, input availability, competitiveness and market access constraints.

**Falling stars:** This quadrant includes other made-up textile articles like knitted fabrics and fur skins etc. These products demonstrate the Pakistani firms can remain competitive even when market conditions are less favorable but continued growth may be constrained by weak EU demand. An appropriate strategy to address this would be product upgrading, productivity improvements, and quality differentiation.

**Retreat:** This quadrant represents products where both the EU demand and Pakistan exports are declining. Cotton is the most important example, as its EU demand declined by 1.9 percent and Pakistan's exports declined by 1.8 percent, yet cotton requires particular attention because Pakistan still holds a 12.4 percent market share in EU. This illustrates why this quadrant should not be interpreted in isolation. A retreat product with a larger market share can be more economically important than a rising star with a 0.01 percent share. For such products, the objective should be defending viable market share while moving towards higher-value or faster-growing downstream products.

**Conclusion and Way Forward**

Pakistan should not view India-EU FTA as a loss of preferential access but as a structural shift in relative competitiveness, requiring greater reliance on productivity, supply-chain depth and product sophistication rather than tariff preferences alone. Pakistan will continue to benefit from the GSP+ preferences, but the reduction of tariff on India's products, once the India-EU FTA comes into force, will increase competitive pressure in the sectors where Pakistan's exports are concentrated such as textile, leather, cutlery, etc. The product level evidence reinforces this concern. Pakistan may remain well-positioned in several *Rising Star* products including knitted apparel, meat, leather, footwear, and several nontraditional exports but it is simultaneously losing ground in *lost opportunity* products despite expanding EU demand. The risk from the India-EU FTA is not that Pakistan suddenly loses EU market access, but that India becomes a much stronger competitor.

Therefore, Pakistan's response should move beyond seeking to preserve preferential margins and focus on building competitiveness before tariff convergence makes the competitive gap harder to close. First, establishing *Rising Star* products should be upgraded through greater product diversification and encourage investment in MMF capabilities, technological adoption and stronger links between textile inputs and downstream manufacturing. Second, the *lost opportunity* products identified in the matrix should become a targeted policy agenda with warranted diagnostics of standard certification, logistics, productive capacity, and market access, constraints rather than generic export incentives. Finally, Pakistan should use its existing EU GSP preference status while it still provides an advantage to diversify beyond traditional cotton-based exports and build presence in higher-value manufacturing, pharma, engineering goods, and other emerging segments (PBC, 2026). The India-EU FTA consequently presents Pakistan with a warning, but also a policy window.

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

**References:**

i. EU commission website: https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/pakistan_en
ii. European Commission website; MEMO: EU-India Free Trade Agreement: Chapter-by-Chapter Summary
iii. PBC (2026). The India-EU FTA: Implications for Pakistan, Pakistan Business Council.

**Box 5.2: Beyond Export Entry: Scaling Pakistan's ICT Exporting Firms**

Pakistan's ICT exports have more than doubled in the last five years. With a CAGR of 16.9 percent, ICT exports have risen from US$ 2.1 billion in FY21 to US$ 4.6 billion in FY26. Yet, export growth has not been accompanied by comparable shift of firms into higher export-receipt brackets. The distribution of ICT exporting firm-size in FY26 shows a pronounced long-tail: 68 percent of computer software firms, 77 percent of software consultancy firms, 89 percent of other computer services firms and 99 percent of NTN-reporting freelancers earn less than US$ 0.1 million on an annual basis (**Table 5.2.1)**. This concentration of firms at the lower end of the export-receipt distribution is particularly important given evidence in the literature that firm size and prior export experience appear to be key

**Distribution of Firms by Size of Annual Export Receipts – FY26** **Table 5.2.1**

million US$, percent of total firms in the category

| Exports proceeds | Exports of Computer Software (HS code: 9184) | | Software Consultancy Services (HS code: 9182) | | Other Computer Services (HS code: 9185) | | Freelance of computer and information services (HS code: 9186) | |
|---|---|---|---|---|---|---|---|---|
| | No. of Firms* (percent of total) | Amount (percent of total) | No. of Firms* (percent of total) | Amount (percent of total) | No. of Firms* (percent of total) | Amount (percent of total) | No. of Firms* (percent of total) | Amount (percent of total) |
| <0.1 | 776 (68) | 18 (3) | 4332 (77) | 95 (10) | 6688 (89) | 96 (22) | 2658 (99) | 13 (54) |
| 0.1-0.5 | 224 (20) | 52 (9) | 996 (18) | 228 (25) | 722 (10) | 153 (34) | 13 (0) | 2 (10) |
| 0.5-1.0 | 68 (6) | 49 (8) | 171 (3) | 117 (13) | 85 (1) | 60 (13) | 1 (0) | 1 (3) |
| 1.0-5.0 | 56 (5) | 122 (21) | 121 (2) | 225 (25) | 55 (1) | 102 (23) | 4 (0) | 8 (33) |
| 5.0-10.0 | 8 (1) | 58 (10) | 16 (0) | 114 (13) | 2 (0) | 14 (3) | 0 (0) | 0 (0) |
| 10.0-50.0 | 8 (1) | 155 (27) | 5 (0) | 83 (9) | 1 (0) | 19 (4) | 0 (0) | 0 (0) |
| >50 | 1 (0) | 118 (21) | 1 (0) | 53 (6) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| **Total** | **1141** | **572** | **5642** | **914** | **7553** | **443** | **2676** | **24** |
| **Non-NTN Reporting Firms** | **NA** | **80** | **NA** | **363** | **NA** | **351** | **NA** | **1141** |

* NTN Reporting Firms

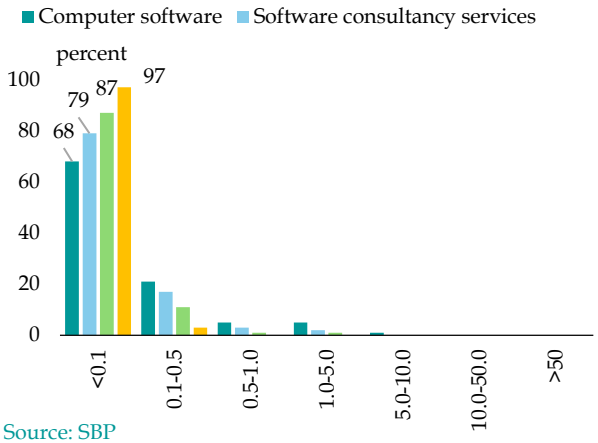
Note: Firms are aggregated by NTN within each service before assigning the firm to an export-receipt size band. Percentages may not sum to exactly 100 due to rounding.

Source: SBP

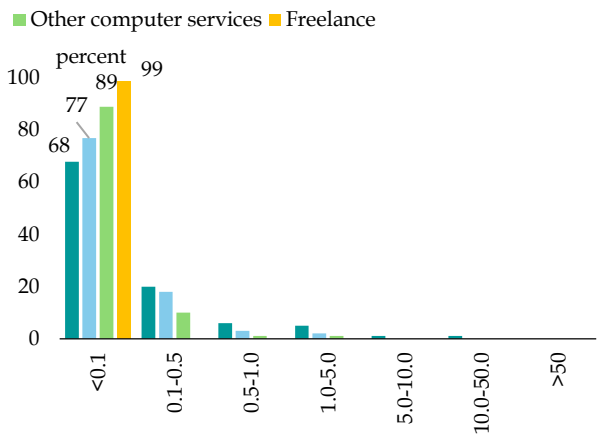
factors in dealing with at-the-border and behind-the-border trade barriers for service sector. In case of Pakistan, this is a structural issue which has persisted over the years (**Figure 5.2.1a and b**).

The problem of 'long-tail' continues to persist despite a number of policy initiatives taken by the SBP and the government to facilitate ICT exporting firms. These initiatives include SBP has raised the foreign currency retention limit for IT exporters from 35 to 50 percent and liberalised the use of retained funds for payments abroad;[71] it has also facilitated IT firms' overseas investment.[72] Moreover, since April 2026, banks are required to establish mechanisms for resolving inward receipts and outward remittance issues faced by IT firms and freelancers.[73] The tax regime also provides a preferential 0.25 percent concessionary tax rate for registered ICT exporters,[74] while also allowing them a simplified tax filing system to claim tax exemption.[75] But these incentives do not by themselves create the capabilities required to win larger contracts, develop propriety products, specialise in high-value services or organise individual

**ICT Firm Size Distribution - FY21** **Figure 5.2.1a**




**ICT Firm Size Distribution - FY26** **Figure 5.2.1b**




Source: SBP

[71] EPD Circular Letter No. 17: https://www.sbp.org.pk/circulars/epd-circular-letter-no-17-of-2023

[72] This directly addressed the need for overseas presence and market expansion. Source: FE Circular No. 01 https://www.sbp.org.pk/circulars/fe-circular-no-01-of-2024

[73] EPD Circular Letter No. 06 dates April 2026, https://www.sbp.org.pk/circulars/epd-circular-letter-no-06-of-2026

[74] Registered with Pakistan Software Export Board. The tax incentive is provided till 2029.

[75] FBR website: https://fbr.gov.pk/fbr-clarifies-news-item-captioned-it-industry-abandoned-in-the-budget-202223/173490

talent into scalable firms. The fact that aggregate exports can grow exponentially whereas the firm's size remains concentrated, which indicates that export growth and firm upgrading are not the same process.

AI is likely to reinforce the importance of firm upgrading. Services most exposed to AI-driven automation rely heavily on routine, repeatable and easily codified tasks.[76] This is particularly relevant for Pakistan, where many ICT exporters remain concentrated in small-scale, low-value and labor-intensive activities. Recent evidence shows that the median value of freelance transactions fell by 41 percent between FY21 and FY25, even as aggregate freelance exports more than doubled, indicating a proliferation of relatively small-value transactions. While this trend cannot be attributed to AI alone, it highlights the vulnerability of transaction-based, low-value digital services to technological and competitive pressures. Similarly, firms relying on effort-based services may therefore face greater pressure as AI reduces the cost of performing routine digital tasks**.**

***The central constraint is increasingly the "middle": moving from a small exporter to a global supplier***
The policy challenge therefore is about helping existing exporters to cross specific capability thresholds. Firm-wise data suggests that the greatest opportunity lies not necessarily in creating more firms, but in moving existing firms through the middle of the distribution.

**Category-wise policy suggestions: different scaling problems**
**Software Consultancy Services (9182):** Scaling beyond small project teams requires capabilities in project management, business analysis, cybersecurity, data management, quality assurance and international sales. Pakistan Software Development Export Strategy (PSDE) 2023-2027 identifies these gaps among smaller and second-tier firms. A targeted '*Enterprise Readiness Passport*'[77] could address this gap, whereby specific requirements could be tailored to support eligible firms across relevant IT service categories. The program could co-finance internationally recognised certifications, cybersecurity, data-compliance readiness etc. with support linked with verified milestones, which would help firms to scale.

**Computer software (9184):** Computer software services include web development services, data entry and processing, web scraping, mobile app development etc. The challenge is to move from selling development capacity to owning reusable technology – propriety products, IP and recurring revenue. PSDE Strategy 2023-2027 identifies weak product and IP-led development and limited access of smaller software firms to government IT projects as constraints.[78] Digitalisation of government services or e-government initiatives can therefore create domestic 'reference markets' for SMEs by expanding domestic demand. In particular, procurement rules can be structured to allow small firms to compete for smaller, modular contracts and to favour reusable, scalable solutions rather than bespoke one-off development products, enabling firms to build reference customers, validate products, and subsequently export them. For instance, Singapore uses government procurement and digitalisation initiatives to help local ICT firms develop solutions for public-sector agencies and subsequently promotes successful firms through government-to-government partnerships. Sri Lanka's ICT Agency similarly supports domestic ICT capability by encouraging joint ventures between foreign and local firms and awarding such partnerships additional points in public procurement evaluations, (UNCTAD, 2013).

**Other Computer Services[79] (9185):** The more fundamental challenge this category faces is moving from generic outsourcing towards specialised, knowledge-intensive and vertical services. Most of Pakistan's offshore services firms remain concentrated in low value-added services in Information Technology Outsourcing and Business Process Outsourcing, with limited participation in vertical and Knowledge Process Outsourcing. [iv] Therefore, a *vertical ICT export program*[80] could concentrate support on areas such as fintech, Cybersecurity, health tech, logistics, and

[76] ILO's Global Index of Occupational Exposure.
[77] Enterprise Readiness Passport refers to a standardised certificate/benchmark that an ICT firm's financial, governance, business and export credentials to demonstrate its readiness for international market.
[78] Pakistan Software Development Export Strategy 2023-2027 states that in cases where government projects are open to the private sector, preconditions for bids involve a certain size and experience that only a few large private IT firms can meet, therefore the procurement conditions are biased against small IT firms.
[79] This category consists of a broad mix of unspecified hardware, software and software-related services.
[80] Refers to a targeted program that focuses resources, finance, and market access to specific high-potential ICT subsectors, to help firms scale and enter international market.

industrial technology, combining specialised skills, certifications, anchor clients and overseas buyer linkages. For instance, Malaysia's Digital Acceleration Grant targets firms in priority verticals, while the X-Port Grant supports export-ready technology firms in global commercialisation.

**Freelance Computer and Information Services (9186):** Freelancing has the lowest entry barrier. Individual transactions rarely provide the organisational infrastructure needed for larger enterprise contracts. The policy response could be to create '*export pods,*[81] which would be small, formally registered teams of proven freelancers, that are matched to larger contracts and support for the specific functions they cannot provide individually such as legal contracting, quality assurance, cybersecurity compliance etc. Support should be conditioned against milestones such as incorporation, first team contract, enterprise certification etc.

**The skilled labour is becoming a constraint on firm scaling**

The concentration of ICT exporters at the bottom of the size distribution is also closely linked with the composition of skills available to and affordable for small firms. Pakistan's ICT firms report difficulty recruiting not only technical workers but also candidates with the social and managerial capabilities required for client-facing work, such as communicating with international clients, managing projects and teams, and coordinating complex service delivery. These capabilities are particularly important for securing and executing larger, more sophisticated contracts; the shortage of such skills constrains the firm's ability to scale beyond small-scale engagements.

A survey conducted by SBP also points to high-salary expectations and workers' preferences for larger established firms (SBP,2023). This creates a particular disadvantage for small exporters. The same firm that needs senior engineers, solution architects, project managers, and international sales specialists, to win and deliver large contracts is also the firm least able to compete with large domestic and international employers for these workers. Consequently, the skills constraint can become self-reinforcing; limited specialised technical and managerial talent restricts the size and complexity of contracts a firm can undertake, while its small scale limits its ability to offer the compensation, career progression and specialised teams needed to attract senior talent.

This helps explain why supplying more entry level programmers in the job market alone may not translate into firm scaling in size. Scaling an ICT exporter requires a relatively small but critical layer of specialised workers who can convert technical labor into a commercial scalable service: architecting solutions, managing large projects, assuring cybersecurity and quality, developing client relationships and selling in international markets. World Bank evidence on Pakistan's online labour market similarly shows strong demand for ICT skills alongside demand for sales and other complementary capabilities. The policy implication is therefore not simply to increase the number of ICT trained workers but to make scarce senior and complementary skills accessible to firms to the point where they are attempting to scale. The subsidised training for smaller exporters will help to share costly specialist talent, such as enterprise architect, cybersecurity leads, and international sales managers, until they reach sufficient scale to employ them permanently.

To mitigate AI's impact on low value-added ICT exports, targeted transitions into AI-complementary skills should be supported through training. Data annotators could move into model evaluation and AI operations, web developers into cloud and platform engineering, and content writers into AI-assisted content strategy and editorial oversight. Programs should align with firms' export upgrading needs and verified skills and employment outcomes, rather than providing generic AI training. This would shift workers towards technical, managerial and domain-specific capabilities supporting larger, complex international contracts.

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

**References:**

i. Rouzet, D., S. Benz and F. Spinelli (2017), Trading firms and trading costs in services: Firm-level analysis, OECD Trade Policy Papers, No. 210, OECD Publishing, Paris.

[81] Exports Proof of Delivery (POD) in this box refers to a small, formally registered team of proven freelancers that pool complementary skills and receive shared support in areas such as legal contracting, quality assurance, cyber security etc. to collectively bid and deliver large international contracts.

ii. Grant (2018). Critical Infrastructure Public-Private Partnerships: When is the Responsibility for Leadership Exchanged? *Security Challenges Journal*, Vol. 14, Issue 1, pp. 40-52.
iii. UNCTAD (2013). Promoting Local IT Sector Development Through Public Procurement, Geneva: United Nations Conference on Trade and Development.
iv. SBP (2020). Quarterly Report 2020, State Bank of Pakistan.
v. WB (2017). Pakistan Economic Policy for Export Competitiveness Digital Pakistan: A Business and Trade Assessment, World Bank.
vi. SBP (2023). Special Chapter, Pakistan's Growing IT Exports and Tech Startups: Opportunities and Challenges, ICT exports or Tech-Startups, Half Yearly Report, State Bank of Pakistan.
vii. PBC & CDPR (2026). Expanding Pakistan's IT Footprint Strategic Directions for International Market Access.

**Box 5.3: Decomposing Pakistan's Interest Payments on Public External Debt: Implications for Balance of Payments**

Pakistan's interest payments during FY25 and FY26 cumulatively, have been lower than FY24 despite increases in debt stock **(Table 5.3.1).** The public external debt stock increased by around 8.7 percent between June 2024 to June 2026 to US$ 106.8 billion while interest payment decreased by US$ 70 million (1.7 percent) to US$ 4.0 billion. This improvement was driven by lower average interest rates, partly offset by some increase in the external debt stock. This box aims to quantify the drivers of interest obligations on public external debt over the past five years and quantify the contribution of interest rates and debt stock in lowering the interest payments.

**Decomposition of Interest Payments on External Debt** **Table 5.3.1**

million US$

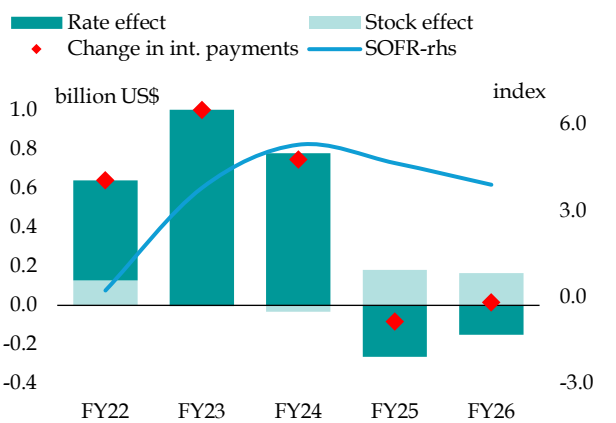
| | FY22 | FY23 | FY24 | FY25 | FY26 |
|---|---|---|---|---|---|
| Public external debt, end-June stock | 99,972 | 94,881 | 98,256 | 103,750 | 106,757 |
| Public external debt, average stock | 97,596 | 97,427 | 96,569 | 101,003 | 105,253 |
| Interest payments | 2,318.1 | 3,318.1 | 4,063.7 | 3,980.1 | 3,993.8 |
| Implied interest rate (percent) | | | | | |
| *Total public external debt* | 2.38 | 3.41 | 4.21 | 3.94 | 3.79 |
| *Multilateral* | 1.36 | 2.23 | 3.02 | 2.94 | 2.86 |
| Change in interest payments | 639.9 | 999.9 | 745.6 | -83.6 | 13.7 |
| Rate effect | 512.7 | 1,004.8 | 778.3 | -264.3 | -150.7 |
| Stock effect | 127.2 | -4.9 | -32.7 | 180.7 | 164.4 |

Source: SBP staff calculations

Since the interest payments are influenced by both interest rate and debt stock, the changes can be decomposed into parts attributable to the rate and stock. Average implied interest rate decreased to 3.79 percent in FY26 from 4.21 percent in FY24. The 42-bps decrease in average interest rates contributed around US$ 415 million decline in interest payment, which was offset by US$ 345 million rise due to US$ 8.7 billion increase in debt stock over the period (**Figure 5.3.1).**[82]

Recently, Pakistan has shifted towards long-term multilateral and IMF financing sources resulting into lower debt servicing costs. The implied interest rate on public external debt decreased to 3.8 percent in FY26 from 4.2 percent in FY24. This partly reflects easing in global interest rates, as much of lending is repriced with reference to global benchmark rates. The shift towards longer term multilateral and IMF financing, however, has helped contain the impact, as the rate effect could have been higher in its absence. The financing is consistent with government of Pakistan's medium term debt management

**Interest Payments on External Debt** **Figure 5.3.1**




Source: SBP staff calculations

[82] Average implied interest rate is estimated using ratio of interest payments to average of opening and closing debt stocks.

strategy (FY23 - FY26) which focused on meeting financing needs at lowest possible costs keeping in view the tradeoff between cost and risks.

**Implications for Balance of Payments**

Even with the expansion of nominal external debt, the lower average interest rate effectively compresses primary income outflows, contributing to narrowing of current account deficit. However, if the global financial conditions are tightened, the combination of larger debt base and rebounding interest rates could trigger a bigger balance of payments shock. For current account the effect accumulates since interest rate is recurring cost of past debt.

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

**Box 5.4: Transforming Remittances into Financial and Development Capital**

Pakistan received US$ 41.6 billion in workers' remittances in FY26, placing it among the world's five largest remittance-receiving economies. Remittance inflows are equal to around 10 of the GDP, amounting to nearly 1.4 times of exports. As a result, remittances have become the country's most stable source of FX earnings (**Figure 5.4.1a and b**). The resilience of workers' remittance has been particularly evident during periods of stress on external account. For instance, remittance inflows increased significantly during the COVID-19 pandemic, natural disasters including floods, and the recent US-Iran war. This resilience is consistent with literature, which suggests that remittance flows tend to be counter-cyclical and positively correlated with potential GDP in recipient countries Bettin, G., et al. (2013).

***Remittances' contribution to long term growth***

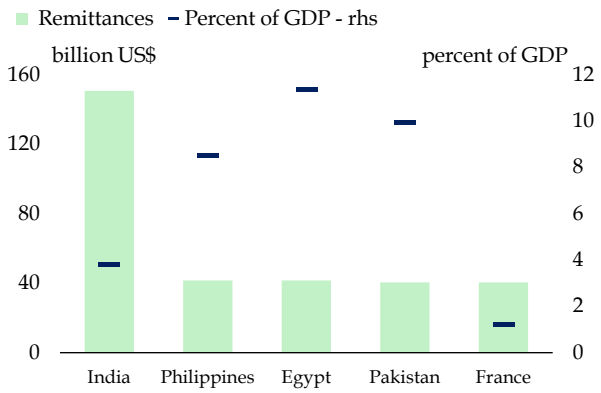
Remittance has a potentially important role, but their contribution to long-term growth depends on the financial environment through which they are intermediated (Frankel, 2011). While remittances support household consumption and welfare, their developmental impact is greater when they are transformed into productive capital. A review of literature points to financial deepening as one potential factor that can help transform remittances into productive finance. A deeper financial system can weaken the remittance-consumption relationship by providing households with greater access to savings instruments, credit, and investment opportunities.

In Pakistan, empirical results support this financial intermediation channel. For quantitative analysis, we use an ARDL model[83] with the interaction between workers' remittances and the IMF Financial Development Index (data period 1980-2025). The estimated long-term specification is:

$$INV_t = \alpha + \beta_1 REM_t + \beta_2 FINDEX_t + \beta_3 (REM_t \times FINDEX_t) + \beta_4 REER_{\{t-1\}} + \beta_5 growth_{t-1} + \varepsilon_t$$

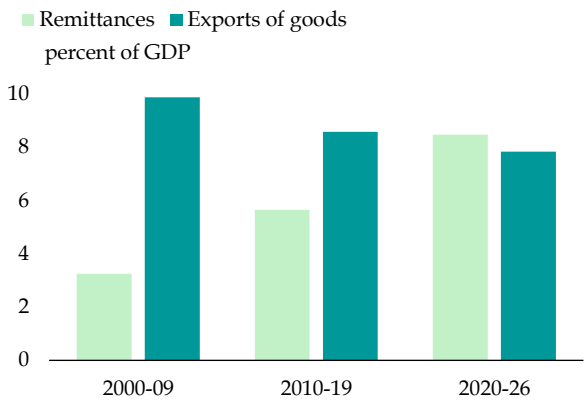
where (INV) and (REM) denote private investment and workers' remittances as shares of GDP.

**Top 5 Workers' Remittance Receiving Countries in 2025** — Figure 5.4.1a




Source: WB

**Pakistan's Goods Exports and Workers' Remittances** — Figure 5.4.1b




Source: Haver

[83] The ARDL bounds testing framework accommodates a mixture of I(0) and I(1) variables and estimates both short run dynamics and long run relationships. The interaction specification follows Giuliano and Ruiz Arranz (2009), who examine how financial development conditions the growth and investment effects of remittances.

We find a strong long-run relationship and a positive, highly significant interaction coefficient of 8.073 ($p<0.001$), indicating that financial development strengthens the effect of remittances on private investment. Importantly, the marginal effect of remittances on investment varies systematically with the level of financial development. At the minimum level of FINDEX, the marginal effect is -1.43, implying that remittances are associated with lower investment, whereas at the maximum observed level, the effect rises to 0.63. The marginal effect crosses zero at a FINDEX of approximately 0.285. This threshold effect suggests the developmental impact of remittances is not uniform: where financial systems are relatively shallow, remittances may be absorbed primarily outside productive investment.

These findings shift the central policy question from simply asking whether remittances are consumed or invested to asking under what financial conditions remittances can be transformed into productive capital.[84] For Pakistan, financial deepening could be a potential bridge between remittance flows and investment.

***Policy implications for financial deepening***

Our results suggest that the policy challenge is to strengthen financial mechanisms. Policies should particularly focus on expanding the range, accessibility, and quality of financial services, rather than on subsidies aimed at increasing the volume of remittances. Several policy instruments could support this transition, including remittance-linked SME and agricultural lending, housing finance based on documented remittance histories, diaspora investment funds for export-oriented[85], especially the ICT sector, matching funds for migrant funded enterprises and digital savings and investment products.

Several case studies demonstrate how such channels can be developed. Moldovo's PARE 1+1 programme is particularly relevant because it was explicitly designed to address the same policy challenge identified in our analysis: converting remittances into productive investment. Under PARE 1+1 programme, migrants or their immediate family members invested from verified remittance resources in an approved business project, received a matching grant from the government, alongside entrepreneurial training, business-plan-preparation, project screening, and post-intervention monitoring. This programme created an explicit pipeline from remittances to enterprise formation and expansion. Within 10 years, the programme trained more than 2,600 participants and approved more than 1,800 investment projects. The programme was subsequently expanded through PARE 1+2 programme under which successful initial beneficiaries could access additional support for business expansion. This fiscal case of such a model, however, depends on whether the matching grant generates additional investment that would not have otherwise occurred; for Pakistan, this argues for a targeted and performance-based scheme rather than a broad subsidy to remittance recipients.

***From financial deepening to mobilising remittance flows at scale***

If financial development strengthens the investment response to remittances, then the question is whether relatively stable flow of remittances can be used to mobilise long-term financing for productive investment in a country. This provides a natural bridge from financial deepening to future-flow securitisation, a mechanism through which predictable future remittance receivables are used to raise financing upfront. International experience demonstrates the feasibility of this approach.[86] World Bank (2018) suggests that the use of future remittances as a collateral (*securitisation*) can lower borrowing costs and lengthen debt maturity of a country.

For Pakistan, the relevance of this mechanism lies in the scale and persistence of remittance inflows. Importantly, this is no longer only a prospective financing concept: the SBP has established a regulatory framework enabling Authorized Dealers to undertake foreign-exchange-future-flow transactions for long-term financing from outside

[84] The three stages of remittances suggest that the third stage of remittance life cycle is that of developmental capital. This arises when remittance-related liquidity is transformed into productive investment. Under this channel, the deposits transform into credit, to investment to productivity gains.

[85] India has leveraged diaspora bonds to channel funds into its development since 1991.

[86] No recent data are available on the size of future flow securitisation of remittances, but as of 2008, over US$ 20 billion had been raised by developing country banks using this approach, notably in Mexico, Brazil, and Turkey. Mexico pioneered major future-remittance securitisation in the 1990s, while Banco de Brasil raised US$ 250 million in 2002 by securitising future remittance receivables from Brazilian workers in Japan.

Pakistan.[87] This, therefore, represents a second, complementary channel of financial intermediation. The first operates at the household and firm level, where deeper financial systems can help transform remittances into savings, credit and private investment. The second operates at the financial-system level, where predictable flow of remittances can potentially be leveraged to mobilise larger pools of capital for investment. Recent developments in Pakistan, including transaction undertaken by a financial institution under the SBP framework suggests that this channel is moving from a theoretical possibility towards a practical instrument for mobilising external financing and deepening the country's financial system.[88] As market capacity, institutional expertise and investor confidence develop, Pakistan has considerable potential to scale future-flow-financing beyond initial transactions, broaden the range of eligible foreign-exchange receivables, attract long-term international capital, and ultimately use its stable external payment flows to support substantially greater levels of productive investment and financial deepening.

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

***References:***

i. Bettin, G., et al. (2013). Remittances and Vulnerability in Developing Countries, *IMF working paper,* International Monetary Fund.
ii. Frankel, J., 2011. Are bilateral remittances countercyclical? *Open Economies Review*, *22*(1), pp.1-16.
iii. Beyond Borders: How Remittances Are Reshaping Asia-Pacific Economies, *Asia Pacific Perspectives 2025*, UNDP
iv. Republic of Moldova official website
v. World Bank (2018). Migration and Remittances for Development in Asia

[87] SBP EPD CL 05 2024 https://www.sbp.org.pk/circulars/epd-circular-letter-no-05-of-2024

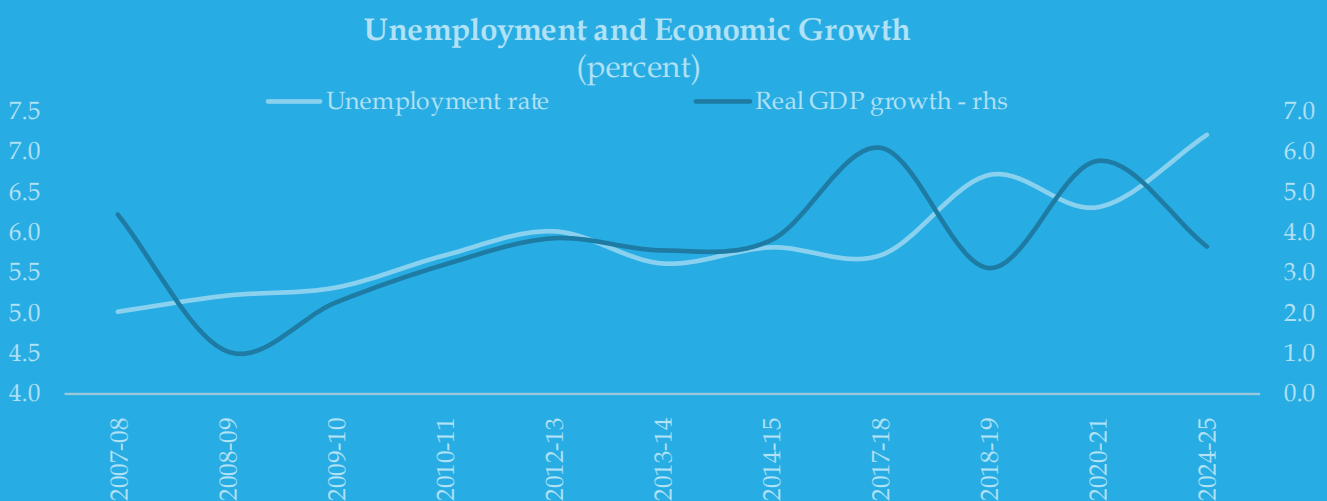
[88] Bank Alfalah signed a landmark agreement with the International Finance Corporation (IFC) on August 20, 2026, to launch Pakistan's first Diversified Payment Rights (DPR) program, aiming to mobilize up to $100 million in long-term FCY financing.



6

# Structural Challenges to Job Creation in Pakistan

*Pakistan has a predominantly young population, with over 60 percent under the age of 30 years, offering significant potential for a demographic dividend. Realising this potential, however, depends on the economy's ability to generate sufficient and productive jobs. This chapter shows that the country's unemployment and other labour-market challenges are not merely cyclical but also structural. The latter is reflected in several indicators including weak real wage growth; high working poverty; and consistent increase in labour migration. From macroeconomic perspective, a key structural challenge is Pakistan's inability to sustain high economic growth, compounded slow pace of structural transformation amid signs of premature deindustrialisation. These challenges are exacerbated by low labour force participation – particularly among women – high youth unemployment, a large NEET population, and pervasive informal employment. Emerging trends, such as 4IR, the green transition, and geoeconomic fragmentation add further pressures through technological gaps, reskilling needs, investment constraints, and intensifying global competition. Addressing these challenges will therefore require not only sustainable higher economic growth, but also a deeper transformation of the production structure and of the labour market to ensure that Pakistan's growing working-age population can be absorbed into productive and decent employment.*



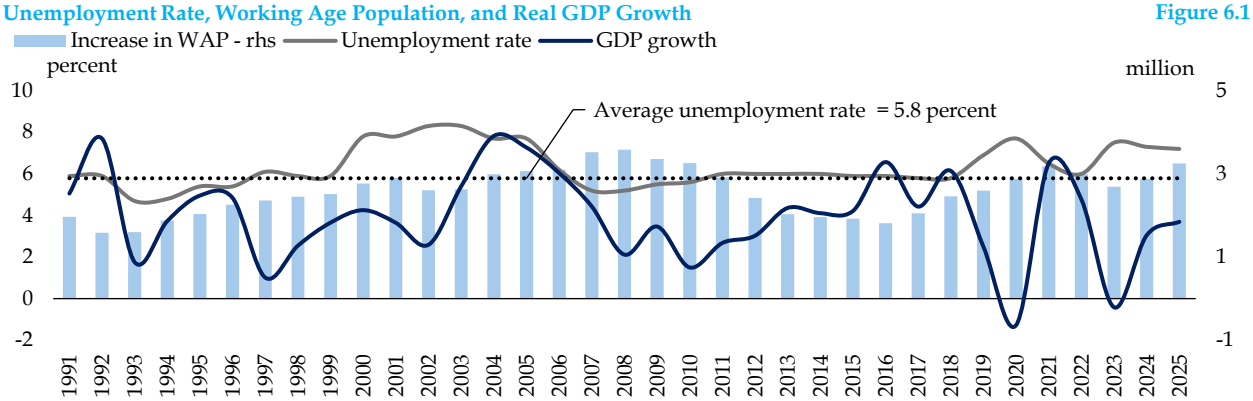
# 6 Structural Challenges to Job Creation in Pakistan

## 6.1 Introduction[1]

Generating sufficient employment opportunities for Pakistan's growing working-age population (WAP) remains one of the country's key economic challenges amid frequent boom bust cycles.[2] In this context, the unemployment rate (UR), which has remained elevated since 2019, is a concern. The recent increase in UR coincides with subdued and volatile economic growth, including a significant contraction in FY23 (**Figure 6.1**). The UR increased to 7.2 percent in FY25, compared with 6.3 percent in FY21 and 5.7 percent in FY18 (PBS, 2026). At the same time, average GDP growth declined to 2.80 percent during FY19–FY25, from 4.2 percent in the preceding seven-year period. This underscores the importance of achieving sustained, higher and more inclusive economic growth to generate sufficient employment opportunities and absorb the expanding WAP.[3] These UR trends need to be considered alongside broader macroeconomic and labour-market challenges, which point to significant structural constraints to job creation, especially of productive and decent jobs.

From macroeconomic perspective, historically low and volatile GDP growth has been one of the biggest challenges, alongside, slow pace of structural transformation (ST) amid signs of premature deindustrialisation (PD). The latter is particularly concerning as manufacturing has historically been a key driver of growth and labour absorption in high-income and East Asian economies. In this context, **Box 6.1** discusses the country's PD and slow pace of ST; the technologisation of global manufacturing processes that increasingly requires less labour; the evolving global economic environment; increasing servicification of manufacturing industry globally;[4] and overall rising share of services in GDP. These present a big challenge for labour absorption in Pakistan, especially for its largely unskilled labour.

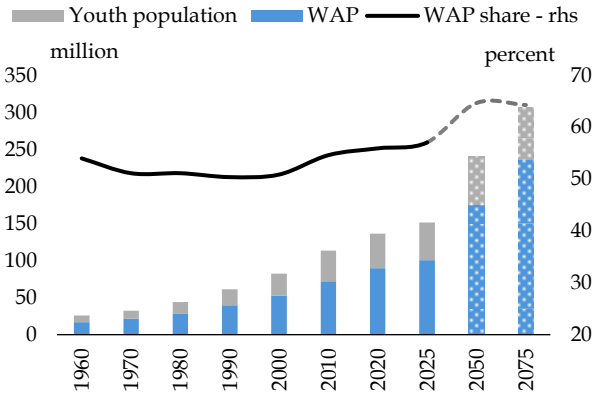
**Unemployment Rate, Working Age Population, and Real GDP Growth** **Figure 6.1**




Note: As PBS LFS data is availbale at discrete interval, IMF estimates are used to construct a continous employment series. IMF estimates are broadly consistent with LFS estimates.
Sources: WB; IMF

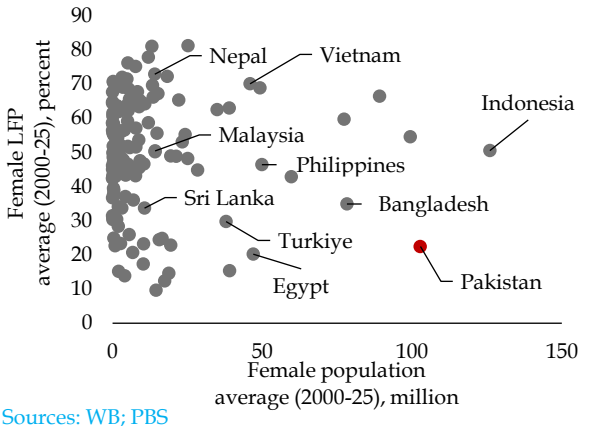
[1] Unemployment and other labour market statistics in this chapter are based on the 19th ICLS where available at PBS; otherwise, statistics based on 13th ICLS are used. This does not materially affect the trends or overall narrative. Unemployment rates are for population aged 15 years and above.
[2] WAP is used as a proxy for potential labour-market entrants because consistent age-disaggregated historical data of the labour force participation are not available. While WAP does not capture changes in labour force participation, it provides a reasonable proxy for the potential expansion of the labour supply in the absence of sufficiently detailed labour force data.
[3] Empirical studies consistently find that low GDP growth along with low foreign direct investment, weak governance quality, and rapid population growth to be significant determinants of unemployment in Pakistan (Khan et al., 2024; WB, 2025a).
[4] The servicification of manufacturing refers to the increasing use and importance of services within manufacturing activities, including services that are purchased as inputs, produced in-house by manufacturing firms or bundled with manufactured products.

**Working Age Population (WAP)** **Figure 6.2**




Note: Median variant forecast from 2025 onward
Source: UN

**Female Population and Labour Force Participation** **Figure 6.3**




Sources: WB; PBS

These constraints are compounded by deeply entrenched labour market fragilities. First, is the rising WAP and growing youth bulge, with over 60 percent of the population already under the age of 30 years. Moreover, compared to the preceding five decades, i.e. between 1975-2025, during which Pakistan added around 115 million people to its WAP, the projected increase in WAP in the next fifty years (2025-2075) is around 156 million people **(Figure 6.2)**.

Such a demographic profile can potentially yield a substantial dividend, but only when economies generate sufficient productive employment (UNFPA, 2021). In Pakistan, however, youth UR is at 12.8 percent, which is substantially higher than aggregate UR. (PBS, 2025a). A large number of young people who are 'not in employment, education, or training' (NEET), and low investments in education raise serious questions about harnessing the potential demographic dividend (PBS 2025a; SBP, 2022).

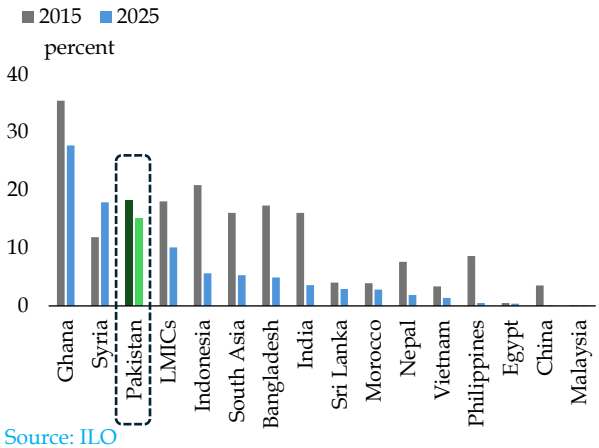
Second, is low labour force participation (LFP) mainly due to low female LFP rate.[5] Pakistan's female LFP is one of the lowest among the cohort of regional and income level peer economies, averaging around 24 percent in the last 17 years (PBS, 2026). The combined effect of a large sized female population and low female LFP **(Figure 6.3)** is a binding constraint on household income and aggregate productivity (WB, 2022a). In addition to low female LFP, female UR has also remained consistently higher than that for male (PBS, 2026).

Third, is the issue of pervasive informality. Informal employment accounts for an estimated 81.7 percent of the total employed and 72 percent of non-agricultural employment (PBS, 2025a). It also extends beyond informal markets, with informal employment common in formal firms.[6] This limits the transition towards more productive and better-paid employment and leaves workers with limited job security, bargaining power, and social protection, reinforcing vulnerable and precarious employment (Schmidt et al., 2023).

In addition to Pakistan's structural weaknesses, three major emerging global trends present a new set of challenges. First, automation and artificial intelligence (AI) are reshaping labour demand in developing economies. Second, the green transition presents both adjustment risks and employment opportunities, but capitalising on these opportunities will require re-skilling and up-skilling of labour (ILO, 2018a; Fankhauser et al., 2018). Third, geoeconomic fragmentation is reshaping global investment and production, favouring economies with stronger infrastructure,

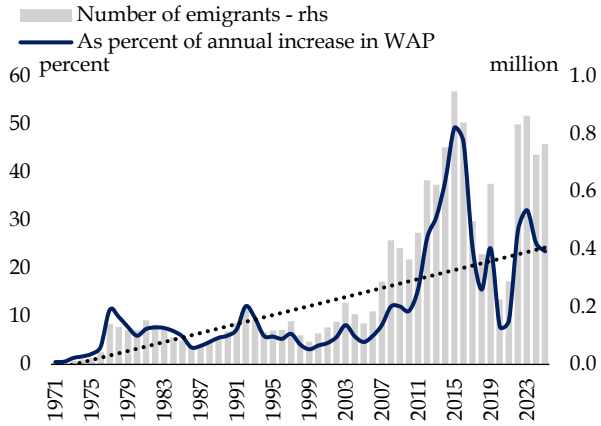
[5] LFP refers to the share of the working-age population that is either employed or actively seeking work.
[6] Zhou (2017) documents how informal and home-based workers are linked to formal enterprises through subcontracting and supply-chain arrangements in textile and garments sector in Pakistan.

**Working Poverty Rate** **Figure 6.4**




Source: ILO

**Annual Flow of Emigrants** **Figure 6.5**




Sources: BEOE; UN

skills, institutions, and global value chain (GVC) integration (Estevadeordal et al., 2025). These challenges are consequential for economies like Pakistan that are already facing industrial stagnation and slow pace of ST amid demographic constraints (WB, 2019; Rodrik, 2016).

These challenges are also increasingly evident in other indicators of labour market. For instance, real wage growth in Pakistan has remained weak in recent years (SBP, 2025a). This reflects the prevalence of informal and low-productivity employment along with weak worker bargaining power (ILO, 2024a). The same reflects in working poverty, which is comparatively high due to low wages, and informal employment amongst other structural challenges (ILO, 2019).[7] In the past ten years Pakistan has managed to shed only 3.2 percent in working poverty compared to 15.3 percent in Indonesia, 12.5 percent in both India and Bangladesh and around 8 percent in LMICs **(Figure 6.4)**. Similarly, consistent increase in outward labour migration over the last two decades, also points to limited job opportunities in domestic economy **(Figure 6.5)**.

In light of the foregoing discussion, this chapter is organised as follows. **Section 6.2** discusses the macroeconomic challenges to job creation. This is followed by discussion on labour market issues in **Section 6.3** that mainly sheds light on low female LFP and high female unemployment; high informal employment; and high youth unemployment and NEET. **Section 6.4** discusses challenges stemming from the future of job creation. **Section 6.5** summarises and concludes the chapter.

## 6.2 Job Creation: A Macroeconomic Perspective

Macroeconomic conditions play a central role in determining an economy's capacity to create jobs. Employment outcomes of economic growth not only depend on the pace of output expansion, but also on its sustainability, sectoral composition, and employment intensity (Cho & Majoka, 2020; UNDP, 2024). Job creation is also affected by price stability, as high and volatile inflation discourages investment (Ahmed & Qayyum, 2007) that impacts job growth.

Similarly, limited fiscal space can constrain investment, while high government financing needs can crowd out private sector borrowing (IMF, 2024), thereby weighing on employment generation. Low levels of domestic private investment further constrain job creation. In contrast, stronger exports and deeper integration into the GVCs expand external demand and support job creation (WB, 2025a). Against this

[7] ILO defines working poverty as the proportion of the employed population living in households with an income or consumption level below the international poverty line.

backdrop, the following sub-sections discuss the key macroeconomic drivers of job creation in Pakistan: GDP growth, structural transformation, inflation, exports, and fiscal conditions.

**GDP Growth**

Pakistan's GDP growth has remained low over more than three decades relative to LMICs (**Figure 6.6a**). Moreover, it has been increasingly volatile, characterised by recurring boom and bust cycles **(Figure 6.6b)**. These stylised facts reflect structural weaknesses in the economy that have constrained investment, productivity, and job creation (Qasim, 2024). The per capita income difference between Pakistan and low-income countries (LICs) has also been narrowing over the last 7 years **(Figure 6.6c)**. The persistence of this trend can adversely affect job creation by discouraging both domestic and foreign investment.

While classification as an LIC per se does not constrain investment, economies at lower income levels generally face higher borrowing costs, weak investor confidence, and greater investment risks, deteriorating infrastructure and weak governance. This discourages investment and limits FDI in manufacturing and other job-intensive sectors (WB, 2025b; UNCTAD, 2025a). In addition, the relationship between Pakistan's GDP growth and employment has weakened over the years. GDP-employment elasticity was estimated at 0.6 during 1972-78 (GoP, 2003). Subsequently, PIDE (2019) estimated it at 0.2 during 2000-18, while WB (2018) found Okun's coefficient[8] at around 0.2 during 1991-2016.

Against this backdrop, **Box 6.2** updates this relationship using the latest data and finds that employment elasticity in Pakistan has weakened further to 0.11 during 2000-25, with sectoral estimates broadly reflecting a similar trend. Together, these trends reflect the economy's limited capacity to generate employment commensurate with growth.

**Structural Transformation (ST)**

The decline in employment elasticities in Pakistan cannot be interpreted in isolation. Literature suggests that employment intensity of growth also depends on the nature and pace of ST.[9] Economies that have undergone successful ST — such as Vietnam and China — have also witnessed declining employment elasticities. However, these largely reflect rising labour productivity driven by capital deepening, technological upgradation, and within-sector productivity improvements (Mason & Shetty, 2019).

Pakistan, on the other hand, presents a markedly different pattern. The weakening of employment

**Figure 6.6a Average GDP Growth in Selected Economies (1990-2025)**

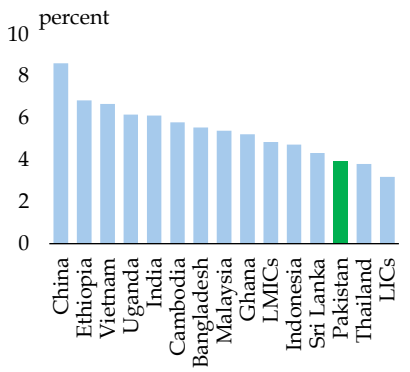



**Figure 6.6b GDP Growth Volatility in Pakistan**

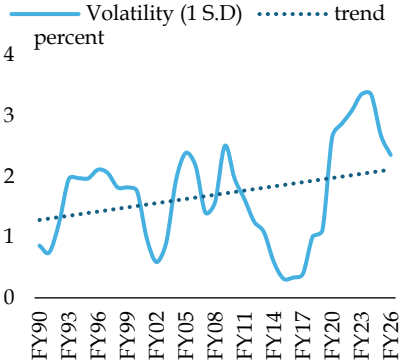
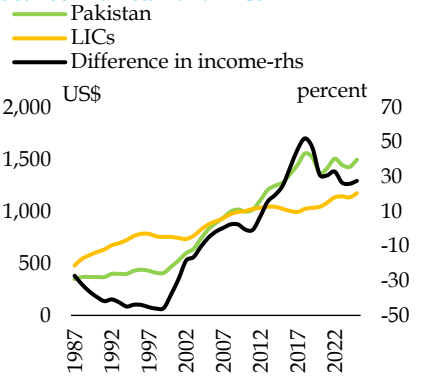


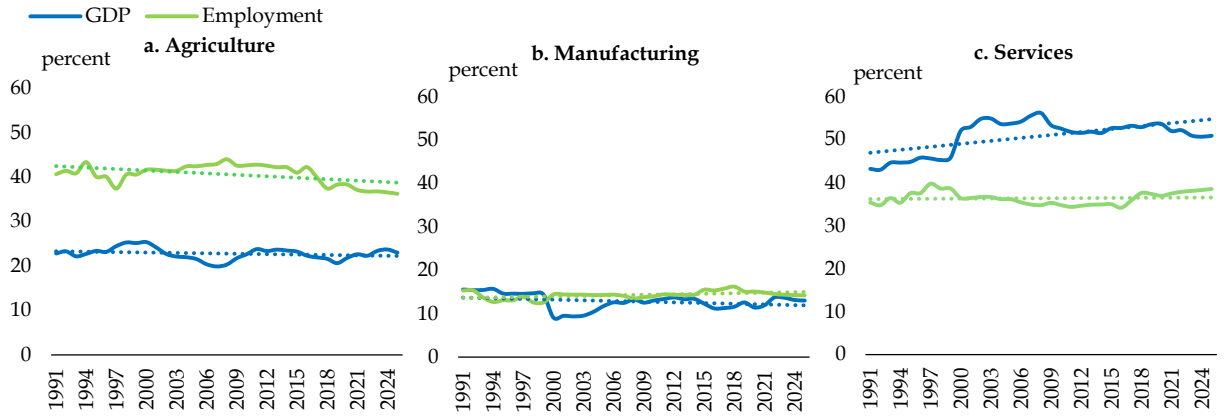

**Figure 6.6c Per Capita Income difference between Pakistan and LICs**




Note: See Appendix 6A for comparative GDP growth, per capita income and their coefficient of variation
Sources: WDI; PBS

[8] Okun's law (1962) establishes a short-run empirical relationship between cyclical output and unemployment, whereby higher output is associated with lower unemployment (Source: IMF, 2017).
[9] Arias-Vazquez et al. (2012); Can & Doğan (2017); UNDP (2024).

**Share in GDP and Employment - Pakistan** **Figure 6.7**



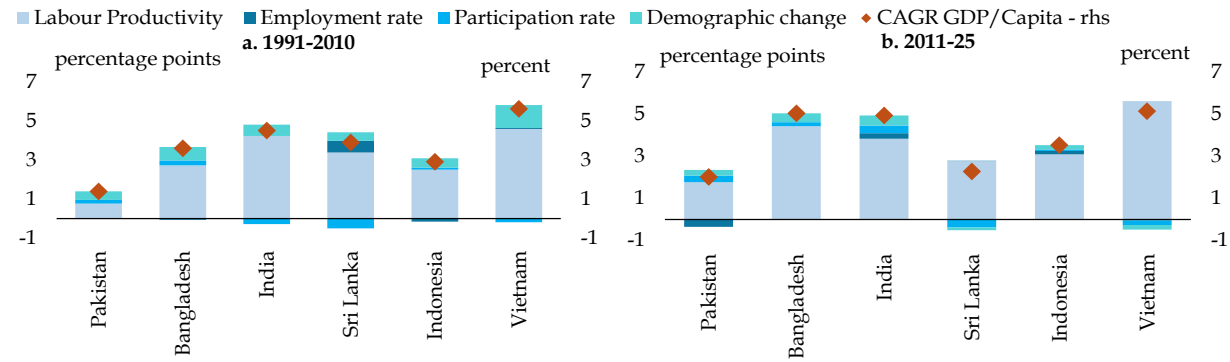

Sources: ILO;WB

response has occurred alongside slow pace of ST and limited productivity gains (Cho & Majoka, 2020; Choudhary & Pasha, 2015). Although labour has gradually moved from agriculture to services, the country seems to be undergoing premature deindustrialisation with share of manufacturing falling over the last three decades, amid rising share of services sector (**Box 6.1) (Figure 6.7**). In essence, Pakistan has largely missed the phase of large-scale industrialisation, which according to Yan and Rodrik (2025), has historically underpinned job creation in East Asian economies.

This contrast is also evident in the decomposition of growth in GDP per capita. Pakistan's per capita growth improved during 2011-2025 relative to 1991-2010, largely on account of labour productivity **(Figure 6.8)**. However, compared to its peer economies, Pakistan recorded the lowest productivity contribution and per capita growth in both periods. Moreover, the negative contribution of the employment rate during 2011-25 further weighed on per capita growth.

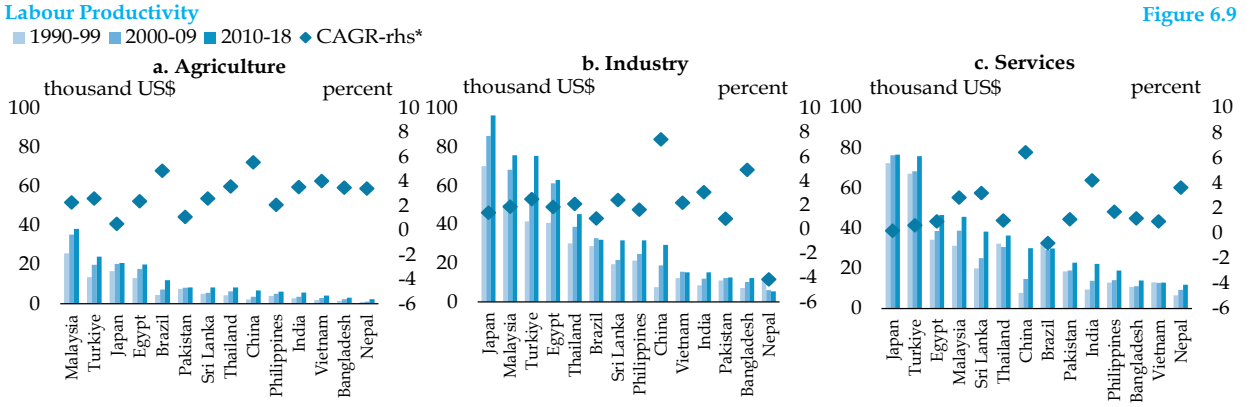
The sectoral movement of labour in Pakistan has been predominantly toward informal and non-tradable sectors, such as construction, real estate, transport, and wholesale & retail trade that have relatively limited potential for productivity improvements compared to manufacturing, business services, or financial services (SBP, 2025b). Pakistan's productivity gains in agriculture and industry have also been weak compared to peer economies **(Figure 6.9)**. However, the relatively better productivity of

**Decomposition of Growth in GDP per Capita** **Figure 6.8**




Note: Compound annual growth rate (CAGR) of GDP/capita is decomposed using the Shapley method into contributions from labour productivity, employment rate, labour force participation rate, and demographic change.
Source: SBP staff calculations using WDI data

**Labour Productivity** **Figure 6.9**




* Compound annual growth rate indicating productivity gains between 1990 and 2018

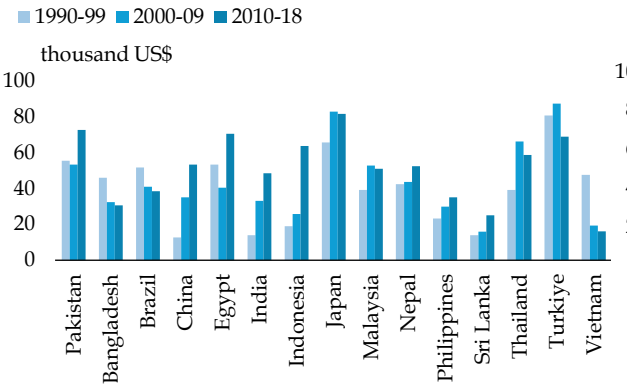
Sources: SBP staff calculations based on UNU-WIDER ETD and WDI data

services sector is driven largely by real estate rather than productivity improvements in modern tradable services (SBP, 2025b).

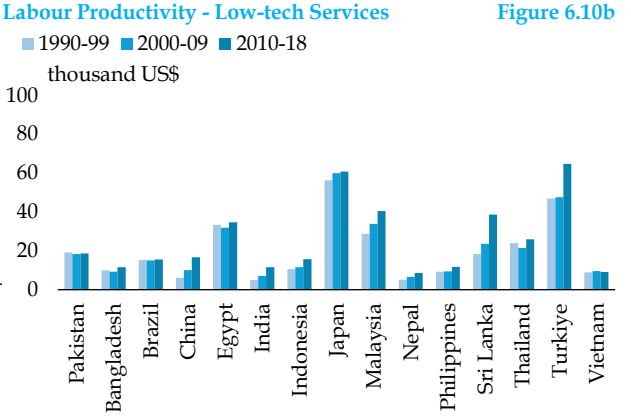
A closer look at Pakistan's services sector productivity (excluding real estate) reveals mixed trends. In high-tech services, productivity is understandably higher compared to low tech services **(Figure 6.10a and 6.10b)**.[10] In fact, it is at par or even better than some of the regional and income level peer economies. Pakistan's share of high-tech services in GDP is also somewhat high relative to its income level (**Figure 6.11a**). However, share of low-tech services in GDP is relatively higher (**Figure 6.11b**). Employment within services sectors is also concentrated in low-tech service sectors, rather than high-tech services (**Figure 6.12a & b**). Moreover, the increase in share of employment in high-tech services in Pakistan has been among the lowest within the cohort of regional and income level peer economies (**Figure 6.12a**), whereas increase in the share of employment in low-tech services is comparably higher (**Figure 6.12b)**.

In the context of job creation, amid the constraints to reversibility of PD as discussed in **Box 6.1**, the foregoing discussion raises two important concerns. First, the slow pace of ST and signs of PD are limiting both aggregate productivity

**Labour Productivity - High-tech Services** **Figure 6.10a**



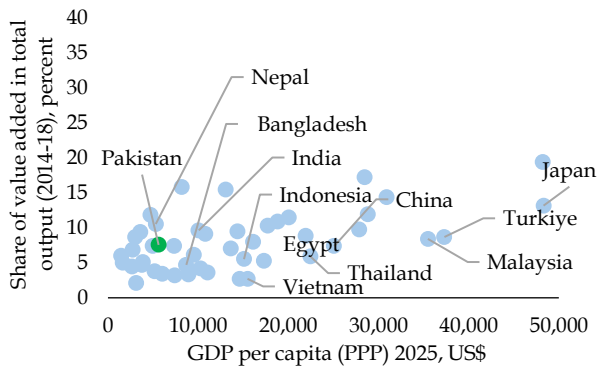

**Labour Productivity - Low-tech Services** **Figure 6.10b**



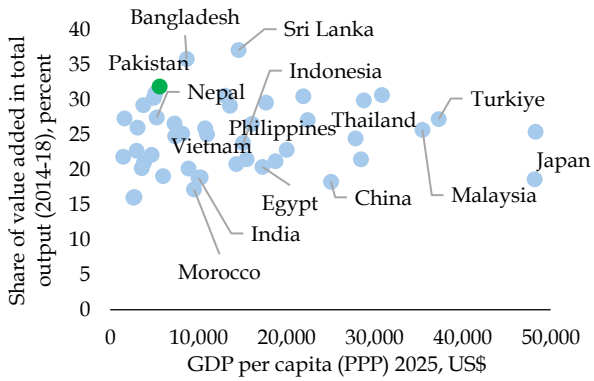

Sources: SBP staff calculations based on UNU-WIDER ETD and WDI data

[10] Following Sufi (2025), 'high-tech' services include information and communication; professional, scientific and technical activities and administrative and support service activities, whereas 'low-tech' services include wholesale and retail; repair of motor vehicles and motorcycles; accommodation & food service, transportation & storage activities.

**Share of High-tech Services in Total Output** **Figure 6.11a**




**Share of Low-tech Services in Total Output** **Figure 6.11b**



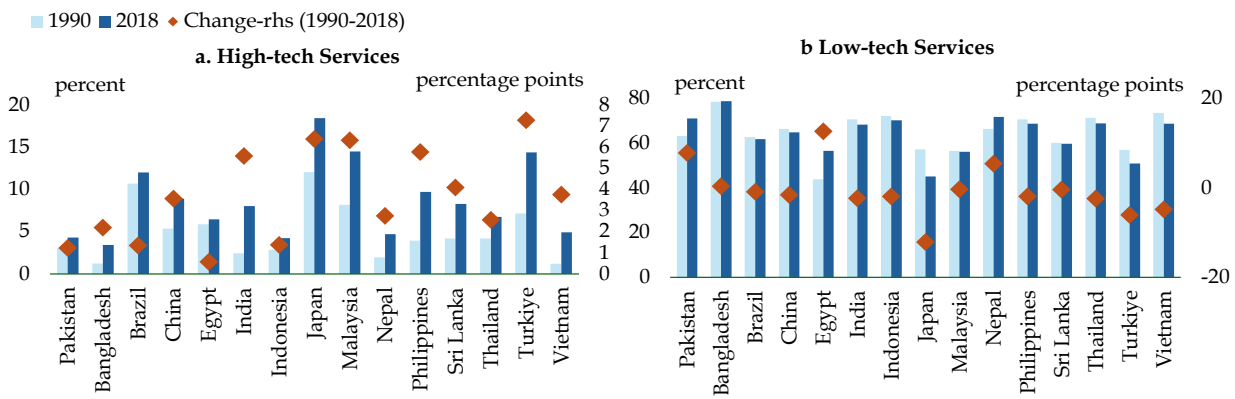

Sources: SBP staff calculations based on UNU-WIDER ETD and WDI data

growth and the quality of jobs in Pakistan (SBP, 2025b). Considering that high productivity, especially labour productivity, is associated with higher employment growth,[11] Pakistan's weak productivity does not bode well for sustained job creation. Therefore, while manufacturing may not be the sole pathway for job creation in today's context, it remains important for its capacity to absorb semi-skilled labour force, generating exports, and creating productivity enhancing linkages with agriculture and services.

Second, whilst focusing on high-tech services is important for productivity growth both within the sub-sector, and through its spillover effects, it may not be construed as an effective policy for employment generation—especially for countries with large population, such as Pakistan. Even Japan, which is one of the most developed economies that has relatively high share of high-tech services in its GDP (**Figure 6.11a**), employs less than 20 percent of its workforce in high-tech services (**Figure 6.12a**).

This is because services sub-sectors differ substantially in their productivity, tradability, skill intensity, and employment potential (Nayyar et al., 2021). High productivity, tradable services, such as IT and finance can support growth, but they mainly employ skilled workers and cannot

**Share of Employment in Services** **Figure 6.12**




Sources: SBP staff calculations based on UNU-WIDER ETD and WDI data

[11] For example, Shi and Michelitsch (n.d.) found that higher labour productivity is associated with higher employment rate in the subsequent 2 to 3 years. Similarly, OECD (2018), Dutz et al. (2011), and Calligaris et al. (2023) also suggest the same. Lower productivity impairs GDP growth, and international competitiveness, both affecting employment prospects (OECD, 2018).

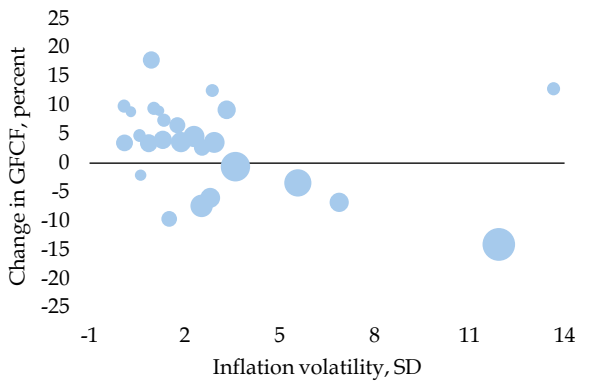
absorb the abundance of low-skilled labour typical of developing economies (Rodrik, 2016). Rest of the services are either not technologically dynamic, or they are non-tradable – such as wholesale and retail trade, real estate - which limits their ability to expand rapidly and is constrained by incomes.

**Inflation**

High inflation stemming from supply-side shocks raises firms' cost of production, without a corresponding rise in demand for goods or employment creation.[12] This seems to be the case in Pakistan as well, where supply shocks —such as global commodity price hikes and domestic floods – have frequently led to higher inflation while affecting production and supply chains.[13] This channel was particularly evident during the 2022–23 inflation surge. In FY23, inflation averaged 29.2 percent and GDP contracted by 0.2 percent (PBS, n.d.), while industrial employment fell by 2.2 and 12.2 percent in Punjab and Sindh, respectively (BoSP n.d.; SBoS; n.d.).

Further, periods of high and volatile inflation in Pakistan have generally coincided with weaker growth in investment, which constrains growth and thus employment generation **(Figure 6.13**). Inflation also erodes workers' purchasing power when increase in nominal wages do not keep pace with rising prices. Real wages in Pakistan have been on a declining trend since FY21;[14] between FY19 and Q1-FY25, real wages of low-skilled workers remained stagnant or even slightly declined (WB, 2025a). By inference, weaker consumption reduces firms' immediate demand for labour, whereas lower investment constrains subsequent expansion and job creation.

**Inflation and GFCF in Pakistan (FY01-FY26)** **Figure 6.13**




Note: Size of the bubble denotes average annual NCPI
Source: SBP staff calculations based on PBS

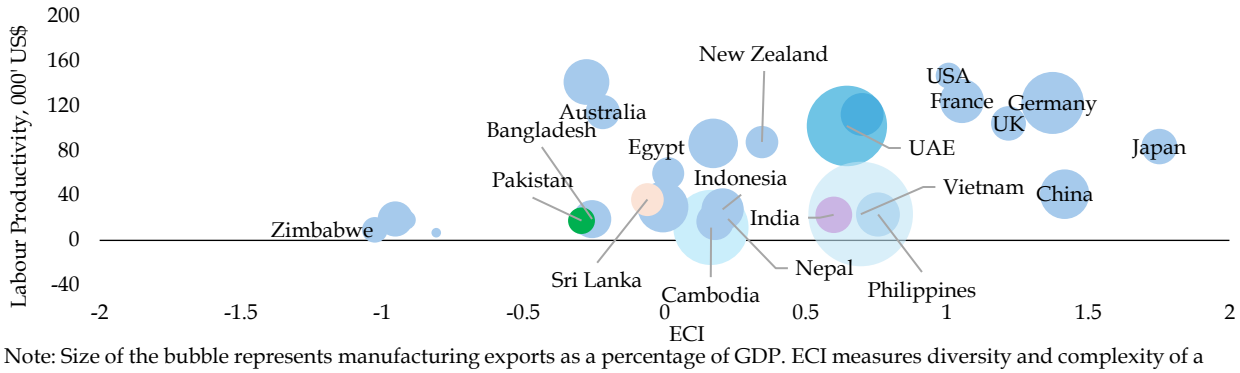
**Exports**

Exports support job creation both directly, through expanding employment in exporting firms, and indirectly, through demand for inputs and services from domestic suppliers (Winkler et al., 2023). Literature also points to a positive relationship between exports and job creation in Pakistan, particularly in labour-intensive sectors.[15] Moreover, export diversification also contributes to job creation (Shiferaw & Hailu, 2016). Despite its importance, Pakistan has been unable to sufficiently tap external demand to fully realise the employment gains. The country's exports (as a percent of GDP) declined from an average of 16.3 during 1990s to 9.5 during 2016-25, which does not compare favourably against the LMIC average of 16.6 and 21.0 during the comparable periods.[16]

Moreover, the export basket remains concentrated in low value-added textiles and agricultural products **(see Chapter 5).** Pakistan also lags peer economies in both economic complexity and labour productivity, which affects its manufacturing exports (SBP, 2025b) **(Figure 6.14).** Further, integration into GVCs remains weak, falling short of both its potential (ADB, 2022) and the level achieved by peer economies **(Figure 6.15).** This limits the country's ability to leverage

[12] Literature on US economy suggests that unlike demand-driven inflation, supply-side and cost-push shocks raise prices while decreasing employment (Gordon & Clark, 2023). RBA (2025) and RBNZ (2019) find similar for Australia and New Zealand, respectively.
[13] Hanif et al. (2017); Ejaz et al. (2021); Hussain et al. (2025).
[14] Real wages declined from Rs 11,697 in FY19 to Rs 10,968 in FY21 and further to Rs 9,748 in FY25. Source: SBP staff calculations based on PBS data.
[15] Tahir & Yu (2025); ILO & WB (2019); Nabi et al. (2025).
[16] Source: WB (n.d.a).

**Labour Productivity, Economic Complexity Index (ECI), and Manufacturing Exports** Figure 6.14




Note: Size of the bubble represents manufacturing exports as a percentage of GDP. ECI measures diversity and complexity of a country's export basket; higher values indicate greater export sophistication and knowledge intensity. Labour productivity is measured by output per worker.
Sources: UNIDO; Harvard; ILO

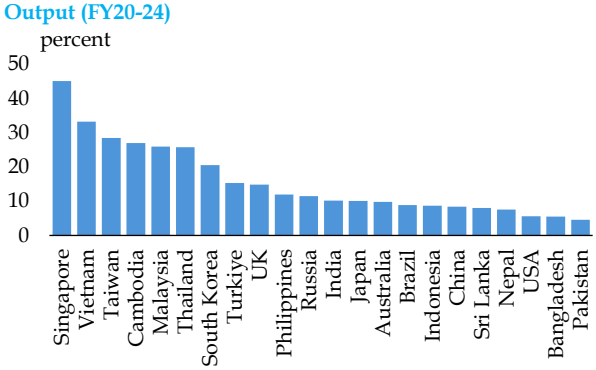
global supply chains for technological upgradation, productivity spillovers, employment generation, and better-paying jobs (ADB, 2022; WB, 2025b).

**Fiscal Policy**

Fiscal policy plays an important role in job creation both in the short and long run while also impacting the quality and nature of jobs (IMF 2014; Gaspar et al., 2019). It does so through a variety of channels including an expansionary fiscal policy that can address both cyclical and structural challenges to job creation. Moreover, quality and design of public investment, including spending on human capital, can improve education, and reduce skills-mismatch between demand and supply of labour. In addition, tax policy also has a bearing on the informal economy and informal job creation (Waseem, 2018).

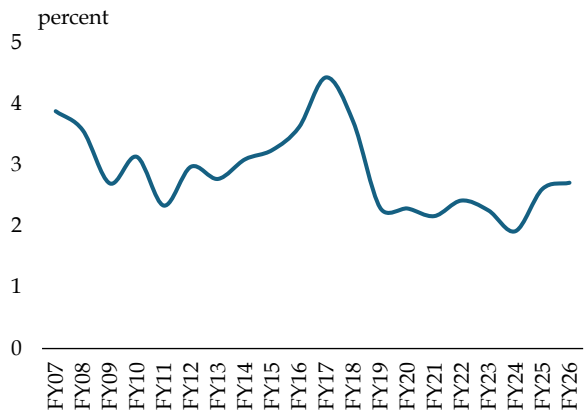
In the case of Pakistan, persistent fiscal deficits amid low tax-to-GDP ratio reflect weaknesses in domestic resource mobilisation and constrain fiscal space for priority investments, particularly in human capital (GoP, 2026).[17] At the same time, public expenditure is highly skewed towards rigid, current expenditures - such as interest payments, salaries, and pensions,[18] leaving limited room for productivity enhancing developmental spending. The development expenditure, on the

**GVC related Output as percent of Total Output (FY20-24)** Figure 6.15




Note: Selected economies from lower-middle, upper-middle, and high-income economies.
Source: WITS

**PSDP Expenditure as percent of GDP** Figure 6.16




Sources: MoF; PBS

[17] Pakistan's tax to GDP ratio averaged 10.0 percent during 2020-24, compared with the averages of 20.3 and 31.3 percent for low-income developing countries and emerging market economies, respectively (Source: IMF, n.d.).
[18] Government's current expenditure averaged 90.1 percent of its total expenditure during FY20–FY26. Source: MoF (n.d.)

other hand has been declining as percent of GDP over the last two decades **(Figure 6.16)**. It is also becoming increasingly less effective in generating employment over time **(Box 4.1)**.

## 6.3 Labour Market Issues

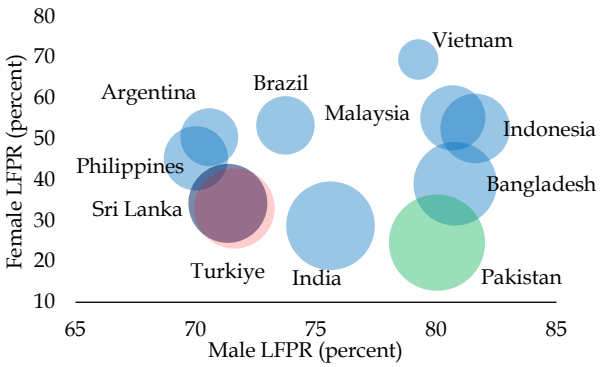
A low and gender-skewed LFP; the dominance of informal employment; and a high youth unemployment amid rising number of young people reaching the working age each year are some of the foremost labour market issues facing Pakistan's economy. These issues are a symptom of weak job creation due to low GDP growth and other macroeconomic challenges discussed in **Section 6.2**. At the same time— as the following discussion shows— they also present a structural constraint to sustained employment growth and economic development in the long run.[19] Driven by the economic structure, socioeconomic factors and lack of enforcement of labour laws and regulations, these issues in Pakistan's labour market have remained persistent.

**Gender-skewed LFP and Employment**

Pakistan's LFP rate has averaged 52.8 percent over the last ten years and remains significantly below in comparison to regional and income group level peers (**Figure 6.17**). Whilst male labour force participation rate (LFPR) in Pakistan is at par with other economies, female LFPR is substantially lower, which drags the country's total LFPR. The gender gap in Pakistan's LFP is among the widest in the world (**Figure 6.18a**). As a result, sizeable proportion of the population remains economically unproductive. This gap has been persistently high (around 60 percent) for nearly three decades.[20] The female UR is also quite high at 10.7 percent in 2024-25, compared to 6.0 percent for male, and the aggregate UR of 7.2 percent (**Figure 6.18b**).

Low LFPR, particularly of females, constrains economic growth, while higher UR for females suggests limited job creation for them. The former limits the economy's effective labour supply and

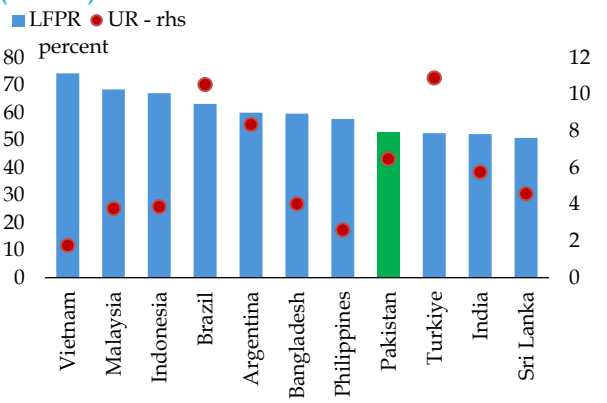
**Labour Force Participation Rate and Gender Gap - Average (2016-25)** **Figure 6.18a**




Note: Size of bubble is showing gender gap (male - female)

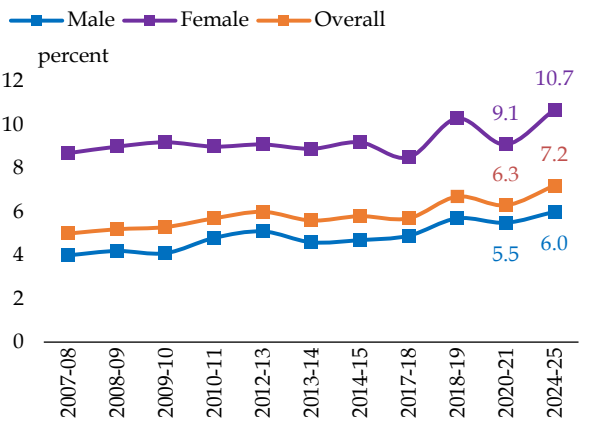
Sources: PBS; WB

**Labour Force Participation Rate - Average (2016-25)** **Figure 6.17**




Sources: PBS; WB

**Pakistan's Unemployment Rate** **Figure 6.18b**




Source: PBS

[19] PBS (2025b); WB (2017); IMF (2016); Rodrik (2016).

[20] Average during 1990-2025 based on PBS and ILO data.

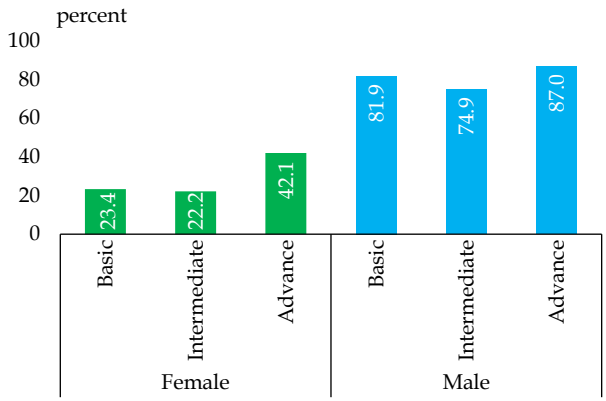
skills base, reducing potential output, productivity and the scope for business expansion and future job creation. A higher LFPR and a reduction in unemployment —particularly among women—can significantly raise aggregate output by improving the utilisation of human capital.[21] Educational attainment; social norms; mobility; fertility rate; child-care responsibilities; and low wages are some of the key determinants of female LFPR and their employment.[22]

**Level of education**: In Pakistan, the LFPR for both male and female is higher for those with advance level of education compared to those with basic level of education.[23] However, the rise in LFPR does not match the availability of jobs, leading to a rise in UR for those holding advance level of education (**Figure 6.19a and 6.19b**). For females, this challenge is more pronounced. At advance level of education, the female LFPR is less than half of the male LFPR, while their UR is more than thrice of male UR. Even though female educational attainment has improved in recent years,[24] it has only reflected in their LFPR, but has not translated into their employability. This implies that other factors also have major impact on their participation and employment level. Besides, the probability of women getting a formal job with qualifications below intermediate level or having technical training is quite lower than getting an informal job (Sabir, 2015). Moreover, barring age factor (too old or too young to work), social norms —including family's permission—is an important factor for female LFPR and employment (PBS, 2025).

**Social norms and restricted mobility:** Urbanisation and education are among the key drivers of women's employment and results in higher female LFP.[25] In contrast, data for Pakistan shows the opposite trend, where rural female LFP is nearly twice the urban female LFP. Nonetheless, it is significantly lower than male LFP in both areas (**Figure 6.20**).

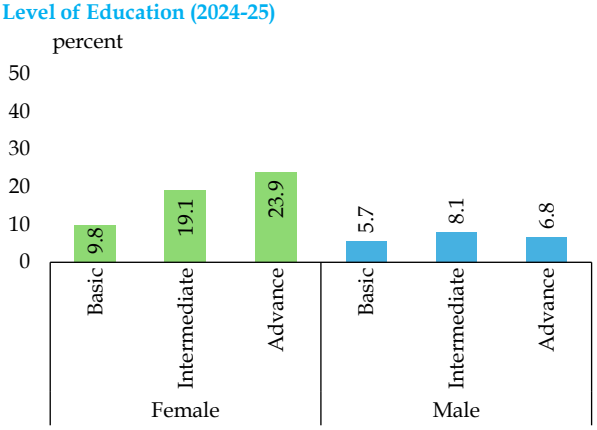
Similar trends are seen in female unemployment, which is twice in urban areas at around 18 percent, compared to rural areas. In rural areas, females are usually engaged in family enterprises in the agriculture sector, with the nature of work

**Pakistan's Labour Force Participation Rate - by Gender and Level of Education (2024-25)** **Figure 6.19a**




Source: WB

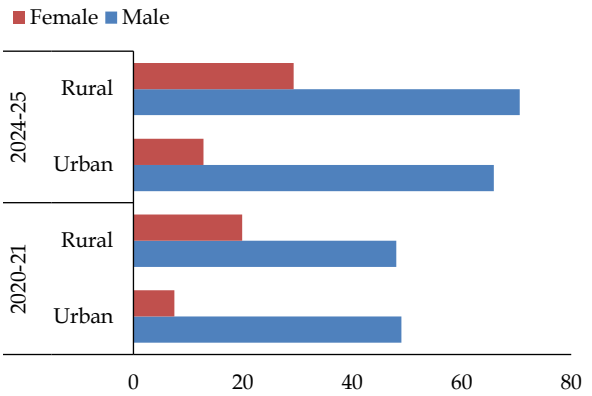
**Pakistan's Unemployment Rate - by Gender and Level of Education (2024-25)** **Figure 6.19b**




Source: WB

[21] Klasen and Lamanna, 2009; Cuberes and Teignier, 2016.
[22] Verick (2018); Tanaka and Muzones (2016); Isran and Isran (2013); Aboohamidi and Chidmi (2013); Ejaz (2005); Ferragina (2019); Anbazhagan and Mappillairaju (2025).
[23] As per International Standard Classification of Education 2011 (ISCED 2011), basic education comprises primary education or lower secondary education; intermediate education comprises of upper secondary or post-secondary non tertiary education; and advanced education comprises short-cycle tertiary education, bachelor's, master's, doctoral degree, or equivalent education level.
[24] Females (age 15-24 years) enrolled in any educational institution increased to 8.1 million in 2024-25 from 5.2 million in 2020-21. Source: PBS (2025)
[25] WB, 2024a; Pimkina, S., & de la Flor, L., 2020; Ivanova et al, 2019; Banerji et al., 2018; Novta, N., & Wong, J., 2017.

**Pakistan's Labour Force Participation Rate - by Area** **Figure 6.20**




Source: PBS

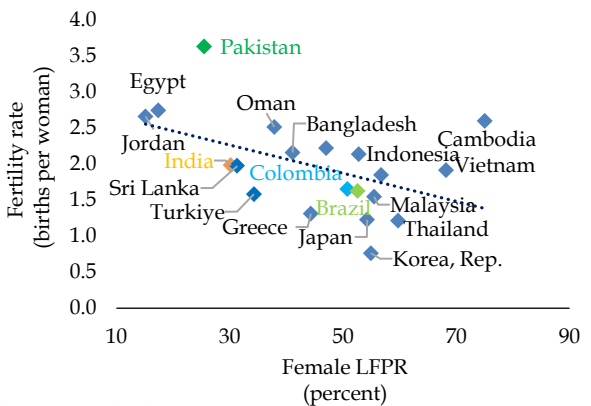
compatible with household responsibilities and prevailing social expectations, as farming and livestock activities in rural areas require working at or near home. In contrast, in urban areas, women face the challenges of transportation, and public interaction as jobs mostly require them to commute farther from home (Bussolo & Rexer, 2025; Isran and Isran, 2013). Garlick et al. (2025) established that mobility constraints largely impact female participation and job search, and women-only transport even brings out of LF females towards job search.

**Childcare responsibilities:** Childcare and domestic responsibilities are also major determinants of low female LFP. Countries with higher fertility rate —a proxy for childcare responsibilities— usually have lower female LFP (**Figure 6.21**). Pakistan has one of the highest fertility rates in the world. Moreover, caring for children, elderly and ill are mostly assigned to women besides other household work, such as cooking and cleaning (**Figure 6.22**), because of which females do not engage in paid employment. Similarly, daycare facilities, distance and mobility are key reasons for accepting a job among participating mothers (Morrissey, 2017; Caria et al., 2022).

**Wage gap:** The gender wage gap also explains lower female LFP around the world. The wages offered to female workers are lower compared to the wages of a male worker with same skill set around the world, and this gender pay gap widens in Pakistan (**Figure 6.23**). This is also linked with low bargaining capability of females for wages due to restricted mobility and household responsibilities (Sana & Jafri, 2021). Furthermore, the reservation-wage model suggests that social constraints inflate the effective reservation-wage — the lowest wage for which a worker is ready to work — for female workers. Hence, they prefer not to participate if the wages on offer do not match the cost of forgoing the responsibilities assigned or designated to them in the society (Arrazola & de Hevia, 2016).

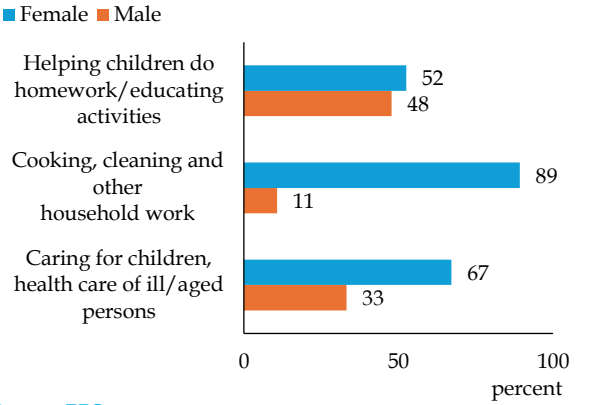
**Hiring bias:** In addition, there also exists gender bias in the hiring process. Evidence from South Asia, including Pakistan, shows that firms perceiving women workers as disruptive to the

**Female Labour Force Participation Rate and Fertility Rate - Average (2021-25)** **Figure 6.21**



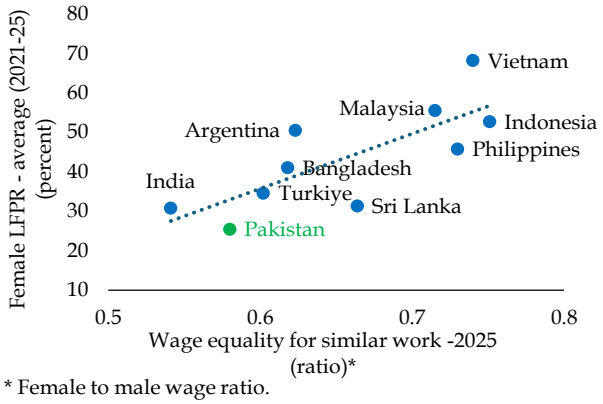

Sources: PBS; WB

**Share of Persons Engaged in Domestic and Care Activities in Pakistan (2024-25)** **Figure 6.22**




Source: PBS

**Gender Wage Inequality and Female Labour Force Participation Rate** Figure 6.23




* Female to male wage ratio.
Sources: PBS; WB; WEF

workplace tend to employ fewer women and this bias contributes to women's limited employment opportunities (Chowdhury et al., 2026). This could be because female workers are less likely to stay for longer hours due to the nature of societal responsibilities delegated to them. This can be seen in mean hours worked for female workers which, on average, are about one-fourth less than their male counterparts in 2024-25 (**Table 6.1**).

**Mean Hours Worked by Major Occupational Groups** Table 6.1

hours per week

| | 2020-21 | | | 2024-25 | | |
|---|---|---|---|---|---|---|
| | Total | Male | Female | Total | Male | Female |
| Total | 47.5 | 51.4 | 34.1 | 47.0 | 50.4 | 35.8 |
| Managers | 51.6 | 52.2 | 41.6 | 50.8 | 51.5 | 39.1 |
| Professionals | 43.2 | 46.4 | 38.1 | 44 | 46.8 | 40.4 |
| Technicians | 50.4 | 51.0 | 45.7 | 49.6 | 50.2 | 46.5 |
| Clerical support workers | 48.7 | 48.8 | 45.2 | 48.1 | 48.8 | 40.1 |
| Services and sale workers | 57.4 | 57.8 | 44.8 | 53.6 | 54.3 | 38.7 |
| Skilled agriculture & forestry | 41.1 | 47.1 | 32.5 | 40.6 | 46.0 | 33.9 |
| Craft and related trade workers | 47.6 | 51.7 | 31.5 | 47.5 | 51.7 | 33.9 |
| Plant and machinery operators | 56.4 | 56.6 | 40.2 | 54.1 | 54.2 | 46.2 |
| Elementary occupation | 46.9 | 49.0 | 37.4 | 47 | 48.5 | 38.4 |

Source: PBS

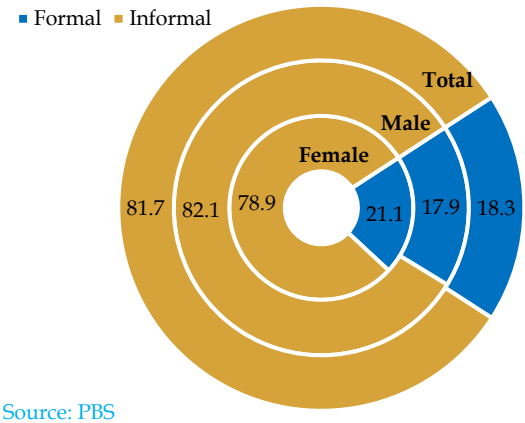
**Informality in Pakistan's Labour Market**

Pakistan's labour market is characterised less by unemployment than by the quality and formality of the jobs it creates. Despite continued efforts of documenting the economy, the nature of employment in Pakistan remains largely informal with more than 80 percent share in total employment (**Figure 6.24**).[26] Informal employment is not merely a transitional phenomenon but a permanent feature of the economy.

In the context of Pakistan's large informal economy, informal employment is not only a symptom of weakness in existing job creation but also indicates a constrained job creation in the future. Limited access to formal finance and inadequate legal cover constrains the expansion of firms in informal sector, and hampers job creation (Islam et.al, 2020). Moreover, it also prevents firms and workers from achieving productivity gains and social protection that formal employment relationships normally generate (Guriev et.al, 2019; Meghir et.al, 2015). Pakistan's high informality also represents a broader deficit in decent work as a large proportion of workers remain outside effective social protection, labour rights, employment security and collective representation (**Box 6.3**).

Pakistan's labour market informality can be explained by each of the four major theories of informal employment (**Table 6.2**). There is evidence of *dualist theory* marked by substantial

**Pakistan's Nature of Employment Composition (2024-25)** Figure 6.24




Source: PBS

[26] The informal employment by definition means working arrangements without legal protection and employment benefits such as paid leaves, social security etc (ILO, n.d.a; UNESCO, n.d.). It should not be conflated with the informal economy, which refers to economic activities and enterprises that operate outside formal regulatory, legal and institutional frameworks.

**Major Theories Explaining Informal Employment** **Table 6.2**

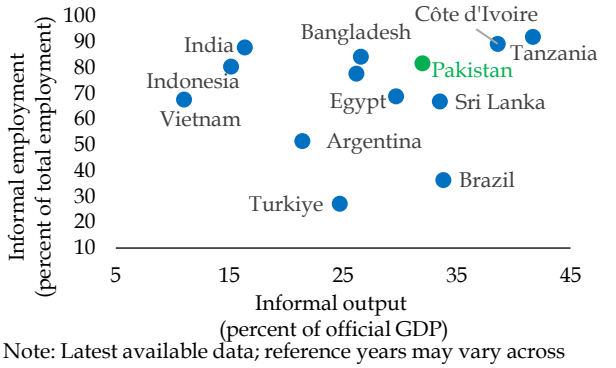
| | Explanation |
|---|---|
| Dualist theory | Informal employment provides a temporary safety net for excluded workers (Hart, 1973). It also acts as a means of survival for those with limited education, skills gap, poverty, or the challenges faced by migrants moving to urban centres (Ackrill & Igudia, 2023). |
| Structuralist theory | Formal firms drive informal employment through subcontracting to evade regulation and labour unions (Portes & Schauffler, 1993; Chen, 2005). |
| Legalist theory | Informality attributes to the evasion of costly and complex legalities and regulations (de Soto, 1989). |
| Voluntarist theory | Firms and individuals choose to stay below the radar of bureaucracy even when costs are not too high. They do so with the intention of gaining unfair competition against efficient formal enterprises (Dell'Anno, 2022). |

Note: These theories are not mutually exclusive as there may be several factors simultaneously at play.

survivalist informality among the poorest own-account, family workers and women (Shaheed & Mumtaz, 1981; Kemal & Mehmood, 1998). There is also some evidence of *structuralist theory*, growth-linked informal segment tied to subcontracting in trade, manufacturing, and construction (Tahir & Tahir, 2018). Both the *legalist* and *voluntarist* perspectives help explain informality in Pakistan. Complex regulations, taxation, procedural requirements, and corruption can make formalisation costly and discourage firms from entering the formal economy (Hayat & Rashid, 2020; SMEDA & ILO, 2002; ILO, 2024a). At the same time, some firms may deliberately remain informal to reduce tax and compliance costs, making informality a strategic choice as well (Waseem, 2018). Key factors of high informality include large agricultural sectors, poor business climates and low human capital (Ohnsorge & Yu, 2022).

**Size of informal economy:** Pakistan's relatively large informal economy seems to be one of the contributing factors behind the high share of informal employment (**Figure 6.25**). The trend is similar in most of the Asian region, which has the second highest share of informal employment after Africa (ILO, 2020a). This is because jobs created in informal economy are predominantly survival jobs—characterised by low wages, sub-

**Size of Informal Economy and Informal Employment** **Figure 6.25**



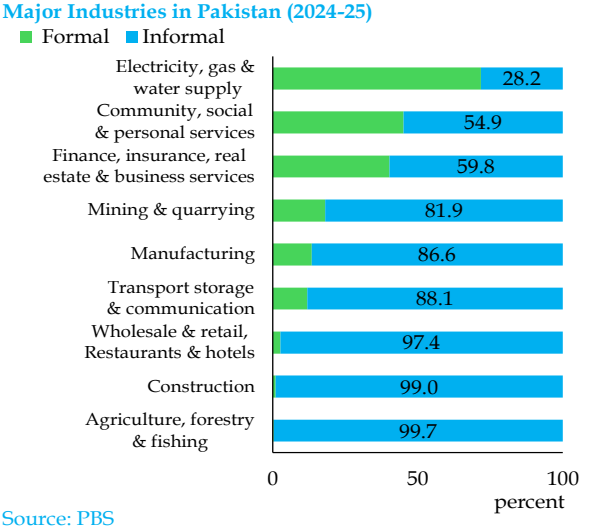

Note: Latest available data; reference years may vary across countries

Sources: PBS; WB; ILO

standard working conditions, and without social protection—rather than "decent work" that drives upward mobility.

However, it is pertinent to note that the size of informal economy does not fully explain the size of informal employment (**Figure 6.25)**. This is because sectors that are usually part of the formal economy also have a large share of informal employment in Pakistan (**Figure 6.26**). The corollary is that informal jobs may not decline with economic growth rather expand alongside formal economy when firms rely on informal networks (Chacaltana et al., 2020). This suggests that *structuralist theory* also explains in part the

**Share of Formal and Informal Employees - by Major Industries in Pakistan (2024-25)** **Figure 6.26**



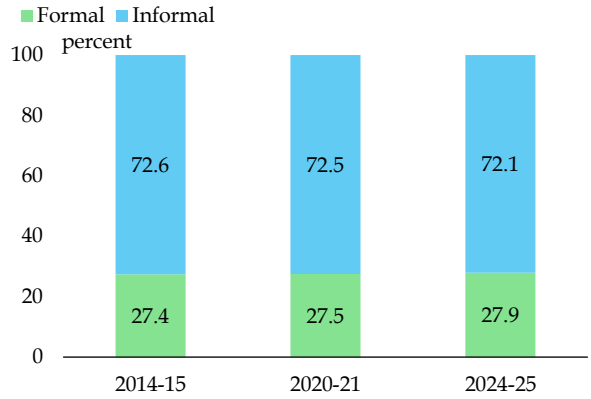

Source: PBS

size of Pakistan's informal employment (Tahir & Tahir, 2018).

**Informal employment in agriculture and non-agriculture sector:** Agriculture sector is largely considered as informal.[27] However, the more concerning fact is that 72.0 percent of non-agricultural employment also remains informal, and the share has almost been unchanged over the last decade (**Figure 6.27**). Among the total informal employment in non-agriculture sectors, wholesale and retail trade alone accounts for around one-third, followed by manufacturing and construction (**Figure 6.28**). These sectors are characterised by small firms, cash transactions, and daily or task-based wage-setting (Tahir & Tahir, 2018; PBS, 2025b). The distribution of informal employment confirms that informality is concentrated in low-entry-barrier, low-capital activities.

Furthermore, the status of employment of informal workers shows that own-account work and unpaid/contributing family workers together make up 53.4 percent, while salaried workers are 44.7 percent (**Figure 6.29**). This suggests that informal labour market is more skewed towards self-employment and subsistence work rather than firm-based job creation, pointing towards the presence of dual economy in the context of *dualist theory*.

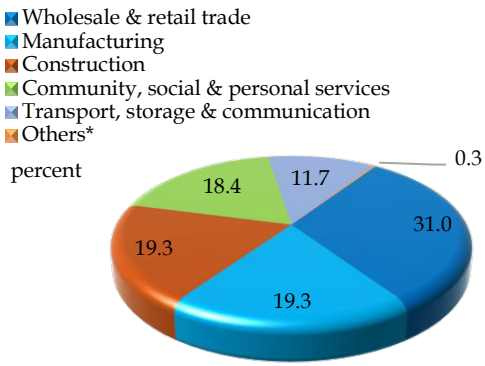
**Distribution of Informal Employment in Pakistan's Non-Agriculture Employment** **Figure 6.27**




Source: PBS

**Low quality of human capital:** A large number of workers in both formal and informal employment have low or no formal education, particularly for females. Even in the formal employment, almost one out of ten males and two out of ten females have no education at all (**Figure 6.30**). It is also a reflection of low-value addition by manufacturing and services sectors. Further, low human capital confines workers to elementary occupations, own-account work and unpaid family labour — categories that are informal by definition — rather than to skilled positions in registered firms. This works on both the supply side (workers lack the skills formal employers require) and the demand side (formal firms facing skills shortages substitute toward informal subcontracting).

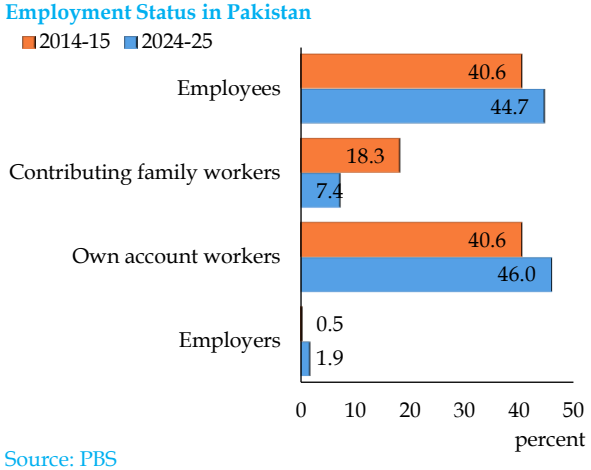
**Distribution of Informal Sector Employment - by Major Industry Divisions in Pakistan (2024-25)** **Figure 6.28**




* Mining & quarrying; electricity, gas & water; finance and insurance; and real estate & business services.

Source: PBS

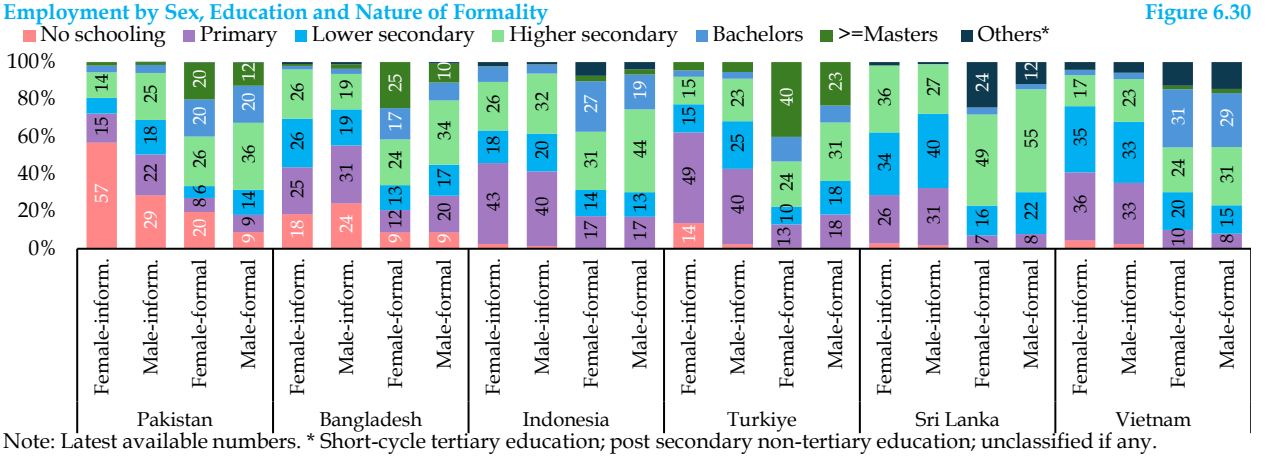
**Distribution of Informal Workers - by Employment Status in Pakistan** **Figure 6.29**




Source: PBS

[27] Agriculture sector accounted for about 33 percent of total employment in 2024-25. Source: PBS, 2025b.

**Employment by Sex, Education and Nature of Formality** **Figure 6.30**



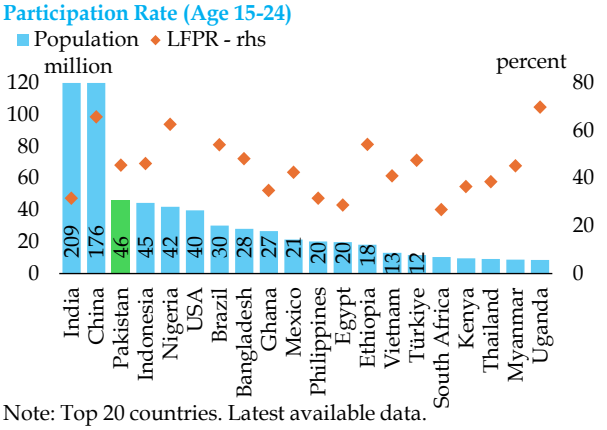

Note: Latest available numbers. * Short-cycle tertiary education; post secondary non-tertiary education; unclassified if any.
Source: ILO

**Cost of formality:** The corporate tax rate in Pakistan is among the highest in the region (PwC n.d.). Besides, Pakistan's low score in World Bank's B-READY indices points to a complex taxation system, which impairs private sector's compliance. Moreover, the social protection laws require the firms to pay contribution on behalf of workers, which is an additional cost to the employer. Besides, other regulatory requirements such as minimum wage, etc. are other reasons firms offer informal employment (Choudhary et.al, 2016). Furthermore, repeated withholding-tax measures for non-filers since 2015 have instead pushed a growing share of transactions into cash and the shadow economy (SBP, 2015), with the currency-to-broad-money ratio rising — a proxy for expanding informality (Arby et.al, 2010).

**Youth Unemployment and High Youth NEET Rate**

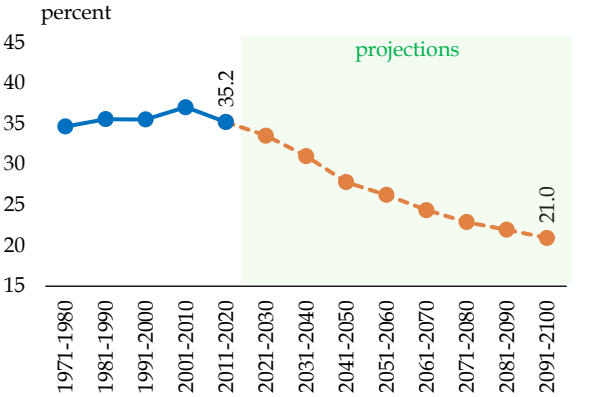
Pakistan has the third largest youth population in the world in absolute terms **(Figure 6.31)**. Around 65 percent of the population is estimated to be below the age of 30 years, with 19 percent and 26 percent falling within international and national 'youth' age brackets, respectively (WB, 2020).[28] Moreover, based on current demographic trends this youth-heavy age structure will persist, with their share in WAP projected to remain more than one-fifth over the long-term **(Figure 6.32).** Whether this youth bulge becomes a demographic dividend — an engine of growth through an expanding, productive labour supply — or a demographic burden depends on the economy's potential to generate enough decent jobs to absorb

**Youth Population and Youth Labour Force Participation Rate (Age 15-24)** **Figure 6.31**




Note: Top 20 countries. Latest available data.
Source: ILO

**Share of Youth in Pakistan's Working-Age Population** **Figure 6.32**




Source: UN

[28] As per UN definition, youth age bracket is 15-24 years, while 15-29 years is defined as youth in Pakistan's National Youth Policy.

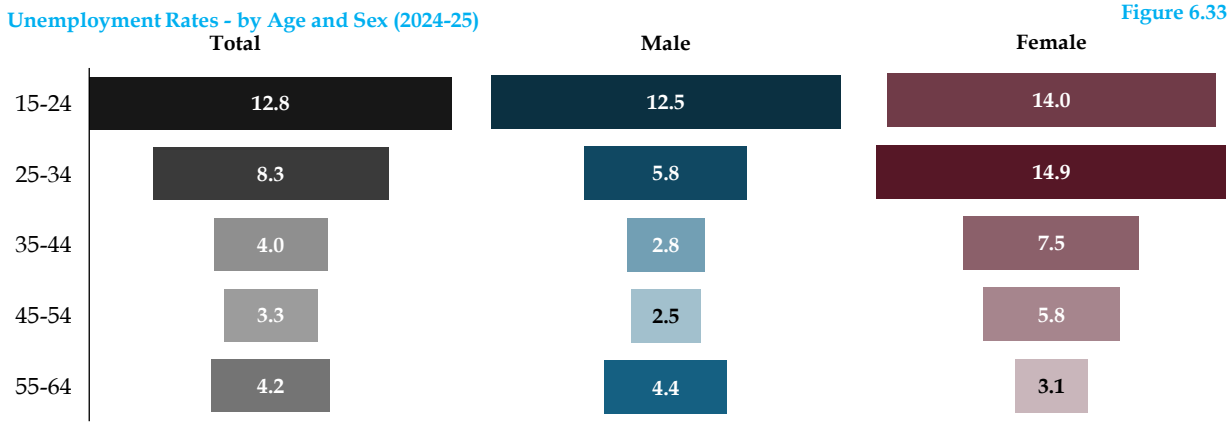
it. The demographic-dividend model holds that a rising share of WAP can lift savings, investment and per-capita growth — but only if the labour market absorbs new entrants and human capital is adequately built (Bloom & Williamson, 1998; Bloom et al, 2003). However, where absorption fails, the same demographic structure can turn this into a security and welfare risk, associated with idleness, informality and social discontent (Urdal, 2006). In this context, Pakistan's high level of youth unemployment and NEET rate are major concerns.

**High youth unemployment:** Whilst Pakistan's youth LFP rate has modestly improved from 43.8 percent to 44.4 percent between 2020-21 and 2024-25, the rising youth participation has not been matched by proportionate job creation. The youth UR stood at 12.8 percent —significantly higher than overall UR of 7.2 percent—in 2024-25, having risen from 11.1 percent in 2020-21.[29]

While the large youth population itself is one of the factors behind high youth UR since it supplies more labour than the market can absorb (Ahsan and Urooj, 2026), the structural challenges to job creation discussed in **Section 6.2** also drive this high youth unemployment. Specifically, the slow pace of structural transformation amid fewer opportunities in high productivity jobs are affecting the job prospects of college educated youth. The continuation of this trend poses risks of future unemployment through what literature calls the scarring effects of youth unemployment.[30]

The high UR is markedly visible in both male and female youth cohort, compared to other age brackets (**Figure 6.33**). In males, the unemployment gradually reduces with aging. This may be associated with attainment of additional education or work experience. The unemployment in young female is not only consistently higher than male counterparts within the same age cohort (barring 55-64 years bracket) but also peaks in 25-34 years bracket (**Figure 6.33**), which are considered as prime fertility years. The factors specifically associated with high youth unemployment are lack of experience along with deficiency of skill building among school going children as suggested by Pakistan's learning poverty ranking (Hou, 2011; WB, 2024b).[31]

**Unemployment Rates - by Age and Sex (2024-25)** Figure 6.33




Source: PBS

[29] PBS (2025b).

[30] Scarring effects refers to the empirical and anecdotal observation that being an unemployed youth increases the risks of future unemployment or working poverty, mainly because of deterioration of skills and missing work experience, or employers' perception of candidates' low productivity. The longer youth remain unemployed or underemployed, the longer the scarring effects are expected to last. In addition, the impact on jobs and wages, scarring effects have also been observed on employees' happiness, job satisfaction and health (Scarpetta et.al, 2010).

[31] About 70 percent children aged 10 in Pakistan cannot reach minimum proficiency in reading, either because of poor quality education or because they do not have access to education at all. Source: (WB, 2024a).

Besides, factors that are not youth specific, such as education and earning of household head, household demographic structure, and the ratio of working to non-working individuals, are also important determinants of youth employment for Pakistan (Hou, 2011; WB, 2020).

**High NEET rate:** Pakistan's NEET rate, which is a broader measure of youth exclusion, stood at 28.4 percent in 2025 (PBS, 2025),[32] with average NEET rate for 2021-2025 higher than most comparable economies (**Figure 6.34**). Higher NEET rate implies that a much larger number of young people who have been away from job search— reflecting a latent youth unemployment— or have not able to find jobs and may enter labour force anytime.

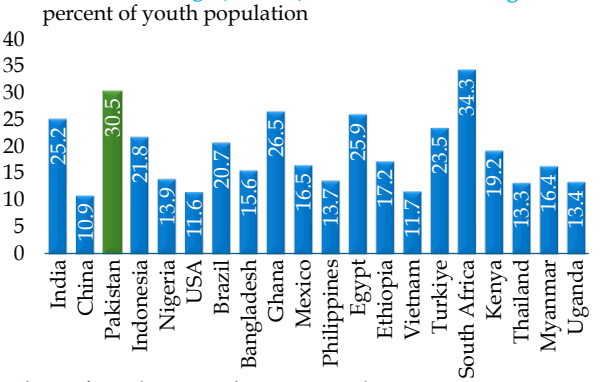
NEET also uncovers the prevailing large gender disparity. While male NEET is 13.0 percent, female NEET is at 45.4 percent (PBS, 2025a). Mirroring the gender skewness in overall LFP, the higher NEET for females reflects cultural constraints, safety concerns, and unpaid care burden, which severely obstruct the young women's transition from education to formal employment (WB, 2024c), sidelining millions from job market.

Low literacy, insufficient skill levels, and lack of credentials drive youth unemployment, exacerbated by poor connections between universities and industries (Mirza et.al, 2017). Technical and Vocational Education and Training (TVET) enrolment also remains low at around 13 percent despite strong interest, pointing to limited capacity and quality rather than a lack of youth demand (Planning Commission, n.d.).

Due to this skill-mismatch and lag in formal job creation, young labour market entrants become part of informal jobs. Globally, an estimated 96.8 percent of young workers in developing countries are in informal employment (ILO, 2017), which

**NEET* Rate - Average (2021-25)** **Figure 6.34**

percent of youth population




* Share of youth not in education, employment or training. Top 20 countries as per youth population.
Sources: PBS; WDI

limits productivity gains, tax revenue, and social-protection coverage weakening the economy's capacity to create better jobs in the next cycle.

The same is visible in Pakistan's large informal employment. As global markets shift toward fourth industrial revolution and green industrialisation amid increased competition in global GVC-based environment, Pakistan needs to reduce the skill gap and develop human capital toward market-driven competencies. This is particularly important to prevent youth unemployment, underemployment, and high NEET. **Box 6.4** covers this issue of education-skill mismatch in Pakistan in detail.

## 6.4 Future of Job Creation

Rapid technological innovation and their integration in manufacturing due to fourth industrial revolution (4IR); transition towards green economies; and geoeconomic fragmentation are some of the key forces shaping the future of employment worldwide (WEF, 2025a). These mega trends present both an opportunity as well as a challenge to many economies. However, as the ensuing discussion shows, for some economies—such as Pakistan —these present more of a challenge rather than an opportunity,

[32] The unemployment rate alone understates the scale of youth economic exclusion, because it excludes young people who are neither working nor looking for work — often young women confined to unpaid domestic roles who are not counted as 'unemployed' despite being economically idle (ILO, 2021). The NEET rate captures this fuller picture. Given its significance it was also adopted as 'SDG indicator 8.6' for tracking youth labour-market integration instead of unemployment (ILO, 2025).

given the technological gaps, need to reskill and upskill labour, investment constraints, and increasing global competition. Accordingly, this section sheds light on how these forces risk a profound disruption to both existing jobs and future job creation.

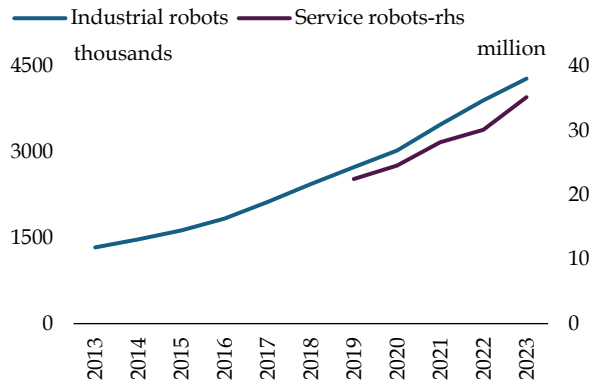
**Fourth Industrial Revolution (4IR)**

Rapid changes in robotics, artificial intelligence (AI), internet of things (IoT), and data analytics—collectively underpinning the 4IR—are enabling firms to automate, increase productivity, and redesign business models. The accelerating pace of these technological advancements is reshaping human-machine interaction, production systems, and hence job prospects (WEF, 2025a). Automation is already transforming production processes worldwide. Supported by declining robot prices (OECD, 2019),[33] the number of industrial as well as service robots has increased over the past few years **(Figure 6.35).**[34]

In the industrial sector, robots are taking over menial jobs like handling, processing, room cleaning, dispensing, assembling, and welding. Moreover, "dark factories" – i.e., factories without lights that can work 24 hours - have begun production and are estimated to grow steadily, characterised by highly automated, AI-driven operations with minimal human presence.[35] In fact, with the advances in hardware, software and AI, robots are also being considered as General Purpose Technologies (GPTs) (McKinsey, 2025).[36]

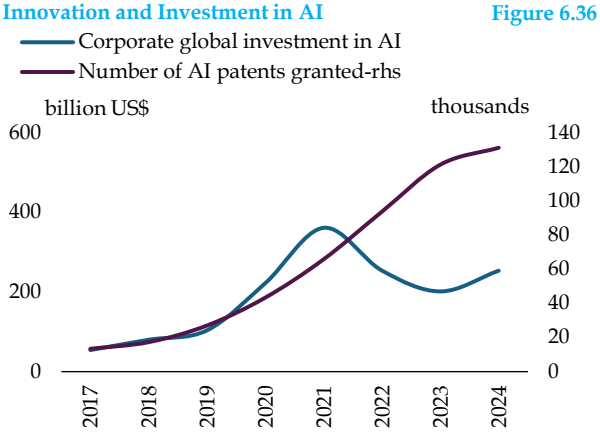
Likewise, driven by progress in computing power and machine learning, generative AI capabilities have advanced dramatically.[37] Moreover, a growing number of patents and investments in the field of generative AI **(Figure 6.36)**, suggest that the speed and accuracy of AI may be expected to increase over time, leading to its ubiquitous use across economic sectors and types of occupation. This is expected to enable significant productivity gains by increasing labour productivity; improved prospects of innovation; and wider economic impacts, including on prices, income, transaction costs, and reallocation of resources (WB, 2026).

**Operational Stock of Industrial and Service Robots** **Figure 6.35**




Sources: AIPRM (2025); IFR (2024)

**Innovation and Investment in AI** **Figure 6.36**




Source: Stanford AI Index Report (2026)

[33] Price of consumer service and domestic service robots declined by US$ 100 to US$ 420 and US$ 110 to US$ 530 between 2019 and 2023 (AIPRM, 2025).

[34] Industrial robots are used in manufacturing for tasks such as welding, painting, and material handling, whereas services robots perform tasks outside the industry, including cleaning, mowing, transporting goods, and room delivery, among others.

[35] The economic incentive to automate depends on the relative cost and productivity advantage of robots over labour. While emerging economies may initially experience low economic incentives to automate because of availability of cheap labour, the declining prices of robots strengthen the incentives to automate.

[36] GPTs are engines for growth given that they are pervasive in nature, their improvements over time, and their impact on complementary innovation (Brynjolfsson et al. 2020).

[37] GenAI capabilities have advanced rapidly, with AI models achieving higher success at a faster pace (Soto et al, 2026).

In the context of job creation, advancements in 4IR in general and automation and AI in particular may also create new job opportunities. For instance, 4IR's positive impact on productivity and economic growth may increase demand for different goods and services across 4IR-producing sectors, 4IR-using sectors, and elsewhere in ways that are not currently even imagined by policymakers and market professionals (WB, 2026). Technological change is also giving rise to new forms of work, particularly through the expansion of gig economy. However, it has limited potential for large scale labour absorption (**Box 6.5**).

Notwithstanding the opportunities, the 4IR also poses challenges to labour absorption, as nearly 40 percent of global employment is already exposed to AI (Cazzaniga et al., 2024; McKinsey, 2022a). First, the advances in 4IR alone do not mean that the opportunities will necessarily transpire. The quality of digital infrastructure, AI readiness, internet access, human capital, institutions, innovation ecosystem and economic integration impacts the pace and penetration of 4IR adoption across economies. Economies that are already strong or can significantly improve their performance across these dimensions can successfully leverage the 4IR to increase competitiveness, which can support exports, GVC integration and hence growth and job prospects. However, Pakistan's low preparedness for the 4IR, reflected by gaps in digital infrastructure, governance, and human capital, places it behind its regional peers.[38]

Secondly, 4IR has intensified concerns about jobs displacement (WEF, 2025a). For instance, jobs in operationally intensive sectors, such as manufacturing, are expected to face higher automation, as a significant share of their workforce performs tasks that are amenable to automation (McKinsey, 2022a). Certain knowledge-intensive jobs in computer and mathematical occupation—such as web development and programming— may also get automated (Srinivasan & Azpurua, 2026).

Similarly, the 4IR is expected to reduce demand for low-skilled jobs in the agricultural sector, while increasing demand for machine operators and equipment mechanics (Charlton et al., 2022).[39] Within the services sector, many routine cognitive tasks in financial and clerical services—such as data entry and bookkeeping—are already being automated, with automation to accelerate in the future. In comparison, however, occupations requiring creative and critical thinking remain less vulnerable to automation.

Case studies on the impact of 4IR adoption on jobs in Pakistan are scant, partly because of the country's low adoption at present. However, literature suggests that Pakistan's workforce is vulnerable to automation and AI, signs of which are already beginning to emerge. Arif and Naushahi (2023) estimated that 17 percent of jobs in Pakistan are vulnerable to automation across different sectors; while Batool et al. (2025) found that manufacturing sector jobs are particularly at high risk.

Even if these risks do not transpire in the long run, they will change the nature of work, and accordingly the skills demanded.[40] Notwithstanding the divided views on whether or not 4IR will take away most of the jobs, the onset of 4IR underscores the need to train the workforce

[38] Pakistan's Network Readiness Index, which measures how well countries use ICT to boost innovation and competitiveness by evaluating nations across four areas of technology, people, governance, and impact, remains below regional peers like India and Bangladesh (PI, 2025). Likewise, Pakistan's lower AI Preparedness Index (2023) shows limited progress in governance and infrastructure required for AI adoption.

[39] Given labour intensive, and low-tech based nature of Pakistan's agriculture and industry, such a shift in labour demand may not pose immediate risks to employment, especially considering availability of cheap labour in the country. However, it may progressively materialise as and when declining prices of technology improve the cost-benefit advantage of automation in the context of productivity gains.

[40] History suggests that the fears of technological unemployment are often unfounded in the long run, as new types of jobs spring up as each technology creates its own jobs (White, 2026)

in terms of both upskilling and reskilling of the workforce (White, 2026; Ellingrud et al, 2020).[41] Given Pakistan's low-skilled and uneducated workforce **(Box 6.4),** this poses a major challenge to labour absorption in the country going forward.

**Green Transition**

Climate change is forcing the global transition towards a green economy, which is reshaping production systems and employment.[42] The shift towards low-carbon and environmentally sustainable economic pathways is expected to both reshape existing industries and create new economic opportunities through green technologies and green industrialisation, which may also transform tasks and working methods. The green transition is already underway globally at a fast pace.[43]

Although the net impact of green transition on global jobs may be positive,[44] the transition is likely to generate significant shifts in skills demand across labour markets. Compared to traditional industries, green industries require higher level of skills, for both innovation in green technologies and its adoption or diffusion. The economies pursuing green innovations will need to ensure that its labour force has necessary hard and soft skills including, critical thinking, active learning, complex problem solving and decision making, and cross-disciplinary technical knowledge, including of STEM disciplines (science, technology, engineering, and mathematics).[45]

The economies that do not actively pursue the goal of becoming major players in green innovation, and only aim to adopt green production processes, will also need substantial retraining of workers. Literature on global occupations suggests that compared to highly skilled workers, workers in low skilled jobs will have to undergo significant training to acquire new skills to avail newly created green employment opportunities (OECD, 2023; OECD 2024a; OECD, 2025).[46] There may be some occupational skills that can transition into green jobs relatively easily. Ham et al. (2026) classify such transitions as those that require 'reskilling' through small to modest training, on the-job training, as against transitions that are difficult without skill investments (upskilling), or jobs to which transition is not possible without skill conversion (reconversion).

For Pakistan's economy, the global green transition creates a unique set of challenges. If Pakistan does not reshape its production systems to undertake climate mitigation and adaptation measures, it risks losing export market share (SBP, 2025a; SBP, 2026). This in turn can affect the prospects of growth in output and employment. However, the adoption of such production systems is also likely to displace workers in carbon-intensive sectors and require them to learn new skills for emerging employment opportunities. It would also necessitate new investments in acquiring green industrial units or upgrading them, as well as investments to retrain

[41] Upskilling refers to workers gaining new skills to support in their existing roles, while reskilling means learning new capabilities to transition to a different or an entirely new role. Workers employed in operationally intensive sectors, such as manufacturing, will require reskilling. In contrast, workforce in less operationally intensive sectors would require upskilling to stay productive and employed (Ellingrud et al, 2020).

[42] UN defines green transition as the comprehensive and systemic shift towards environmentally sustainable and climate-safe practices across various sectors (OECD, 2024a).

[43] For instance, the rapid shift towards clean energy is evident from an over two-fold increase in renewable energy (RE) capacity during the last decade, because of which the share of RE in global total electricity generation rose to 34.0 percent in 2025 from 23.0 percent a decade ago (IRENA, 2026). In the transport sector, the share of electric vehicles has been consistently rising, from a mere 4 percent share in global new car sales in 2020 to 25.0 percent in 2025 (IEA, 2025). Similarly, factories are being retrofitted with climate friendly technologies to ensure sustainable manufacturing processes (McKinsey, 2022b). This transition is aided by growing climate finance and accelerating innovation in green technologies (GLCF, 2024; OWID, 2025 a & b).

[44] Estimates on impact on Pakistan's job market are scant but global estimates offer some insights; by 2030, the green transition may add 24 million jobs worldwide, while 14.4 million jobs could get displaced (WB, 2025c; WEF, 2025b).

[45] OECD, 2023; OECD 2024a; OECD, 2025.

[46] For example, coal miner becoming solar technician or mechanics of internal combustion engines becoming mechanics of electric engines.

labour for changing economic realities (Bulmer et al., 2026).

Given Pakistan's climate vulnerability and carbon-intensive industrial structure, green transition is of particular significance. Pakistan's 120th rank in $CO_2$ efficiency of manufacturing value-added points to the need to transition towards cleaner production (UNIDO, 2026), failing which can negatively impact export competitiveness, FDI attractiveness, ability to integrate with green GVCs, and thereby impacting job prospects. Pakistan's low score in Green Growth Index (**Figure 6.37**) also points in the same direction.

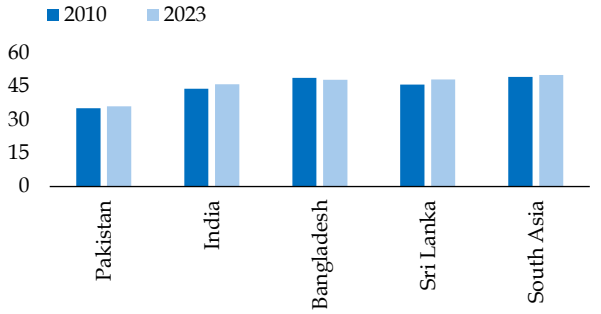
On the face of it, given Pakistan's underdeveloped manufacturing sector, most jobs only seem to require reskilling through small investments in training (**Figure 6.38)**. However, this appears to be challenging, given the country's inadequate vocational training system (**Box 6.4**), as well as low wage premium for green jobs.[47] In Pakistan, these jobs are mostly concentrated in low and medium-skills occupation. About 31 percent of green workers do not have any formal education or vocational training (WB, 2022b; Ham et al., 2026). The skills gap also limits the economic returns associated with green skills; the premium on green jobs in Pakistan is merely 2.9 percent compared to 12 percent in South Asia (Ham et al., 2026). This signals that workers and firms have little incentives to invest in training.

**Geoeconomic Fragmentation**

The geoeconomic fragmentation —which refers to policy-driven changes to global economic integration—has become noticeable over the past decade.[48] Driven by economic shocks following the global financial crisis of 2008, Russia-Ukraine conflict, escalating US-China tensions, and resurgence of nationalist industrial policies,[49] geoeconomic fragmentation is impacting global trade and investments through two key mechanisms.

First, it is driving GVCs reconfiguration along geopolitical alignments, resulting in a trend towards re-shoring, friend-shoring, and near-shoring to mitigate geoeconomic risks (ADB & WTO, 2025). Second, it is increasing uncertainty to trade and investment prospects and adding complexity to GVCs (UNCTAD, 2025a & b). In

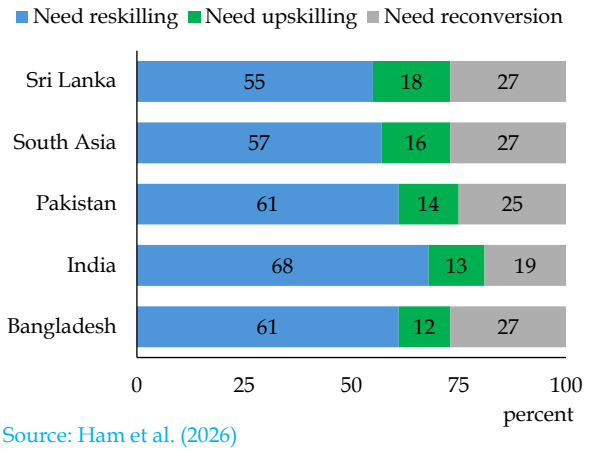
**Green Growth Index*** **Figure 6.37**




* It measures how well countries achieve global sustainability targets across four key areas: efficient resource use, natural capital protection, green economic opportunities, and social inclusion.

Source: GGGI

**Non-green Workers by Transition Category** **Figure 6.38**




Source: Ham et al. (2026)

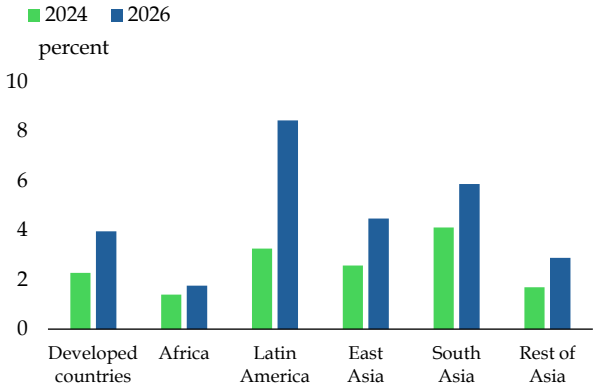
[47] Green jobs are decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency (ILO, n.d.b).
[48] IMF (2023); Pietrobelli et al. (2026).
[49] Industrial policies during 2000-2014 relied mainly on trade openness, special economic zones, innovation and skills, and other related instruments to achieve the objective of GVC integration and higher value addition. In contrast, industrial policies since 2020 rely mainly on economic security reshoring incentives; production subsidies; export controls; domestic-preference measures; tighter screening of FDI flows and other such instruments to achieve the objective of resilience, strategic autonomy, and economic security (UNCTAD 2026a).

this backdrop, global tariffs are rising (**Figure 6.39**), while non-tariff measures —such as technical regulations, health and safety requirements, and certification procedures—are becoming more stringent, affecting developing countries (UNCTAD, 2026b). These trends are also resulting in increasing complexity for GVCs (OECD, 2026).

For job creation in Pakistan, these trends present two challenges. First, geoeconomic fragmentation poses risks to global GDP growth,[50] potentially reducing global demand and hence an impact on export-driven job prospects in Pakistan. At the other end, whilst GVC reconfiguration may be geopolitically aligned, growing uncertainty and complexity imply increasing competition among economies for better trade access and investment. This is in the wake of 4IR and green industrialisation discussed earlier, as technological disruptions and disappearing benefits of low labour cost compel firms to reshore. Consequently, youth bulge, large WAP, and cheap labour may not be primary incentives for attracting GVC-linked investments or secure long-term trade contracts (Pietrobelli et al., 2026).

In this regard, the emergence of connector economies, such as Indonesia, Vietnam, and Mexico, exemplify the importance of economic competitiveness. In the context of US-China decoupling, whilst these economies have leveraged balanced relationships with the US and China, they also provide a conducive business environment and rich human capital. This suggests that geopolitical alignment alone is insufficient to attract reconfigured GVCs, as alignment remains secondary for large-scale Chinese investment projects.[51] This trend is relatively pronounced among the Chinese firms which have adopted the China+1 strategy and leveraged connector economies to bypass US tariffs.[52] Resultantly, China's outward FDI in 2022-23 to connector economies has doubled from 2018-19 (Gopinath et al, 2024).

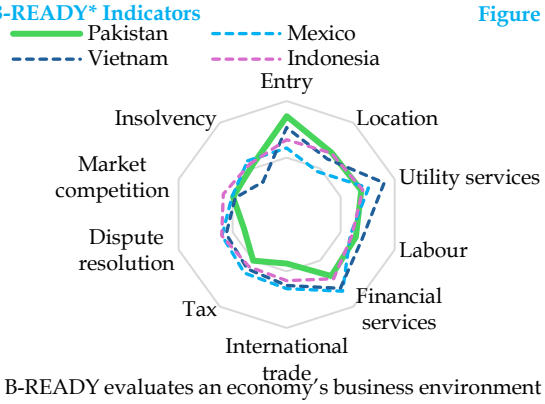
**Trade-weighted Average Tariff on Goods Exported** **Figure 6.39**




Source: UNCTAD (2026b)

In contrast, Pakistan has not been able to leverage its geopolitical relationships because of weak economic competitiveness, comparatively unfavourable business environment (**Figure 6.40**), and weak GVC integration that impairs the prospects of export-driven job creation (**Figure 6.41**). For example, despite facing relatively smaller increase in US tariffs, Pakistan's textile exports to the US have increased only moderately, reflecting structural weaknesses and limited technological upgradation (SBP, 2026). Similarly, even though the China Pakistan Economic Corridor featured as a flagship project under the Chinese One Belt One Road (OBOR) initiative, growth in total Chinese FDI inflows after the

**B-READY* Indicators** **Figure 6.40**




* B-READY evaluates an economy's business environment by assessing its regulatory framework, public services for firms and markets, and how effectively they work together.

Source: WB

[50] IMF (2023); UNCTAD (2025 a, b & 2026); UN (2026).
[51] Habib et al. (2024); Pietrobelli et al. (2026); Curran et al. (2023); Gopinath et al. (2024).
[52] Maciejewska, A. & Alifandi, A. (2023); Tran, H. (2024).

launch of OBOR in 2014 has been lower in Pakistan compared to peer economies in South and Southeast Asia (SBP, 2025b).

## 6.5 Summary and Conclusion

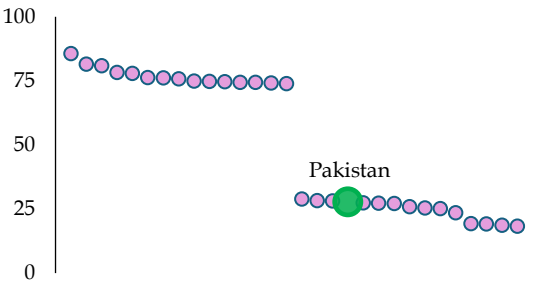
Pakistan's slow pace of structural transformation amid signs of premature deindustrialisation; the recurring boom bust cycles; high and volatile inflation; low investment; and fiscal challenges do not bode well for job creation. The country needs sustained and inclusive economic growth to be able to absorb the growing youth population, whose UR has been particularly higher than other age groups. At the same time, however, without sharply slowing population growth, Pakistan is likely to face persistent challenges to job creation in view of the growing demographic pressures and evolving labour market needs.

In this backdrop, 4IR poses a difficult trade off. If Pakistan adopts 4IR at a fast pace, then it may pose further risks of unemployment given the current education and skill profile of the labour force. If Pakistan does not adopt or is unable to adopt 4IR, then it may affect its productivity and competitive, which will constrain GDP growth and thereby create a challenge of job creation. Either way, upskilling and reskilling need to be top priority, for which it currently lacks fiscal and institutional capacity.

Similar is the situation in the case of green industrialisation. Pakistan needs to create more green jobs and pursue green industrialisation, which require investment in skills and infrastructure, amongst other reform measures. If Pakistan does not pursue green industrialisation, its export competitiveness could weaken, increasing the risk of losing export market share as trading partners introduce carbon taxes and other climate-related trade measures. This in turn may place a constraint on its export growth, GVC integration and thereby job prospects.

GVC integration itself, however, remains a big challenge. Pakistan has already missed the opportunity to capitalise on the GVC

**GVC Readiness Index*- Top 15 and Bottom 15 Economies** **Figure 6.41**




* GVC Readiness Index combines six dimensions: technology, trade integration, sustainability, institutional and geopolitical, financial, and business environment. The index is scaled 0–100, where higher values indicate greater readiness.
Sources: ADB; WTO (2025)

development and integration in preceding three decades. Now, the times have changed. As a result of emerging technological changes in the wake of green industrialization and 4IR, and geoeconomic fragmentation, GVCs' demands from public and private sectors are increasingly complex.

Countries can no longer leverage cheap labour to attract GVCs because of its waning importance. Today, GVC enabling environment demands trained human capital, frontier technology, high productivity, effective governance, strong institutions, robust infrastructure, and other public goods. Currently, Pakistan falls short of providing such a friendly environment.

Even if urgent reforms help Pakistan revive manufacturing growth, the sector may not be able to absorb the labour force, as it did for several economies in the past. This is because of the sector's falling labour intensity amid technological advances in general and expected increase in automation and robot use in particular. This puts Pakistan in a difficult situation of creating productive and decent work, particularly if labour force relocates from agriculture after its much-needed productivity-driven development.

In the developed world and in some highly skilled small population economies, services are often thought of as a sector that may absorb labour. Services are an integral component of structural transformation and cannot be overlooked;

particularly, high-tech services that offer significant productivity potential and can generate positive spillovers across low-tech services, manufacturing, and agriculture. However, reliance on service sector may not be a suitable alternative, given the sector's nature of work and Pakistan's labour force dynamics. As this chapter has shown, the prospects of large-scale labour absorption in high-tech services, like web-based gig economy, remain low. Recent studies on AI also suggest that employment in high-tech service sectors remains vulnerable to AI.

Historically, the migration of low skilled labour, particularly to the GCC, offered some respite to the young and unemployed. That may remain the case for a foreseeable future. However, if industrial and service robots along with driverless cars make the planned inroads in the GCC economy, it may reduce the demand for low skilled workers in the region, which can affect Pakistan's largely low skilled labour exports. Whilst Pakistan may potentially export more high-skilled workers to the region that may reduce domestic competitiveness if the development of skilled human capital falls short of domestic needs, as seems to be the situation lately.

The broader socio-economic context of advanced economies (AEs) is also important. Given their renewed focus on productivity growth and aging population, AEs are expected to continue investing in 4IR. This implies that technology may be expected to become cheaper leading to wider adoption across various sectors. This will keep countries like Pakistan playing catch-up, albeit with limited resources. Moreover, AEs may also keep attracting highly skilled workers from the world, which means Pakistan needs to produce more skilled labour than it does and will potentially export. Accordingly, public spending on education and skill development must increase manifold. This may not only help address the issue of education-skill mismatch in the job market but also lead to improvement in the country's NEET rate.

So far, Pakistan's unemployment rate has not risen sharply as large informal economy, and high informal employment in the non-agriculture sector have been able to absorb the influx of unskilled workers. However, sustainable formalisation by enforcing labour laws is necessary to ensure productivity growth. To this end, a policy shift is required by lowering compliance barriers, enhancing social safety nets for self-employed workers, and targeted growth in labour-intensive manufacturing to improve the composition of job creation toward the formal sector and quality jobs.

Owing to low female LFP, nearly half of the country's working-age population is not part of the labour force. Paradoxically, if Pakistan manages to speed up its structural transformation, it may lead to a further increase in female unemployment in the absence of skill upgrade and other reforms. This is because increased agricultural productivity that drives structural transformation leads to a decline in agricultural employment, which may affect females more since they are mostly employed in low-skill occupations in that sector. An increasing share of female workers would then need to be employed in manufacturing and/or service sectors that require relatively higher level of skills and education, and whose jobs are further away from home. This necessitates a broad spectrum of skill enhancement, job creation and participation enhancing policies, accompanied by targeted support for female mobility, childcare, workplace safety, and change in social norms.

The enormity and complexity of the challenges may appear insurmountable. Like several other developing economies, Pakistan may also not have a clear roadmap to deal with the changing times while addressing the country's unique legacy issues. Nevertheless, by building strong, adaptive and learning institutions; investing heavily in education and skills development; decelerating population growth; leveraging technology; undertaking fiscal reforms; and pursuing productivity gains for sustained GDP

growth, Pakistan can resolve the challenges to job creation. Achieving these desired outcomes through successful implementation of wide-ranging reforms is imperative, particularly given the socio-economic implications of not pursuing such reforms.

**Box 6.1: Premature Deindustrialisation in Pakistan: Causes, Implications and the Prospects of Reversibility**

Premature deindustrialisation (PD) refers to the peaking of manufacturing value added (MVA) share in GDP, and/or manufacturing employment in total employment at lower levels of per capita income compared to high income countries (**Figure 6.1.1).** It is important to note that whilst the usages and implications of the two metrics of PD vary considering different stages of economic development, MVA seems to have primacy over employment share because of its greater implications on economic growth, productivity and employment.[53]

Whilst advanced industrial economies began de-industrialising in the late 1960s as their economies developed, and some high-income developing countries in East Asia entered this phase in the late 1980s (Palma, 2014), PD has become increasingly common in several developing countries over time (Ozcelik & Ozmen, 2023). In Pakistan, MVA has been in a long-term stagnation between 1960-2023, with a slight increase from 1960 till mid-1990s, and a slight decline since late 1990s. Similarly, Pakistan's manufacturing employment has grown at a slow pace since 1990s and has remained somewhat stagnant since 2017. This suggests that the country is either at the brink of PD, or has started to deindustrialise prematurely, as manufacturing appears to be losing its role as the engine of structural transformation before Pakistan has reached the income and productivity levels, which is typically associated with PD as Rodrik (2016) notes. This is consistent with recent evidence that Pakistan's structural transformation has stalled, with the economy shifting towards low-value services without a commensurate expansion of manufacturing (WB, 2025b).

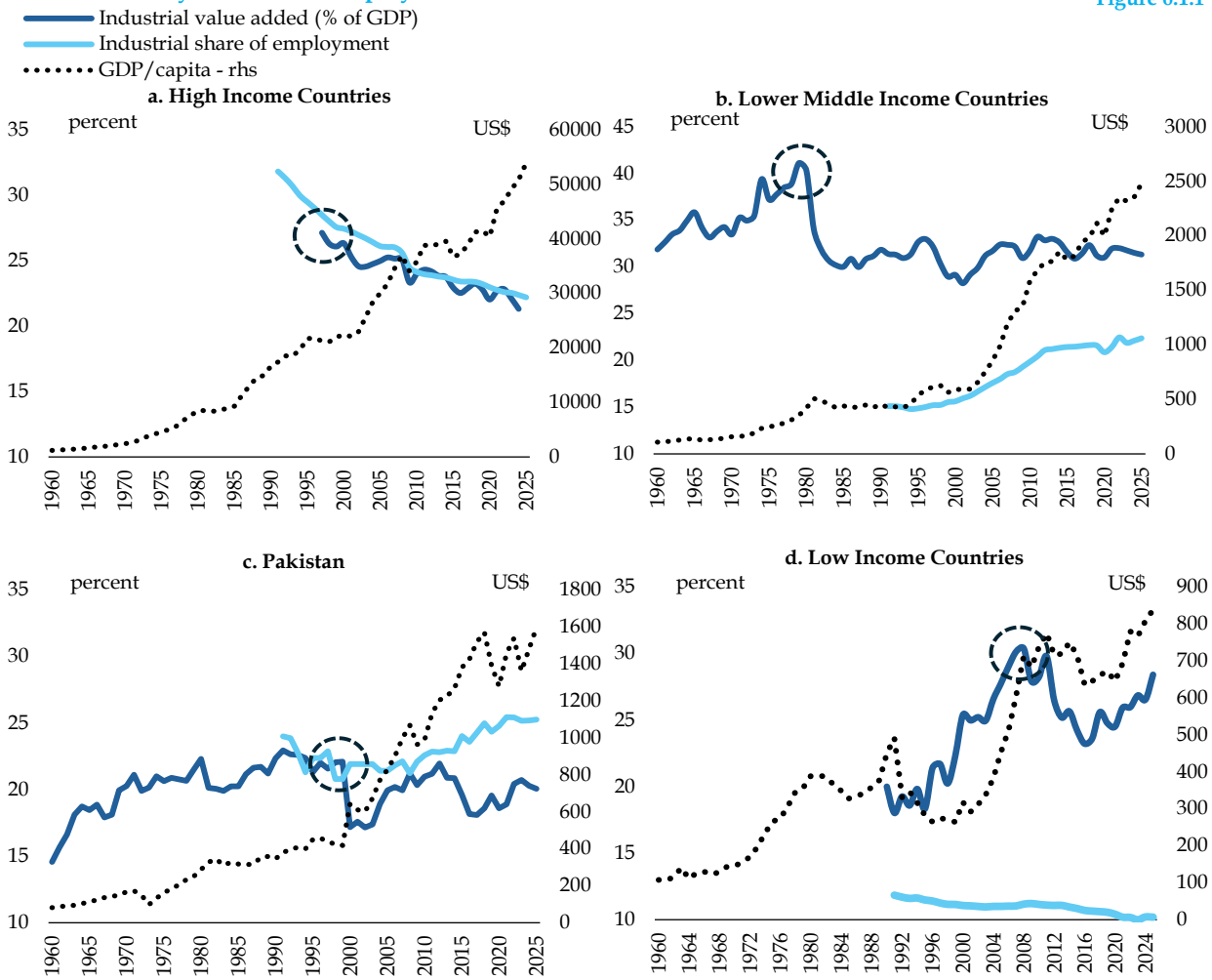
**Causes of PD**: Different economies appear to have faced different reasons, or a combination thereof, for PD (Ozcelik & Ozmen, 2023), where five major reasons are most prominent. First — from the perspective of employment share — refers to the 'statistical illusion', which suggests that decline in share of manufacturing employment is because of the 'contracting out' or 'outsourcing' of services by manufacturing firms to specialist service producers. Examples of contracting out include both low-end services (such as transport, cleaning, design, security, catering), and high-end services (such as recruitment, data processing, R&D, legal and accounting services, and management consulting) (Palma, 2014).

Second —also from the perspective of employment share —attributes PD to rapid productivity growth brought about by technology, or transition to manufacturing of goods that have low labour intensity of manufacturing (Palma, 2014; Tregenna, 2009). Here it is important to note that early industries (i.e. industries at early stages of industrialisation) are more labour intensive compared to middle and late industries (Haraguchi, 2019).[54]

Third —from the perspective of MVA— increasing participation in GVC is also another reason behind PD. Whilst GVC integration helps increase manufacturing exports (and its accompanying benefits), it distributes value addition across national boundaries and thereby reduces or flattens MVA share (Palma, 2014).[55] Fourth, significant reduction in the income elasticity of demand for manufactured goods (in favour of services) is another reason that explains PD (Palma, 2014), where it is important to note that as incomes rise, the elasticity of demand for manufactured goods

[53] Both indicators are commonly used to assess PD. However, MVA share in GDP is the frequently used indicator of PD, reflecting manufacturing contribution, while the employment share provides a complementary measure of labour absorption. Their interpretation depends on the stage and nature of ST and the per capita income level at which MVA share begins to decline.
[54] Manufacturing subsectors are classified as early, middle or late industries according to the income level at which their share of GDP is estimated to peak: below US$ 6,500, US$ 6,500–15,000 and above US$ 15,000 GDP per capita (PPP, constant 2005 prices), respectively. These thresholds broadly correspond to low/lower-middle, upper-middle and high-income classification in terms of GDP per capita PPP. Early industries (e.g. food and beverages, textile and wearing apparel) have employment elasticity of 0.1 – 0.51; middle industries (e.g. coke and refined petroleum, basic metals) have employment elasticity of 0.05 – 0.22; and later industries (e.g. motor vehicles, chemicals, precision instruments) have employment elasticity of 0.02 – 0.27 (Source: Haraguchi, 2019).
[55] For example: if country A produces a car with low backward integration (i.e. domestically produces most car parts), then its domestic MVA will be higher than country B if it produces same car with high backward integration (i.e. imports most cars parts).

**Share of Industry in GDP and Employment** Figure 6.1.1




Note: Industry value added is used as a proxy for manufacturing value added due to the non-availability of a consistent cross-country long-term series on manufacturing value added and employment.

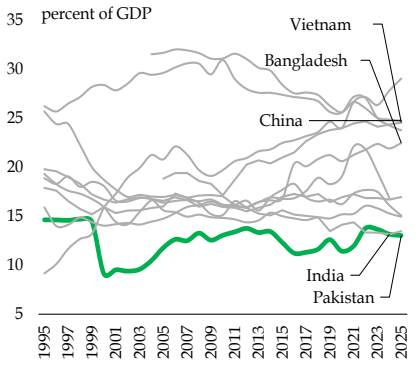
Source: WB

weakens leading to lower MVA. Fifth, an underdeveloped industrial base and weak public and private fundamentals have also led to PD, where examples of public fundamentals include institutions, infrastructure and ineffective industrial policy, export policies, distortionary fiscal policies, and that of private fundamentals include capital, technology, skills, and innovation. Trade openness in such economies (without accompanying structural reforms) in a globally competitive environment also has been found to have furthered PD (Ozcelik & Ozmen, 2023; Atolia et al, 2018).

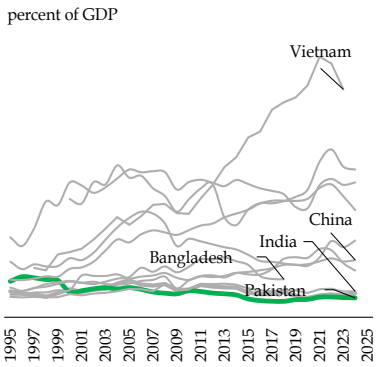
**Causes of PD in Pakistan's context**: In the case of Pakistan, a confluence of above-mentioned factors explains the onset of PD. While literature on the statistical illusion in Pakistan is scarce, anecdotal evidence seems to suggest that both manufacturing and service sector firms do outsource a number of services to specialist service providers. These include, outsourcing of HR system and recruitments; legal consultants, janitors and other service staff, catering. In fact, as the discussion on informal employment in **Section 6.3** suggests, manufacturing firms also seem to contract out even manufacturing jobs to firms that supply informal workers.

Rapid productivity growth in manufacturing does not seem to hold in Pakistan; nor does GVC integration amid an anti-export bias (SBP, 2025a) (See also **Section 6.2**). In fact, in a cohort of peer economies by income classification and

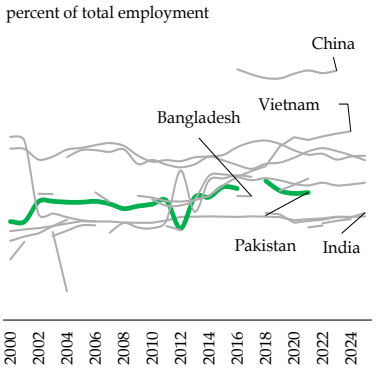
**Manufacturing Value Added** Figure 6.1.2a




**Manufacturing Exports** Figure 6.1.2b




**Manufacturing Employment** Figure 6.1.2c




Note: This figure compares Pakistan with a cohort of income classification and GVCs aspirant economies. This includes: China, India, Bangladesh, Vietnam, Turkiye, Poland, Thailand, Cambodia, Morocco and LMIC aggregate. National estimates of manufacturing employment are not available prior to the year 2000, while ILO modelled estimates are available, they diverge substantially from the corresponding national estimates.

Source: WB

GVCs aspirants, Pakistan is the only country with both low and falling MVA (as percent of GDP), as well as low manufacturing exports (as percent of GDP) since late 1990s (**Figure 6.1.2).** Moreover, whilst its manufacturing employment share may be moderately rising, it is still lower compared to several economies. This is despite the fact that Pakistan's share of early industries —that have higher employment elasticities compared to middle and late industries —is bigger than the share in most peer economies **(Figure 6.1.3).**

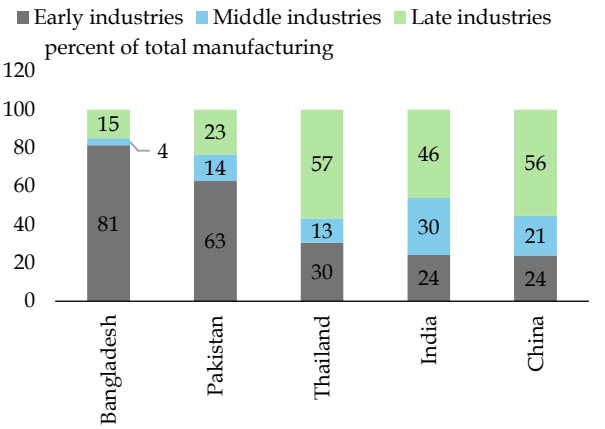
As literature on income elasticity of demand for manufactured goods in Pakistan is not available, SBP (2025a) notes that with the rise in per capita income, household consumption of services seems to have increased more than the increase in household consumption of manufactured goods. The fifth reason, i.e. underdeveloped industrial base and weak public and private fundamentals, clearly seems to hold for Pakistan as has been sufficiently documented by (WB, 2022c).

**Prospects of reversing PD:** The reversing of deindustrialisation may not be impossible, but it has become difficult especially for lower middle income, and low-income countries. Several reasons account for this challenge. First, global manufacturing is increasingly becoming more technologically advanced, which increases labour productivity. As a result, manufacturing cannot absorb the historically high share of labour force. Second, on a related note, cheap labour alone is no more a comparative advantage as was the case up until even a decade ago. Over the years, the nature of manufacturing and GVC integration have evolved requiring strong and 'learning' institutions; educated and skilled force; efficient infrastructure; and other public and private fundamentals mentioned above (WB, 2018; Rodrik & Stiglitz, 2024).

Climate change and geoeconomic fragmentation are adding to the investment needs to bring innovation and up-skilling and re-skilling (See also **Section 6.4**). As is the servicification of manufacturing that entails investments in hi-tech services like ICT. The challenge for policymakers in Pakistan and in other economies is that there is neither any ready-made recipe on how to reverse PD, nor any successful models to learn from (Rodrik, 2014; Ozmen and Ozcelik, 2023).

**Implications on job creation**: PD has important implications for employment and job creation because it weakens one of the most effective channels through which developing economies have historically generated productive jobs and sustained productivity growth. International experience shows that manufacturing has been at the centre of structural transformation, helping

**Share of Manufacturing** Figure 6.1.3




Source: INDSTAT

economies achieve sustained increases in employment, higher economic growth through increases in labour productivity, technological progress, export competitiveness and sustained long-term income growth (Rodrik, 2013, 2015; Stiglitz & Lin, 2013).

Unlike other sectors, manufacturing combines economies of scale, technological learning, innovation and strong linkages with the rest of the economy while absorbing large numbers of workers with varying skill levels. Countries that successfully transitioned from low to middle and high-income status including Japan, Korea and more recently China and Vietnam did so by building competitive manufacturing and industrial sectors (Stiglitz & Lin, 2013). Manufacturing has also traditionally absorbed large number of low, moderately skilled workers—that are abundant in Pakistan —and has facilitated technological diffusion and supported export-led growth (WB, 2018).

Therefore, in light of the challenges to reverse PD and considering that most new technologies to raise agricultural yields are labour saving, if Pakistan manages to increase labour productivity in agriculture, then the question is where it would absorb the surplus labour. One answer is the services sector, as has been the case in Pakistan. With the onset of PD, labour in Pakistan moved towards lower-productivity informal services, limiting wage growth, reducing opportunities for productive employment and slowing income convergence. At the same time, high productivity services, as **Section 6.2** and **Box 6.5** show in detail, cannot absorb as much labour (WB, 2018), whereas, as **Section 6.3** informs, the country has one of the world's youngest and fastest-growing labour forces that will continue to place pressure on the labour market over the coming decades. This presents a daunting challenge to job creation in the country.

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

**Box 6.2: Analysing the Growth–Employment Nexus in Pakistan**

Economic theory posits a positive and relatively stable relationship between output growth and employment generation. Pakistan's economy expanded at an average rate of approximately 3.9 percent between FY00-FY26, outpacing the average employment growth of approximately 2.4 percent. However, the unemployment rate has remained persistent in the range of 6 – 7 percent (PBS, 2026), suggesting that aggregate employment generation has not kept pace with the expansion of output. Against this backdrop, this box empirically examines the growth–employment relationship in Pakistan by estimating employment elasticities and testing for the presence of a long-run equilibrium between the two.

In historical context, the trend output growth has consistently outpaced trend employment growth during FY00-FY26. Moreover, the gap between the two has diverged for most of the period (**Figure 6.2.1a**). The disconnect extends beyond trends, as the cyclical components of output and employment also show different amplitudes with output cycles considerably wider than employment cycles (**Figure 6.2.1b)**, indicating that even at business-cycle frequency, movements in output and employment are not systematically aligned.[56]

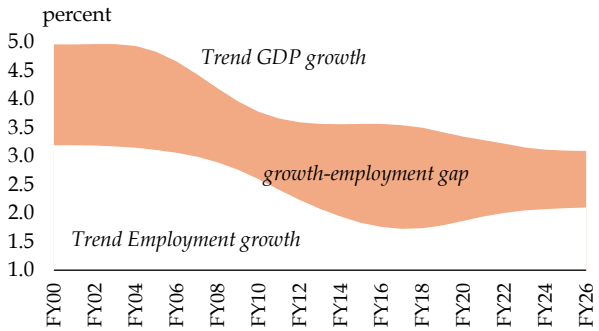
To empirically investigate whether output and employment are bound by a stable long-run equilibrium relationship, we use Johansen maximum-likelihood cointegration methodology. Considering all the diagnostics,[57] the results show that employment and real GDP are not cointegrated over a sample period, FY00–FY26.[58] This implies growth and employment can drift apart without any inherent error-correction mechanism pulling them back together (**Table**

[56] As a robustness check, a one-sided HP filter is used to mitigate end-point bias, which also suggests the relationship is weak and does not indicate a systematic contemporaneous association between employment and output cycles

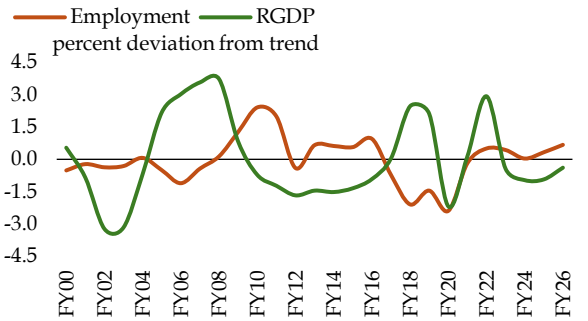
[57] For unit root pre-testing, augmented dickey-fuller (ADF) tests were applied on the log levels and first differences of both series, with lag length selected by the Akaike Information Criterion, confirming first differences of both the series are stationary.

[58] Evidence for developing economies points to a generally weak and, in some cases, unsynchronized response of employment to output growth. An et al. (2017) —a study of 25 low and lower-middle-income countries —found that changes in output and employment growth were often not synchronized, with employment growth substantially lagging output growth during 2001–15.

**Trend Real GDP and Employment Growth** **Figure 6.2.1a**




**Cyclical Deviations in Employment and Real GDP from Trends** **Figure 6.2.1b**




Note: The Hodrick–Prescott filter is used to decompose each series into a smooth trend component and a cyclical (deviation-from-trend) component, allowing analysis of trend GDP growth and trend employment growth independent of short-term noise.
Source: SBP Staff calculations

**6.2.1)**.[59] This disconnect may be associated with broader structural features of the labour market, including premature deindustrialisation, high informality, and productivity stagnation, as discussed in **Sections 6.2 and 6.3**

This is evidenced by not only weak, but declining employment elasticity of output. Aggregate elasticity fell from 0.6 in 1972-78 to 0.4 in 1990-2000 (**Table 6.2.2**). Post-2000, aggregate elasticity declined to 0.20 in 2000-18, indicating lower employment intensity of growth (PIDE, 2019).[60] However, there is considerable heterogeneity in employment absorptive capacity across sectors. Construction remained the most labour-absorbing sector during 1972-2000, while the elasticities across other sectors declined, except trade **(Table 6.2.2).**

SBP staff estimates of the employment demand model, using the Cobb–Douglas production function over 2000-25 period, finds that the relationship between employment and GDP weakens further (**Table 6.2.3**).[61] The findings are consistent with the lower end of the range reported for developing countries in cross-country literature, where aggregate employment

**Johansen Cointegration Trace and Maximum-eigen Value Tests** **Table 6.2.1**

| Specification | $H_0$: rank | Trace statistic | 5% critical value | Max-Eig statistic | 5% critical value |
|---|---|---|---|---|---|
| VAR (1) | r = 0 | 20.4 | 25.9 | 11.6 | 19.4 |
| | r <= 1 | 8.8 | 12.5 | 8.8 | 12.5 |

* VAR(1) is the primary specification, incorporating a linear deterministic trend, which is appropriate given the visibly trending nature of both series and is also supported by the information criteria.
Source: SBP staff estimates

**Employment Elasticity with respect to GDP: 1972-2000** **Table 6.2.2**

| Sector | 1972-78 | 1978-87 | 1990-2000 |
|---|---|---|---|
| Overall elasticity | 0.6 | 0.4 | 0.4 |
| Agriculture | 0.9 | 0.4 | 0.4 |
| LSM | 1.1 | 0.2 | 0.02 |
| SSM | - | - | 0.9 |
| Construction | 0.8 | 0.6 | 0.9 |
| Transport & comm. | 0.5 | 0.5 | 0.5 |
| Trade | 0.5 | 0.5 | 0.6 |
| Electricity & Gas | - | - | 0.5 |
| Others including services | - | - | 0.7 |

Source: GoP (2003)

[59] An additional complementary check, comparable to a two-step Engle–Granger test, was estimated by OLS and the residuals were tested for a unit root using the appropriate MacKinnon critical values for a two-variable cointegrating regression. The test statistic does not reject the null of no cointegration at conventional significance levels.
[60] Other studies also show similar trend. Haider (2009) found a weak relationship between employment and GDP growth in Pakistan, with the aggregate employment elasticity estimated at 0.26 during 1973–2008, which declined to 0.12 during periods of economic recovery, indicating that growth episodes in Pakistan have historically been least employment-intensive when the economy is expanding relatively faster. More recently, Kamal (2023), in an analysis spanning Pakistan's employment history from 1964–67 to 2015–18, finds that Pakistan has suffered from a persistently high level of jobless growth.
[61] Newey–West regressions were used to account for potential heteroskedasticity and serial correlation. The aggregate model used total employment as the dependent variable, with GDP per capita and aggregate GFCF as explanatory variables. For sectoral estimations, respective sectoral employment was specified as the dependent variable, with GDP per capita and sector-specific GFCF as explanatory variables. All specifications used variables in log forms and included three dummy variables for the global financial crisis, the COVID-19, and the recent commodity super cycle.

elasticities typically fall between 0.11 and 0.15, in contrast to developed countries where the range is 0.43 to 0.48 (Haider et al. 2023).

The estimates also indicate that elasticity remained substantially below 1 across all the sectors **(Table 6.2.3)**. However, it varied significantly, with elasticity being highest in industry, followed by services and agriculture. Within industry, construction exhibits the strongest employment elasticity. This is consistent with the literature, which highlights the sub-sector's capacity to absorb large number of low and semi-skilled workers (Haider, 2010; Khan, 2008).

**Employment Elasticity with respect to GDP: 2000-2025** **Table 6.2.3**

| | Coefficient | Std. Error | t-Statistic | Prob. | F-statistic |
|---|---|---|---|---|---|
| Aggregate | 0.1 | 0.0 | 4.0 | 0.0 | 336.4 |
| Agriculture | 0.3 | 0.1 | 3.9 | 0.0 | 137.9 |
| Industry | 0.6 | 0.1 | 7.0 | 0.0 | 251.3 |
| Manufacturing | 0.5 | 0.1 | 9.0 | 0.0 | 284.7 |
| Construction | 0.8 | 0.1 | 5.4 | 0.0 | 539.5 |
| Services | 0.3 | 0.2 | 2.2 | 0.0 | 180.3 |
| WRT, transport & storage, accom. & food, ICT, finance & insurance, and real estate | 0.7 | 0.1 | 4.8 | 0.0 | 109.5 |

Source: SBP staff estimates using ILO and PBS data

Manufacturing also demonstrates relatively greater employment responsiveness, indicating labour-intensive nature of manufacturing industries, particularly textiles, wearing apparel, and food processing. This is in line with global evidence on employment elasticities of early industries – such as food and beverage, textile and wearing apparel - remain in the range of 0.1-0.5 (Haraguchi, 2019).

Agriculture records the lowest employment elasticity. This is consistent with the broader shift of economic activity from agriculture, towards manufacturing and services (Sharma, 2019). Services exhibit marginally higher employment elasticity than agriculture, indicating somewhat greater capacity to absorb labour as the economy expands. In Pakistan, wholesale and retail trade (WRT), transport, accommodation and food, and real estate are the major labour absorbing services **(Table 6.2.3).** However, the elasticity remains significantly below one, suggesting that employment growth has not kept pace proportionately with output expansion.

** The contribution of Ravi Kumar and Romaisa Batool is acknowledged in writing this box.*

**Box 6.3: Decent Work Deficit in Pakistan**

Pakistan's labour-market challenge extends beyond the number of jobs created to their quality, productivity and security. ILO (2023) notes that in economies with widespread informality, unemployment alone provides an incomplete measure of labour-market vulnerability, as workers may remain employed in low-productivity and insecure activities. The concept of decent work therefore captures whether employment is productive, adequately remunerated, secure, and supported by workers' rights and social protection (ILO, 2024b). The ILO's Decent Work Agenda provides a broad framework for improving the quality of employment and labour-market outcomes. The framework rests on four mutually reinforcing pillars (**Figure 6.3.1**).

With a focus on regulatory-oriented pillars (i.e. 'rights at work', 'social protection', and 'social dialogue'),[62] this box sheds light on decent work deficits. The deficit is an outcome of: (a) slow pace of structural transformation (ILO, 2026), premature deindustrialisation, macroeconomic instability, and stagnant capital formation that fails to generate enough formal jobs for a young and rapidly

**The Four Pillars of Decent Work** **Figure 6.3.1**




Source: ILO

[62] This discussion in this box excludes the pillar of "employment creation", which concerns the availability of sufficient opportunities for productive employment. Pakistan faces a persistent challenge in generating sufficient productive employment for its growing working-age population (PBS, 2025 a & b). This pillar is discussed in detail in **Section 6.2 and Section 6.3.**

**Major Labour Legislations in Pakistan** **Table 6.3.1**

| Laws/Acts[a] | Coverage | Enforcement Issues[b] |
|---|---|---|
| Factories Act, 1934 | Workplace health and safety, workplace conditions, labour inspection in factories | Weak labour inspection, inability to address modern labour challenges, such as the gig economy and flexible working conditions, informal sector |
| Industrial Relations Act, 2012 (and provincial IRAs) | Trade unions, collective bargaining, dispute resolution via Labour Courts/NIRC | Union density remains very low, especially outside large formal firms |
| The Minimum Wages Ordinance, 1961 (Federal) and Provincial legislations | Sets and revises minimum wages | Compliance is low among informal and small enterprises |
| Employees' Old-Age Benefits Act (EOBI), 1976 | Pensions for registered workers of private sector | Excludes the 80 percent of workers in informal employment |
| Provincial Employees' Social Security Ordinances (from 1965) | Medical care, injury and maternity benefits | Coverage historically confined to large, registered establishments |
| Protection against Harassment of Women at the Workplace Act, 2010 | Workplace harassment redressal | Limited reach into informal and domestic work settings |

Sources: [a]Federal and Provincial government websites; [b]Ali et, al. (2024b); ILO (2015).

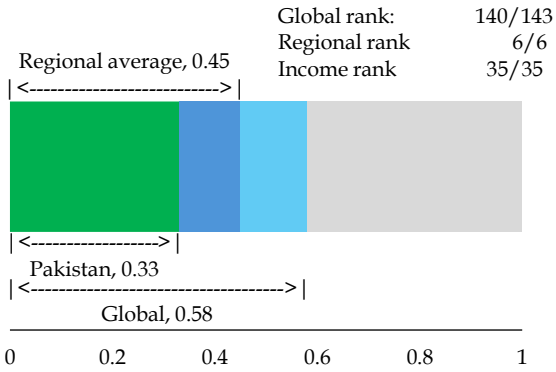
growing labour force; (b) structural features of the labour market itself – informality, underemployment, low female participation, and a heavy reliance on low-productivity agriculture and self-employment; and (c) a fragmented legislative framework and weak enforcement. While the first two (a) and (b) are discussed in detail in **Section 6.2** & **Section 6.3** respectively, the legal and regulatory framework across the three regulatory-oriented pillars is discussed below.

Pakistan has an extensive body of labour legislation. However, coverage thresholds and enforcement capacity leave most of the informal workforce outside its protection (**Table 6.3.1**). While the federal government retains cross-provincial functions and federal institutions, such as the Employees' Old-Age Benefits Institution (EOBI), labour matters were devolved entirely to the provinces post 18th amendment, which are now responsible to legislate on industrial relations, factories, wages, social security and occupational safety. The devolution has fragmented provincial laws, exacerbating disparities in governance, enforcement, and coverage due to institutional weaknesses, limited social protection for informal-sector workers and gender disparities (Ali et al., 2024a). Provinces are struggling in enforcement of regulations due to presence of large informal economy (Hyder, 2023). With weak enforcement, Pakistan sits almost at the end in ranking of "Fundamental Labour Rights" sub-index of WJP Rule of Law Index, with a score of 0.33 (**Figure 6.3.2**). While Pakistan's relatively low labour score in World Bank's B-READY index indicates a moderate labour-market institutional framework, it has relatively weaker regulatory quality and efficiency compared with peers, which points to persistent gaps between formal labour provisions and their effective implementation **(Figure 6.3.3).**

**Rights at work:** Pakistan has established several legal and institutional mechanisms for labour rights and tripartite consultation. These include laws prohibiting workplace discrimination based on gender, religion disability, etc; forced labour; higher wages for night shifts; freedom of association and assembly; and so forth. However, enforcement remains constrained, particularly in the informal economy. For instance, despite laws being in place, female workers still face persistent barriers to equal access to employment (ILO, 2018b; ILO, 2023), whereas trade union density rate remains notably lower than peer economies **(Figure 6.3.4).** In addition, there are a number of gaps, such as absence of Occupational Safety and Health regulations for agriculture sector, and absence of legal framework to mandate equal remuneration for work of equal value, or to regulate labour rights and benefits of platform workers (physical gig economy workers) (WB, n.d.b). Resultantly, Pakistan scores 4.8 (out of 10) in the level of national compliance with labour rights, compared to 4.4 in India and 9.1 in China and Vietnam (ILO, n.d.c).

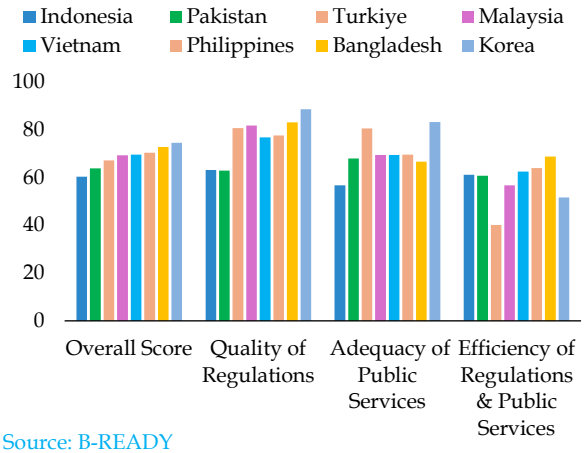
**Social protection:** Limited social protection leaves workers highly exposed to income and employment shocks. Public spending on social insurance is comparatively low **(Figure 6.3.5)**. Coverage is particularly weak among informal workers, whereas even among eligible formal-sector workers, only around 34 percent were registered with provincial Employees' Social Security Institutions (ILO, 2023c). Absence of unemployment insurance, limited

**Pakistan's Ranking and Score in Fundamental Labour Rights Sub-Index** Figure 6.3.2




Source: WJP Rule of Law Index

**B-READY Labour Regulatory Score** Figure 6.3.3



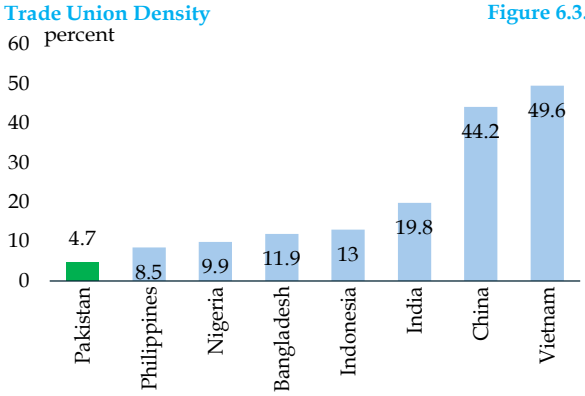

Source: B-READY

contributory financing,[63] and fiscal constraints further weaken protection against labour-market risks. For instance, the law does not require firms to pay directly for unemployment insurance, or health care for its permanent full-time workers. Nor is there any government-provided unemployment insurance scheme for workers in the private sector, or a government funded universal health care (WB, n.d.b). Considering that non-fatal occupational injuries per 100'000 workers (in reference group) in Pakistan are estimated to be 2,691 compared to 325 in India and 227 in Philippine, the gaps in health care benefits and insurance leave workers rather vulnerable (ILO, n.d.c).

**Social dialogue:** Pakistan has tripartite and bipartite mechanisms for consultation among government, employers and workers, but their effectiveness is limited by fragmented labour governance and weak representation of informal workers. The National Tripartite Labour Conference 2024, the first in 15 years, renewed commitments to occupational safety and health, labour standards and social dialogue.[64] However, persistent gaps in the effective exercise of freedom of association and collective bargaining, alongside the scale of informality, continue to limit the reach of these institutions (ILO, 2018b).

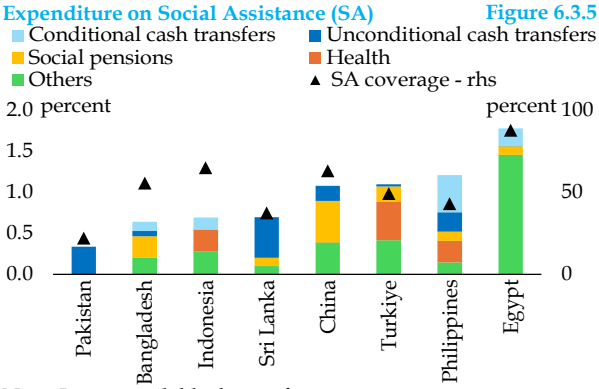
**Conclusion:** Pakistan has recently made some progress in decent work through provincial initiatives. This includes social protection for domestic workers, the extension of minimum wages to domestic and agricultural workers, efforts to develop pension coverage for informal workers, and broader labour protections in Sindh and Punjab (ILO,

**Trade Union Density** Figure 6.3.4




Note: Latest available data is used; reference years may vary across countries.
Source: WB

**Expenditure on Social Assistance (SA)** Figure 6.3.5




Note: Latest available data; reference years may vary across countries. SA coverage is the share of population covered by at least one social protection benefit.
Source: WB

[63] Contributory financing refers to social protection system that is financed through regular contributions made by workers, employers and/or the government, with benefits linked to those contributions.
[64] Article 5 of the Tripartite Consultation suggests that consultation shall be undertaken at appropriate intervals fixed by agreement, but at least once a year.

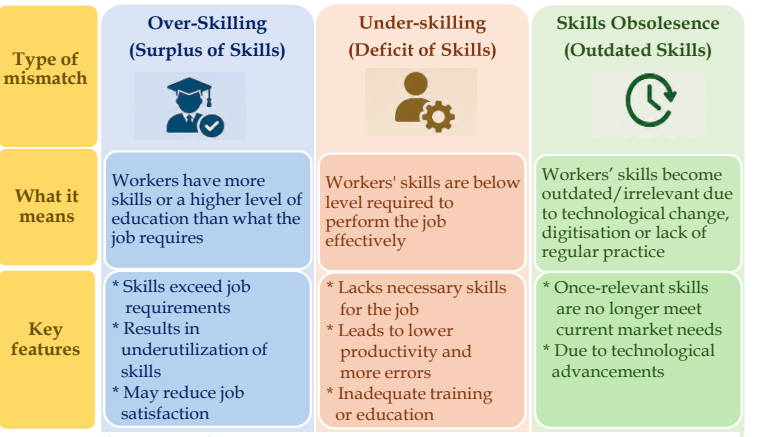
n.d.c, 2026).[65] However, these reforms are at an early stage and are largely province-specific, limiting their reach relative to the scale of Pakistan's informal workforce. The central challenge remains the gap between legislation and implementation. Slow pace of and low-quality job creation, widespread informality, demographic pressures, and the exclusion of women and young people from the labour market continue to drive the country's decent work deficit. Addressing the deficit therefore requires not only more jobs but a shift towards productive, formal and rights-based employment supported by stronger labour institutions and social protection.

*The contribution of Ali Ahsan and Syed Qamar Hussain are acknowledged for writing this box.*

**Box 6.4: Education-Skill Mismatch in the Context of Job Creation in Pakistan**

The economic value of education depends not only on obtaining qualification but also on whether the knowledge and skills acquired are relevant to available jobs. This education-skill mismatch arises when individuals are either under-skilled or over-skilled or possess outdated skills that do not align with those demanded by available jobs (**Figure 6.4.1**). This may reflect gaps in education and training systems or a shortage of jobs suited to workers' qualifications. The effects of skill mismatch extend across the labour market. Individuals may face unemployment, lower wages, underutilisation of their abilities, and reduced job satisfaction; firms may experience lower productivity, weaker competitiveness, and difficulties in adopting new technologies; and economies may face higher unemployment, slower structural transformation, and lower returns on investments in education and training (ILO, 2020b). Addressing this mismatch, is central to unlocking productivity gains and genuine job creation.

Types of Skills Mismatch — Figure 6.4.1



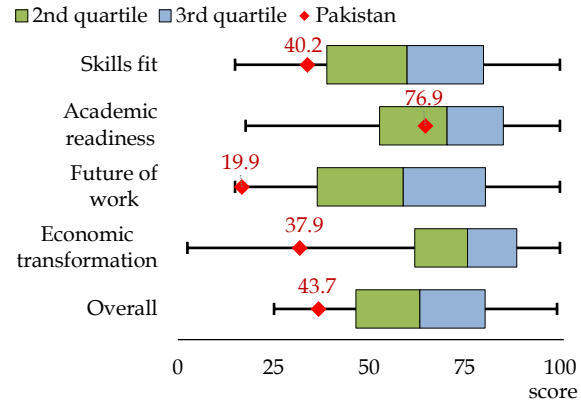

Source: Based on ILO, n.d.

**Skill mismatch in Pakistan:** Pakistan has one of the world's largest youth population (PBS, 2025a & b). This demographic fact is often framed as a dividend waiting to be claimed, but a persistent education–skills mismatch instead constrains it. As per SBP (2022), about 54 percent of the country's expected working age population in 2031 were estimated to be comprising of those who would be either illiterate or have attained only primary education. However, the mismatch shows up simultaneously not only as a shortage of skilled and educated people in some occupations, but also as over-qualified and under-employed workers in others amid stubbornly high graduate unemployment,[66] reflecting a structural misalignment between curricula and industry needs.

International benchmarks corroborate the presence of this mismatch. Pakistan ranked 66th in the QS World Future Skills Index, 2025 with a low score in skill fit (**Figure 6.4.2**).[67] Similarly, in the World Bank's HCI+ Pakistan's score is 129.6, below the South Asian average of 157.1 and LMIC average of 171.5.[68] Likewise, Pakistan ranks 124th out of 135 countries in the Global Talent Competitiveness Index (GTCI), 2025, which assesses a country's ability to develop and effectively utilise human capital. Pakistan scores lower in vocational, technical skills and generalist adaptive skills

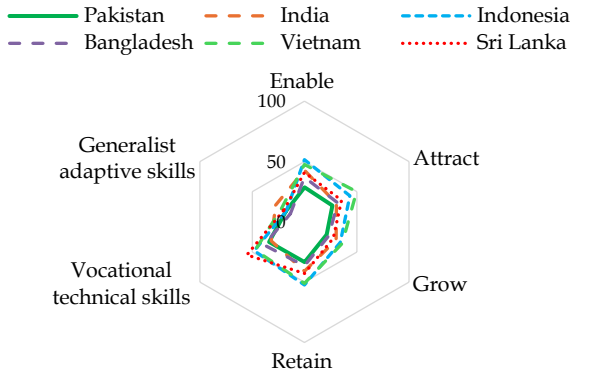
[65] The Sindh Domestic Workers Welfare Act, 2025 and Punjab Labour Code, 2026.
[66] Ali et. al (2024); Adnan (2023); Khan et.al (2022); Farooq (2011)
[67] The Skills Fit indicator reflects the alignment between the skills acquired by graduates and those demanded by employers, measured through the difference between the importance of specific skills and employer satisfaction with graduates' competencies.
[68] The HCI+ divides human capital accumulation into three pillars: health and nutrition, education, on-the-job learning. Each pillar is tied to measurable outcomes, allowing countries to identify when and where human capital gaps emerge, in health, learning, or employment, and tailor interventions accordingly.

QS World Future Skills Index - 2027 Figure 6.4.2




Note: 0 is low and 100 is maximum score.
Source: https://www.qs.com/world-future-skills-index/2027

GTCI Country Profiles 2025 - by Pillar Figure 6.4.3




Note: Score 0 means lowest and 100 means highest possible talent competitiveness.
Source: INSEAD

than peers (**Figure 6.4.3**).[69] These highlight significant weaknesses in its talent ecosystem, particularly in creating an enabling environment and attracting, developing, and retaining skilled human capital.

These stylised facts reflect weak foundational learning that limits how much advanced education and training can achieve, as educational institutions and training programmes often struggle to keep pace with labour market needs. Alongside underfunded educational infrastructure, this skills mismatch limits the extent to which education can improve workers' earnings and employment prospects (Shakil et al., 2024). The returns are particularly different across fields of study. Lateef et al. (2024) find that STEM fields offer consistently higher wage premiums than non-STEM fields, pointing to stronger demand for technical and analytical skills. This highlights the importance of making education and training more responsive to the evolving needs of employers. Moreover, the economy is skewed toward informal, and low-productivity sectors that generate comparatively few skill-intensive jobs. Weak private investment in R&D and automation, combined with thin industry-academia linkages, further limits the pull for higher-order skills (Ahmad & Khan, 2018).

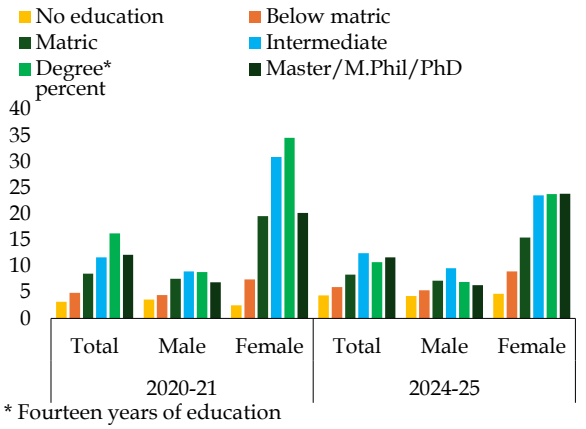
The skill mismatch can be substantiated with the unemployment rate (UR) by level of education. The UR is lowest for workers with no education and highest for workers with intermediate education levels (**Figure 6.4.4**). There is slight improvement in UR for graduation and above, but UR is high for intermediate level showing the widening mismatch between high school education and required skills. The UR is comparatively higher for females at all levels of education depicting less suitable jobs for them. This is further substantiated with the fact that out of total unemployment, the share of workers with no prior work experience remains high (**Figure 6.4.5**).

**Challenges in context of 4th industrial revolution (4IR) and green industrialisation:** While overall technological advancements are altering labour market requirements, increasing demand for higher-skilled workers, the trend towards 4IR and green industrialisation is further augmenting the challenge of mismatch. Both 4IR and green industrialisation sit at the intersection of several disciplines — engineering, information technology, biotechnology, environmental science and regulation — and reward workers who combine STEM (science, technology, engineering, and mathematics) foundations, digital/data skills, strong problem-solving and analytical ability, and the capacity to "relearn" as technologies evolve quickly.

Moreover, green transition requires the integration of green competencies into mainstream training rather than treating them as separate skills. Electricians, engineers, construction workers, and textile technicians will increasingly require knowledge of renewable energy, energy efficiency, cleaner production, and environmental compliance. The ILO (2022) therefore emphasises integrating green skills into occupational standards, curricula, and training systems.

[69] GTCI captures a country's ability to attract, retain and nurture talent by providing an enabling environment. It was introduced by INSEAD in 2013. Its four input pillars—Enable, Attract, Grow, and Retain—assess the conditions and policies supporting talent development, while its two output pillars—Vocational and Technical Skills and Generalist Adaptive Skills—measure the resulting skills and their contribution to productivity and innovation.

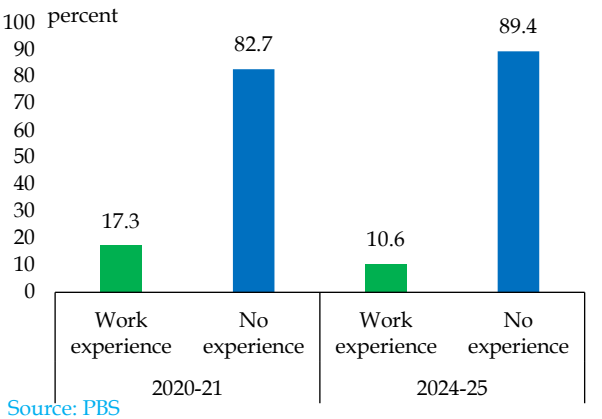
**Unemployment Rate - by Level of Education** **Figure 6.4.4**




* Fourteen years of education

Source: PBS

**Share of Unemployed - by Level of Past Work Experience** **Figure 6.4.5**




Source: PBS

**Addressing the mismatch in a structured manner:** WEF survey (2025a) finds that employers anticipate a major shift in skill demands, with 85.0 percent focusing on upskilling current staff and 70.0 percent recruiting new talent. To keep pace, organisations need to phase out obsolete roles and transition employees into evolving roles. Global practices suggest that strong reskilling opportunities, clear career pathways, and worker well-being are becoming central to talent retention with broad support for government-backed training initiatives. Higher education degrees can no longer keep up with technology that is changing rapidly. To bridge this gap, universities and businesses need to start co-creating flexible learning programs that adapt in real time. While major firms excel at scaling up-to-date tech training, public policy is needed to ensure these micro-credentials are universally recognised and reach small business employees and underserved groups (WB, 2026).

Technical and vocational education and training (TVET) also play a central role in addressing this gap, but its effectiveness depends on greater responsiveness to labour-market demand. Vietnam illustrates the role of broad-based education in supporting structural transformation. By expanding access to quality primary education, Vietnam built a workforce with strong foundational skills, which helped facilitate the movement of labour from agriculture into more productive non-farm employment (WB, 2014). Similarly, investments in women's leadership helped improve both gender equality and productivity in Bangladesh's garment sector (IFC, ILO, 2025). Germany's dual vocational education and training (VET) system — combining classroom instruction with structured employer apprenticeships — has helped keep youth unemployment low and skills closely aligned with industry needs.

While Pakistan has expanded its TVET infrastructure and introduced competency-based training, the TVET system is constrained by persistent challenges, including outdated curricula, inadequate equipment, weak industry linkages, and insufficient instructor capacity (SBP, 2019). Considering that effective TVET systems must be demand-driven, flexible, and closely connected with employers (WB, ILO & UNESCO, 2023), Pakistan should strengthen industry participation in curriculum design, occupational standards, apprenticeships, and trainee assessment.

**Conclusion:** Pakistan needs to adopt an integrated digital and green skills strategy, supported by a national skills anticipation system that regularly identifies emerging sectoral and occupational requirements. Stronger partnerships between industry, TVET institutions and universities, integrating STEM, digital and interdisciplinary green-tech competencies into both university and TVET curricula; continuous curriculum updating, instructor reskilling and outcome-based monitoring are essential. In addition, the government may also offer incentives to firms for training, such as matching grants, or tax relief. By doing so Pakistan can reduce skills mismatch and transform its young workforce into a source of technological upgrading, green competitiveness, and productive employment.

**The contribution of Syed Qamar Hussain is acknowledged in writing this box.*

**Box 6.5: Gig Economy and Future of Employment**[70]

With 58.3 percent of its population under the age of 25 (PBS, 2025a), the youth population (15–29 years) in Pakistan— projected to reach 99.8 million by 2050 (MoPDSI, 2024)— is driving a rapid expansion of the country's labour force. However, absorbing this labour force into the domestic job market remains challenging. In this context, the gig economy seems to be a potential avenue that can offer job opportunities to young people,[71] which in the backdrop of Pakistan's growing freelancing exports has raised hopes of its promising potential. But can the gig economy absorb new entrants to labour market in an economy like Pakistan, and offer them productive, decent jobs? With a focus on web-based gig economy (as against the location-based gig economy), this box attempts to answer this question.

**Labour absorption capacity**: Although gig economy is defined differently in different countries, it has two major types: (a) online or web-based platform work (e.g. digital micro-tasks) and (b) location-based platform work (e.g. on-demand app-based services like local rides or food delivery).[72] With about 2.2 million workers engaged in the gig economy of both types, Pakistan's share of gig economy workers in the total employed labour force is around 2.8 percent, where the share of web-based gig workers is merely 0.08 percent (PBS, 2025a).

This is not unique to Pakistan, as the share of gig economy workers in total employed labour force is somewhat the same in other economies as well. For instance, in India and in the UK, it is around 1.4 percent, whereas in the US, which has the largest gig economy (Payoneer, 2025), it is estimated to be around 2 percent (CIPD, 2023; Datta & Chen, 2023).[73] These numbers may be slightly overstated considering that several gig economy workers also have a full-time job, with the gig being a supplemental income stream. Definitional and measurement issues, notwithstanding, these numbers suggest that the gig economy does not offer large-scale labour absorption compared to employment in other sectors.

**Productive, decent jobs**: The gig economy deviates from standard employment by mainly offering temporary or part-time work. In that context, the location-based gig economy, with a share of 97.1 percent in Pakistan's total gig economy workers, is characterised by low productivity and limited access to decent work. It only perpetuates the challenges of low productivity, informality and decent work as discussed in **Sections 6.2 and 6.3.**

In contrast, the web-based gig economy in Pakistan presents a more nuanced picture. Although web-based gig economy workers are less than 3 percent of total gig economy workers (PBS, 2025a), Pakistan has established itself as a global market for web-based platform work (freelancing) by ranking among the top markets worldwide (Payoneer, 2025; BoI, 2024). Pakistan, along with India and Bangladesh, accounts for half of the global supply of the online gig economy (Datta & Chen, 2023). Export earnings of Pakistan's web-based workers has grown two-folds to US$ 1.5 billion over the last two years **(Figure 6.5.1)**, which in the context of low number of workers points towards relatively high productivity. Monthly earnings of online gig workers are also notably higher than those of informal workers (Datta & Chen, 2023).

[70] ILO defines the gig economy as a labour market where organisations or individuals use digital labour platforms to connect with workers for short-term tasks, projects, or on-demand services, operating on a payment-per-task or freelance basis rather than traditional long-term employment contracts (Source: ILO, 2018c).

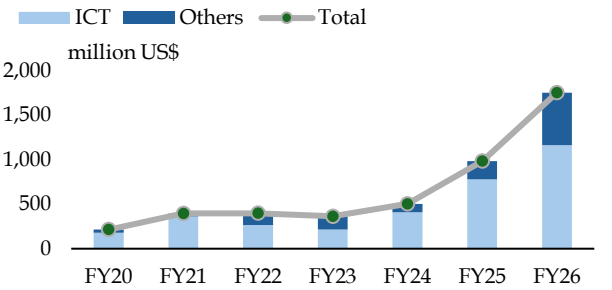
[71] In most economies, online gig workers are younger than other services sector workers; they are also younger than workers with similar occupations in the labour market, as well as workers in the informal sector. In Pakistan, around 67 percent of online workers are between the ages of 15-29 compared to 32 percent in similar occupation workers. (Source: Datta and Chen, 2023)

[72] India defines gig worker as persons participating and earning from activities outside traditional employee-employer relationship; this includes both physical and web-based workers (Ministry of Labour, 2020). UK describes gig economy as "the exchange of labour for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment by task basis" (Low Pay Commission, 2024). US does not explicitly define gig economy or gig workers; however, it indicates that such work may include electronically mediated contingent work (BLS, 2017).

[73] For India, the number is estimated based on data collected from WB (2025e) and Sharman & Sharma (2025).

Besides, web-based gig work presents several benefits. At individual level, it offers a cushion against exchange rate depreciation, as wages are set in USD or other foreign currencies. In addition, unlike location-based gig economy, web-based gig economy is highly tradable, as digital services can be seamlessly provided across borders, allowing freelancers to tap global markets. Freelancing also offers flexible hours and remote working conditions, which is preferred by young cohorts.[74] It provides a viable supplemental income source to students and young professionals. At the societal level, web-based gig work offers an avenue for raising female labour force participation by eliminating mobility and constraint of fixed working hours.[75]

**Pakistan's Freelancing Exports** **Figure 6.5.1**




Note: ICT and other services exports include export earnings received on account of ICT and non-ICT services, respectively, rendered to overseas firms. Examples of non-ICT services may include research writing and clerical services, among others.

Source: SBP

Nonetheless, whilst web-based gig work may be productive in the short-term, its prospects for long-term employment generation and productivity growth remains limited. For instance, unlike scalable business models, freelancing is constrained by the time and capital of gig workers, often limiting scalability of the model (Fiore & Rosati, 2020; **Box 5.2**). Freelancing also offers much less opportunities for professional development due to a lack of training and feedback, as workers do not accumulate firm-specific skills. Online gig workers are also at higher risk of unemployment and job insecurity compared to other informal workers; they also face limited potential of earnings growth, especially for gig jobs that do not require high level of skill (Zeid et al., 2024). Moreover, displacement by Artificial Intelligence (AI) is a key concern, as 23.2 percent of Pakistani freelancers are in AI-vulnerable occupations, such as programming, web development, and research writing (ADB-PAFLA, 2024). This further highlights the need for training initiatives to upskill and reskill gig workers at large scale.[76]

Furthermore, the workers in Pakistan's tertiary cities have limited access to web-based gig work owing to digital infrastructure constraints, internet disruptions, low levels of education and English language proficiency, and weak electrification.[77] Spatial distribution of web-based gig workers in Pakistan shows that tertiary cities have 36 percent share in online gig workers, compared to 44.0 percent in Bangladesh, 41.0 percent in India, 71.0 percent in Mexico, and 78.0 percent in China (Datta and Chen, 2023). Owing to these challenges and constraints, gig economy, despite its many benefits at the individual and societal level, may not be construed as an engine for creating productive, decent jobs.

**The contribution of Almas Karim and Talha Ali Madni is acknowledged in writing this box.*

[74] Gen-Z is more inclined to this type of work, offering flexibility (Source: Deloitte, 2025; Upwork, 2024).
[75] Share of male and female gig workers in employment stands at 3.0 percent and 2.5 percent, respectively. (Source: PBS, 2025a).
[76] The federal government is already running such training initiatives under the PM's Youth Programme in collaboration with Microsoft, Coursera, and edX. The program has so far awarded only 0.1 million certifications in digital skills (Source: PMYP, n.d.).
[77] Datta and Chen (2023) classify cities into three categories: capital cities; secondary cities, defined as the ten largest cities in a country excluding the capital; and tertiary cities, comprising smaller cities and towns beyond the capital and the ten largest cities.

## Appendix 6A: GDP Growth, Per Capita Income, and their Coefficients of Variations for Selected Peer Economies during 1990-2025

**GDP Growth and Per Capita Income during 1990-2025** **Table 6A.1**

GDP growth is in percent; per capita income in US$

| | GDP Growth | | | | Per capita income | | | |
|---|---|---|---|---|---|---|---|---|
| | Average | Minimum | Maximum | Coefficient of Variation | Average | Minimum | Maximum | Coefficient of Variation |
| China | 8.6 | 2.3 | 14.3 | 33.9 | 4,947 | 330 | 14,230 | 94.6 |
| Ethiopia | 6.8 | -8.7 | 13.6 | 77.8 | 417 | 110 | 1,110 | 75.7 |
| Vietnam | 6.7 | 2.6 | 9.5 | 22.9 | 1,587 | 110 | 4,970 | 91.4 |
| Uganda | 6.2 | 3.0 | 11.5 | 34.5 | 542 | 180 | 1,120 | 54.9 |
| India | 6.1 | -5.8 | 9.7 | 44.6 | 1,142 | 330 | 2,760 | 66.5 |
| Cambodia | 5.8 | -34.8 | 13.3 | 130.1 | 1,000 | 170 | 2,750 | 79.9 |
| Bangladesh | 5.5 | 3.4 | 7.9 | 21.3 | 1,055 | 290 | 2,880 | 83.5 |
| Malaysia | 5.4 | -7.4 | 10.0 | 70.2 | 7,070 | 2,420 | 12,380 | 46.3 |
| Ghana | 5.2 | 0.5 | 14.0 | 45.1 | 1,130 | 270 | 2,630 | 70.3 |
| Indonesia | 4.7 | -13.1 | 8.2 | 74.1 | 2,263 | 560 | 5,120 | 67.6 |
| Sri Lanka | 4.3 | -7.3 | 8.7 | 79.3 | 2,201 | 490 | 4,670 | 67.2 |
| **Pakistan** | **4.0** | **-1.3** | **7.8** | **51.2** | **921** | **370** | **1,560** | **46.3** |
| Thailand | 3.8 | -7.6 | 11.2 | 101.4 | 4,159 | 1,540 | 7,690 | 48.6 |
| LMIC | 4.9 | -4.2 | 7.5 | 40.8 | 1,256 | 448 | 2,488 | 55.8 |
| LIC | 3.2 | -3.2 | 7.1 | 77.9 | 510 | 250 | 811 | 37.0 |

Source: WB

## References:


Aboohamidi, A. & Chidmi, B. (2013). Female Labor Force Participation in Pakistan and Some MENA Countries. Annual Meeting, February 2-5, 2013, Orlando, Florida 143097, Southern Agricultural Economics Association.

Ackrill, R. & Igudia, E. (2023). Analysing the Informal Economy: Data Challenges, Research Design, and Research Transparency, *Review of Development Economics,* 28(4), 1971–1993.

ADB (2022). Pakistan's Economy and Trade in the Age of Global Value Chains. Asian Development Bank, Manila.

ADB & PAFLA (2024). Freelancing Landscape of Pakistan. Asian Development Bank and Pakistan Freelancers Association, Manila and Karachi.

ADB & WTO (2025). Global Value Chain Development Report 2025: Rewiring GVCs in a Changing Global Economy. Asian Development Bank and World Trade Organization, Washington, D.C. and Manila.

Adnan, R. (2023). Privoconomy: Private-Sector's Impact on Pakistan's Unemployment & Shrinking Employability of Human Capital. *PIDE Discourse 2023-06*.

Ahmad, S. & Khan, R. (2018). The Mismatch Between Education and Labour Market Demands and Its Impact on Youth Unemployment in Pakistan, *Flinders University repository*.

Ahmed, I., and Qayyum, A. (2007). Do Public Expenditure and Macroeconomic Uncertainty Matter to Private Investment? Evidence from Pakistan, *The Pakistan Development Review,* 46(2), 145–161.

Ahsan, H. & Urooj, A. (2026). Decoding Joblessness in Pakistan: A Generational and Temporal Analysis, *PIDE Working Paper,* 2026:06.

AI Preparedness Index (2023). IMF, Available at: https://www.imf.org/external/datamapper/AI_PI@AIPI/ADVEC/EME/LIC, Accessed on July 30, 2026.

AIPRM. (2025). AIPRM. Available at: https://www.aiprm.com/robotics-statistics/, Accessed on August 1, 2026.

Ali, W., Rahman, A. & Karsidi, R. (2024a). Sustainable Skill Development in Pakistan: Bridging Gaps in Vocational and Technical Education Policy – A Systematic Literature Review, *Society*, 12(2), 656–673.

Ali, A., Javed, M. A., Khurshid, W., Hussain, S., Khan, M. R. & Islam, M. U. (2024b). Critical Evaluation of Labour Related Policies, Regulations, Practices and Welfare Activities in the Context of Industrial Development and Social Protection in Pakistan. *Khyber Journal of Public Policy*.

Anbazhagan, R. & Mappillairaju, B. (2025). Spatial Disparities and Multilevel Analysis of Factors associated with Women Unemployment in India: Evidence from Nationally Representative Data, *SankhyaB: The Indian Journal of Statistics*.

An, Z., Ghazi, T., Prieto, N.G. & Ibourk, A. (2017). Growth and Jobs in Developing Economies: Trends and Cycles. *IMF Working Paper,* 17/257.

Arby, M. F., Malik, M. J. & Hanif, M. N. (2010). The Size of Informal Economy in Pakistan. *SBP Working Paper Series*, No. 33.

Arias-Vazquez, F. J., Lee, J. N., & Newhouse, D. L. (2012). The Role of Sectoral Growth Patterns in Labour Market Development. *World Bank Policy Research Working Paper*, No. 6926.

Arif, R. & Naushahi, A. (2023). How susceptible is Pakistan's Job Market to AI? MHRC LUMS, Available at: How susceptible is Pakistan's Job Market to AI? | Welcome to MHRC, Accessed on July 31, 2026.

Arrazola, M. & Hevia, J. (2016). The Gender Wage Gap in Offered, Observed, and Reservation Wages for Spain, *Feminist Economics,* Vol. 22(4), 101-128.

Atolia, M., Loungani, P., Marquis, M. & Papageorgiou, C. (2018). Rethinking Development Policy: Deindustrialization, Servicification and Structural Transformation, *IMF Working Paper*, No. WP/18/223.

Banerji, A., Gjonbalaj, A., Hlatshwayo, S. & Le, A. V. (2018). Asian Women at Work. *Finance & Development, 55*(3).

Batool, W. Aslam F. Haider, S. Bano, R. Faraz, A. & Ali. Riaz, A. (2025). The Impact of AI on Employment in Pakistan: A Study on Job Displacement, *Journal of Media Horizons,* Volume 6, Issue 1.

BoSP (n.d.), Monthly Survey of Industrial Production & Employment in Punjab, Bureau of Statistics Punjab, Available at: https://bos.punjab.gov.pk/monthly_survey_of_industrial_production-view, Accessed on: August 21, 2026

Bloom, D. E., Canning, D., & Sevilla, J. (2003). The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change. RAND Corporation, Santa Monica.

Bloom, D. E., & Williamson, J. G. (1998). Demographic Transitions and Economic Miracles in Emerging Asia, *The World Bank Economic Review,* 12(3), 419–455.

BLS (2017). FAQs about Data on Electronically Mediated Employment (CPS): U.S. Bureau of Labor Statistics, Bureau of Labor Statistics, Available at: Bureau of Labor Statistics. https://www.bls.gov/cps/electronically-mediated-employment-faqs.htm, Accessed on: August 25, 2026.

BOI (2019). Pakistan Ranks 4th among World's Fastest Growing Freelance Markets, Board of Investment, Available at: https://www.invest.gov.pk/node/850, Accessed on: August 20, 2026.

Brynjolfsson E., Rock, D., & Syverson C. (2020). The Productivity J-Curve: How Intangibles Complement General Purpose Technologies, *National Bureau of Economic Research,* Working Paper Series 25148.

Bulmer, E.R., Christiaensen, L., Farole, T. & Lehr, U. (2026). Exploring the Employment Implications of the Green transition. World Bank, Washington, D.C.

Bussolo, M., & Rexler, J. M. (2025). Urbanisation vs. Tradition: The Paradox of Female Labour Force Participation in South Asia. Organisation for Economic Co-operation and Development, Paris.

Calligaris, S., Calvino, F., Reinhard, M., & Verlhac, R. (2023). *Is there a trade-off between productivity and employment? A cross-country micro-to-macro study*. OECD Science, Technology and Industry Policy Papers, No. 157. OECD Publishing.

Can, M. & Doğan, B. (2017). The Effects of Economic Structural Transformation on Employment: An Evaluation in the Context of Economic Complexity and Product Space Theory, ed. F. Yenilmez & E. Kılıç, *Handbook of Research on Unemployment and Labour Market Sustainability in the Era of Globalization* (pp. 275-306). IGI Global Scientific Publishing.

Caria, S., Crépon, B., ElBehairy, H., Fadlalmawla, N., Krafft, C., Nagy, A., Mottaghi, L., Zeitoun, N. & El Assiouty, S. (2022). Child Care Subsidies, Employment Services and Women's Labor Market Outcomes in Egypt: First Midline Results, *Middle East and North Africa Gender Innovation Lab,* World Bank.

Cazzaniga, M. Jaumotte, F. Li, L. Melina, G. Panton, A.J. Pizzinelli, C. Rockall, E. & Tavares, M.M. (2024). Gen-AI: Artificial Intelligence and the Future of Work, *IMF Staff Discussion Notes*, SDN/2024/001.

Chacaltana, J., Bonnet, F. & Garcia, J. M. (2020). Growth, Economic Structure and Informality, *ILO Working Paper*, No. 69.

Charlton, D., Hill, A.E. & Taylor, J. Edward. (2022). Automation and Social Impacts: Winners and Losers, *FAO WORKING PAPER*. No 22–09.

Chen, M. A. (2005). Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment, *UNU-WIDER Research Paper*, No. 2005/10.

Cho, Y. & Majoka, Z. (2020). Pakistan Jobs Diagnostic: Promoting Access to Quality Jobs for All. World Bank, Washington, DC.

Choudhary, A., & Pasha, F. (2015). The Quest for Dividends from Structural Change. *SBP Research Bulletin*, *11*(1), 8.

Choudhary, M. A., Naeem, S. & Zoega, G. (2016). Informal Labour Markets in Pakistan, *SBP Working Paper Series*, No. 75.

Chowdhury, A. R., Islam, A. M. & Kotikula, A. (2026). Women Disrupting the Workplace: Employer Attitudes against Hiring Women in South Asia, *Review of Development Economics.*

CIPD (2023). The Gig Economy: What does it Really Look Like? Chartered Institute of Personnel and Development, London.

Cuberes, D. & Teignier, M. (2016). Aggregate Effects of Gender Gaps in the Labour market: A Quantitative Estimate, *Journal of Human Capital,* 10(1), 1-32.

Curran, E., Donnan, S., Cousin, M. Dieu, N. Uyen, T. Quynh, N. Martewicz, M. Averbuch, M. Murray, B. Lee, A. Sihombing, G. & Jiao, C. (2023). These Five Countries Are Key Economic 'Connectors' in a Fragmenting World. Bloomberg, 2 November 2023.

Datta, N. & Chen, R. (2023). Working without Borders: The Promise and Peril of Online Gig Work. World Bank, Washington, D.C.

Dell'Anno, R. (2022). Theories and Definitions of the Informal Economy: A Survey, *Journal of Economic Surveys,* 36(5), 1610–1643.

Deloitte (2025). Gen Zs and Millennials at Work: Pursuing a Balance of Money, Meaning, and Well-being, Deloitte Insights, Available at: https://www.deloitte.com/us/en/insights/topics/talent/2025-gen-z-millennial-survey.html, Accessed on: August 20, 2026.

De Soto, H. (1989). The Other path: The invisible Revolution in the Third World, Harper & Row, New York.

Dutz, M. A., Kessides, I. N., O'Connell, S. D., & Willig, R. D. (2011). Competition and Innovation-driven Inclusive Growth, *World Bank Policy Research Working Paper*, No. 5852.

Ellingrud, K., Gupta, R., & Salguero, J. (2020). Reskilling Workers for Industry 4.0. McKinsey & Company, Available at: https://www.mckinsey.com/capabilities/operations/our-

insights/building-the-vital-skills-for-the-future-of-work-in-operations, Accessed on August 1, 2026.

Ejaz, M. (2005). Determinants of Female Labor Force Participation in Pakistan: An Empirical Analysis of PSLM (2004-05) Micro Data, *The Lahore Journal of Economics,* Vol. 12.

Ejaz, M., Hanif, M. N., and Arby, M. F. (2021). Asymmetries in Pass-Through of Changes in Exchange Rate to Inflation in Pakistan, *Pakistan Economic and Social Review,* 59(2), 143–178.

Estevadeordal, A., Cano Moncada, A., Koopman, R. B., Stolzenburg, V., & Blanga-Gubbay, M. (2025). Resilience and Reglobalization: Global Value Chain Trends and New Opportunities. *Global Value Chain Development Report 2025: Rewiring GVCs in a Changing Global Economy, Chapter 2*. World Trade Organization.

Fankhauser, S., Sehlleier, F. & Stern, N. (2018). The Economics of Climate Change and the Green Transition, *Oxford Review of Economic Policy*, Vol.24, No.2, 280–305.

Farooq, S. (2011). Mismatch between Education and Occupation: A Case Study of Pakistani Graduates. *The Pakistan Development Review,* 50(4), 531–552.

Ferragina, E. (2019). Does Family Policy Influence Women's Employment? Reviewing the Evidence in the Field, *Political Studies Review,* 17(1), 65–80.

Fiore, A. Di, & Rosati, F. (2020). Freelancing Platforms Want to become Agile Channels to Attract Large Corporations, LSE Business Review, Available at: https://blogs.lse.ac.uk/businessreview/2020/09/24/freelancing-platforms-want-to-become-agile-channels-to-attract-large-corporations/, Available on: August 20, 2026.

Garlick, R., Field, E. & Vyborny, K. (2025). Women's Mobility and Labor Supply: Experimental Evidence from Pakistan, *Institute of Labor Economics (IZA) Discussion Papers*, No. 17883.

Gaspar, V., Amaglobeli, D., Garcia-Escribano, M., Prady, D., & Soto, M. (2019). *Fiscal policy and development: Human, social, and physical investment for the SDGs* (IMF Staff Discussion Note No. 19/03). International Monetary Fund.

GGGI (2019). Green Growth Index. Global Green Growth Institute, Seoul.

GGGI (2020). Green Growth Index. Global Green Growth Institute, Seoul.

GGGI (2024). Green Growth Index. Global Green Growth Institute, Seoul.

GLCF (2024). Global Landscape of Climate Finance 2024. Climate Policy Initiative, San Francisco.

GoP (2003). Accelerating Economic Growth and Reducing Poverty: The Road Ahead (Poverty Reduction Strategy Paper). Poverty Reduction Strategy Paper Secretariat, Ministry of Finance, Government of Pakistan.

GoP (2026). Pakistan Economic Survey 2025–26, Chapter 4: Fiscal Development. Government of Pakistan. Finance Division, Islamabad.

Gopinath, G., Gourinchas, P., Presbitero, A.F., & Topalova P. (2024). Changing Global Linkages: A New Cold War? *IMF Working Paper,* No. WP/24/76.

Gordon, M. V., & Clark, T. E. (2023). The Impacts of Supply Chain Disruptions on Inflation. *Federal Reserve Bank of Cleveland Economic Commentary*, 08.

Guriev, S., Speciale, B. & Tuccio, M. (2019). How Do Regulated and Unregulated Labor Markets Respond to Shocks? Evidence from Immigrants During the Great Recession. *Journal of Law, Economics, and Organization,* 35(1), 37–76.

Habib, A. Plotnikov, D. & Presbitero, A. (2024). People's Republic of China: Selected Issues. *IMF Staff Country Reports,* No. 24/276.

Haider, A. (2009). Employment–Growth Nexus (Jobless Growth) — A Case Study of Pakistan. PhD Thesis, *Department of Economics, Federal Urdu University of Arts, Science and Technology*, Islamabad.

Haider, A. (2010). Sectoral Analysis of Employment Demand (Jobless growth) in Pakistan, *Atlantic Canada Economics Association Conference.*

Haider, A., Jabeen, S., Rankaduwa, W. & Shaheen, F. (2023). The Nexus between Employment and Economic Growth: A Cross-Country Analysis. *Sustainability, 15*, 11955.

Ham, A., Vasquez, E., Yanez-Pagans, M., Knudsen, C., & Asad S. (2026). Occupational Mobility and Green Transition: A Stylized Estimation of Skill Investment Needs in South Asia. *World Bank Policy Research Working Paper*, No. 11373.

Hanif, M. N., Iqbal, J., & Khan, I. N. (2017). Global Commodity Prices and Domestic Inflation: A Case Study of Pakistan. *SBP Research Bulletin*, *13*(1), 21-51.

Haraguchi, N. (2019). Structural Transformation and Manufacturing Employment, ed. Monga, C. & Lin, J. Y., *The Oxford Handbook of Structural Transformation*. Oxford University Press, London.

Harris, J. R., & Todaro, M. P. (1970). Migration, Unemployment and Development: A two-sector Analysis, *The American Economic Review,* 60(1), 126–142.

Haque, N. U., & Jalil, A. (2020). The Cost of Disinflation: The Sacrifice Ratio, *Pakistan Institute of Development Economics*, No. 2020: 2.

Hart, K. (1973). Informal Income Opportunities and Urban Employment in Ghana. *The Journal of Modern African Studies,* 11(1), 61–89.

Haraguchi, N. (2019). Structural Transformation and Manufacturing Employment, ed. Monga, C. & Lin, J.Y. *The Oxford Handbook of Structural Transformation*. Oxford University Press, London.

Hayat, R. & Rashid, A. (2020). Exploring Legal and Political-institutional Determinants of the Informal Economy of Pakistan, *Cogent Economics & Finance*, 8(1).

Hou, X. (2011). Challenges for Youth Employment in Pakistan: Are they Youth-specific? *Policy Research Working Paper*, No. 5544.

Hussain, F., Hussain, S., and Khan, S. (2025). Underlying Factors of Inflation in Pakistan: Dynamic Effects and Contributions, *SBP Working Paper,* No. 115.

Hyder, A. (2023). Revitalising Labour Relations in Pakistan: A Call for Comprehensive Reforms. *Discourse*, 175–178.

IEA (2025). Trends in Electric Cars. International Energy Agency, Available at: https://www.iea.org/reports/global-ev-outlook-2026/trends-in-electric-cars, Accessed on August 1, 2026.

IFC-ILO (2025). Creating Better Jobs for Women and Boosting Productivity in Bangladesh's Garment Factories: An assessment of the Gender Equality and Returns Program, *Social Policy & Labor Discussion Paper*, No. 2621.

IFR (2024). Record of 4 Million Robots in Factories Worldwide. (2024). International Federation of Robotics, Available at; https://ifr.org/ifr-press-releases/news/record-of-4-million-robots-working-in-factories-worldwide, Accessed on August 1, 2026.

ILO (N.D.a). Labour Force Statistics (LFS, STLFS, RURBAN databases) - ILOSTAT. International Labour Organization. Available at: https://ilostat.ilo.org/methods/concepts-and-definitions/description-labour-force-statistics, Accessed on: August 30, 2026.

ILO (N.D.b). What is a green job? International Labour Organization. Available at: https://www.ilo.org/topics-and-sectors/just-transition-towards-environmentally-sustainable-economies-and-societies/what-green-job, Accessed on: August 8, 2026.

ILO (N.D.c). ILO Country Profiles. International Labour Organization, Available at:. https://ilostat.ilo.org/data/country-profiles/, Accessed on September 2, 2026.

ILO (2015). Pakistan Country Programme Review. International Labour Organization, Geneva.
ILO (2017). Global Employment Trends for Youth 2017: Paths to a Better Working Future. International Labour Organization, Geneva.

ILO (2018a). World Employment and Social Outlook: Trends 2018. International Labour Organization, Geneva.

ILO (2018b): Khalil, Z. K. (2018). A Profile of Trade Unionism and Industrial Relations in Pakistan. International Labour Organization, Geneva.

ILO (2018c). Digital Labour Platforms and the Future of Work towards Decent Work in the Online World. International Labour Organization, Geneva.

ILO (2019). The Working Poor or How a Job is no Guarantee of Decent Living Conditions. International Labour Organization, Geneva.

ILO (2020a). Women and Men in the Informal Economy: A Statistical Brief. International Labour Organization, Geneva.

ILO (2020b). What is skills mismatch and why should we care? International Labour Organization, Available at: https://www.ilo.org/resource/article/what-skills-mismatch-and-why-should-we-care, Accessed on August 15, 2026.

ILO (2021). The Original Context of NEET and Developing Country Conditions. International Labour Organization, Available at: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40asia/%40ro-bangkok/%40sro-new_delhi/documents/publication/wcms_789243.pdf, Accessed on: September 1, 2026.

ILO (2022). Greening TVET and skills development: A Practical Guidance Tool. International Labour Organization, Geneva.

ILO (2023a). World Employment and Social Outlook: Trends 2023. International Labour Organization, Geneva.

ILO (2023b). Where Women Work in Asia and the Pacific: Implications for Policies, Equity and Inclusive Growth. International Labour Organization, Geneva.

ILO (2023c). Decent Work Country Programme for Pakistan 2023–2027. International Labour Organization, Geneva.

ILO (2024a). World Employment and Social Outlook: Trends 2024. International Labour Organization, Geneva.

ILO (2024b). Macroeconomic Diagnostics for Decent Jobs, Social Protection and Just Transitions: Practitioner's Guide. International Labour Organization, Geneva.

ILO (2025). Measuring what Matters: NEET vs Youth Unemployment. International Labour Organization, Accessed on: https://www.ilo.org/resource/article/measuring-what-matters-neet-vs-youth-unemployment?utm_source=chatgpt.com, Accessed on September 1, 2026.

ILO (2026). Employment and Social Trends 2026. International Labour Organization, Geneva.

ILO & WB (2019). Exports to Jobs; Boosting the Gains from Trade in South Asia. International Labour Organization and the World Bank, Geneva and Washington, D.C.

IMF (N.D.). World Revenue Longitudinal Database. International Monetary Fund, Available at: https://www.imf.org/en/topics/fiscal-policies/world-revenue-longitudinal-database, Accessed on: August 21, 2026.

IMF (2014). Can Fiscal Policies do more for Jobs? Fiscal Monitor, October 2014: Back to work—How fiscal policy can help, International Monetary Fund, Washington, D.C.

IMF. (2016). The Evidence that Growth Creates Jobs: A New Look at an Old Relationship. International Monetary Fund, Available at: https://www.imf.org/en/Blogs/Articles/2016/11/09/the-evidence-that-growth-creates-jobs-a-new-look-at-an-old-relationship, Accessed on: September 15, 2026.

IMF (2017). Growth and Jobs in Developing Economies: Trends and Cycles. *IMF Working Paper*, No. 17/25.

IMF (2023). World Economic Outlook 2023. International Monetary Fund, Washington, D.C.

IMF (2024). Pakistan: Selected Issues, *IMF Country Report*, No. 24/311.

IRENA (2026). Renewable Capacity Statistics 2026. International Renewable Energy Agency, Abu Dhabi.

Islam, I., Lapeyre, F. & Sidibé, M. (2020). Transition to Formality and Structural Transformation: Challenges and Policy Options. International Labour Organization, Geneva.

Isran, S. & Ali Isran, M. (2013). Low Female Labour Participation in Pakistan: Causes and Consequences, *Pakistan Journal of Social Sciences (PJSS)*, Vol. 33, No. 1, 163-178.

Kamal, M. and Fatima, A. (2023). Structural Transformation and Political Economy: A New Approach to Inclusive Growth, *PLOS ONE,* 18(8).

Kemal, A. R. & Mahmood, Z. (1998). Characteristics of the Workers in the Urban Informal Sector of Pakistan, *Pakistan Institute of Development Economics (PIDE) Research Report*, No. 160.

Khan, M. Z., Said, R., Mazlan, N. S. & Mohamed Nor, N. (2022). Incidence of Educational Mismatch and Earning in Pakistan, *PLOS ONE*, 17(6), 1–14.

Khan, R. A. (2008). Role of Construction Sector in Economic Growth: Empirical Evidence from Pakistan Economy. *Proceedings of the First International Conference on Construction in Developing Countries (ICCIDC),* Karachi (pp. 279-290).

Khan, S., Javed, A. & Mahwish, S. (2024). Macroeconomic Determinants of Unemployment in Pakistan: Some policy Implications, *Journal of Social Sciences and Humanities*, Vol.63, No.2.

Klasen, S. & Lamanna, F. (2009). The Impact of Gender Inequality in Education and Employment on Economic Growth: New Evidence for a Panel of Countries, *Feminist Economics,* Vol. 15(3), 91-132.

Lateef, D. A., Adnan Riaz, M., Usman Bhatti, M., Irfan, Y. & Raza, A. (2024). The Economic Returns to Higher Education: Evaluating Wage Premiums and Labor Market Outcomes Across Disciplines in Punjab, Pakistan, *Journal of Social Signs Review*, 2(4), 885–901.

Low Pay Commission (2024). Self-employment, the Gig Economy and the National Minimum Wage. UK Low Pay Commission, London.

Maciejewska, A. & Alifandi, A. (2023). ASEAN as a China Plus One destination: Current Situation and Risk Outlook, S&P Global, Available at: ASEAN as a China Plus One destination: Current situation and risk outlook | S&P Global, Accessed on July 31, 2026.

Mason, A.D. & Shetty, S. (2019). A Resurgent East Asia: Navigating a Changing World. *World Bank East Asia and Pacific Regional Report*, World Bank.

McKinsey (2022a). What are Industry 4.0, the Fourth Industrial Revolution, and 4IR? McKinsey & Company, Available at: https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-are-industry-4-0-the-fourth-industrial-revolution-and-4ir, Accessed on July 30, 2026.

McKinsey (2022b). Building Sustainability into Operations. McKinsey & Company, New York.

McKinsey (2025). Will embodied AI create robotic coworkers? McKinsey & Company, New York.

Meghir, C., Narita, R. & Robin, J.-M. (2015). Wages and Informality in Developing Countries. *American Economic Review,* 105(4), 1509–1546.

Ministry of Labour (2020). The Code on Social Security, 2020, V. V. Giri National Labour Institute, Available at:

https://vvgnli.gov.in/en/code-social-security-2020, Accessed on August 20, 2026.

Mirza, F. M., Jaffri, A. A. & Hashmi, M. S. (2017). An Assessment of Industrial Employment Skill Gaps among University Graduates in the Gujrat-Sialkot-Gujranwala Industrial Cluster, Pakistan, *Pakistan Journal of Social Issues,* 8(1).

MoF (n.d). RSRP Budgetary Expense. Ministry of Finance, Islamabad.

MoPDSI (2024). National and Provincial Level Population Projections (2023–2050), Planning Commission, Available at: https://pc.gov.pk/web/publication, Accessed on May 22, 2026.

Morrissey, T.W. (2017). Child Care and Parent Labor Force Participation: A Review of the Research Literature, *Rev Econ Household*, 15, 1–24.

Nabi, I., Shaikh, H., Khan, Z., Malik, S. F., Salman, Z., Hafeez, E. & Khan, U. (2025). Growth Framework: A Framework for Productivity and Export-led Growth in Pakistan. International Growth Centre, London.
Nayyar, G., Hallward-Driemeier, M., & Davies, E. (2021). At your Service?: The promise of services-led development, *World Bank*.

Nazeer, N., & Rasiah, R. (2016). Explaining Pakistan's Premature Deindustrialization, *The Lahore Journal of Economics*.

Novta, N., & Wong, J. (2017)**.** Women at Work in Latin America and the Caribbean, *IMF Working Paper,* 17/34.

OECD (2018). Productivity and Jobs in a Globalised World: (How) Can All Regions Benefit?, OECD Publishing, Paris.

OECD (2019). Determinants and Impact of Automation: An Analysis of Robots' Adoption in OECD Countries. Organisation for Economic Cooperation and Development, Paris.

OECD (2023). Assessing and Anticipating Skills for the Green Transition: Unlocking Talent for a Sustainable Future. Organisation for Economic Cooperation and Development, Paris.

OECD (2024a). OECD Employment Outlook 2024. Organisation for Economic Cooperation and Development, Paris.

OECD (2024b). Development Co-operation Report 2024. Organisation for Economic Cooperation and Development, Paris.

OECD (2025). How the Green Transition Reshapes Vocational Education and Training: Understanding the Impact. Organisation for Economic Cooperation and Development, Paris.

OECD (2026). Trends in Global Value Chains. Organisation for Economic Cooperation and Development, Paris.

Ohnsorge, F. & Yu, S. (Eds.). (2022). The Long Shadow of Informality: Challenges and Policies. World Bank, Washington, D.C.

OWID (2025a). Annual Patents Filed for Carbon Capture and Storage Technologies. Our World in Data, Available at: https://ourworldindata.org/grapher/patents-ccs?time=2022, Accessed on August 1, 2026.

OWID (2025b). Annual Patents Filed in Sustainable Energy. Our World in Data, Available at: https://ourworldindata.org/grapher/patents-for-renewables-by-country?time=2022, Accessed on: July 30, 2026.

Ozcelik, E., & Ozmen, E. (2023). Premature Deindustrialisation: The International Evidence, *Cambridge Journal of Economics,* Vol. 47 No. 4.

Palma, J. G. (2014). De-industrialisation, Premature De-industrialisation and the Dutch Disease, *Revista NECAT*, Vol. 3, No. 5.

Payoneer (2025). Top 10 Freelancing Countries, Payoneer, Available at: https://www.payoneer.com/resources/business/top-10-freelancing-countries/, Accessed on August 20, 2026.

PBS (N.D.). National Accounts Annual Tables 2025-26-May-2026. Pakistan Bureau of Statistics, Available at: https://www.pbs.gov.pk/national-accounts-2/, Accessed on: August 13, 2026.

PBS (2018). Labour Force Survey 2017-18. Pakistan Bureau of Statistics, Islamabad.

PBS (2025a). Labour Force Survey 2024-25. Pakistan Bureau of Statistics, Islamabad.

PBS (2025b). Key Insights of Labour Force Survey 2024-25, Pakistan Bureau of Statistics, Islamabad, Pakistan.

PBS (2026). Employment Trend Report 2025, Pakistan Bureau of Statistics, Islamabad.

Pimkina, S. & de la Flor, L. (2020). Promoting Female Labor Force Participation, *Jobs Working Paper*, No. 56.

PMYP (N.D.). Digital Youth Hub, Available at: https://pmybals.pmyp.gov.pk/pmyphome/Education, Accessed on: August 27, 2026.

Portes, A., & Schauffler, R. (1993). Competing Perspectives on the Latin American Informal Sector, *Population and Development Review*, 19(1), 33–60.

PI (2025). Network Readiness Index 2025. Portulans Institute, Washington, D.C.

PIDE (2019). Employment in Pakistan: Trends, Sectoral Shares and Elasticities, Pakistan Institute of Development Economics.

Pietrobelli, C., Delera, M. & Geri N. (2026). Navigating a Fragmenting Global Economy: What GVC Reconfiguration means for Future Industrial Development? *UNIDO Policy Brief Series,* Issue no. 28.

Planning Commission (N.D.). Youth Initiatives. Planning Commission, Available at: https://pc.gov.pk/uploads/youth/Youth_Initiatives.pdf, Accessed on: September 15, 2026.

PwC. (n.d.). Corporate income tax (CIT) Rates, Worldwide Tax Summaries, Available at: https://taxsummaries.pwc.com/quick-charts/corporate-income-tax-cit-rates, Accessed on: August 21, 2026.

Qasim, A. W. (2024). Rethinking the Development Model, *The Pakistan Development Review,* 41-46.

RBA (2025). The RBA's Dual Mandate – Inflation and Employment. Reserve Bank of Australia, Sydney.

RBNZ (2019). Monetary Policy and the Economy, *Reserve Bank Bulletin*, 82(3).

Rodrik, D. (2013). Unconditional Convergence in Manufacturing, *The Quarterly Journal of Economics,* Vol.128, No.1.

Rodrik, D. (2014). The Past, Present, and Future of Economic Growth, *Challenge*, Vol.57, No.3.

Rodrik, D. (2016). Premature Deindustrialization, *Journal of Economic Growth*, Vol.21, No.1.

Rodrik, D., & Stiglitz, J. E. (2024). A New Growth Strategy for Developing Nations, *The Journal of Economic Perspectives.*

Sana, M. & Jaffri, A. (2021). Gender-Based Labour Force Participation and Wage Gap in Pakistan: Does Globalization Matter, *Journal of Independent Studies and Research-Management, Social Sciences and Economics (JISR-MSSE)*, 19(2), 137–152.

SBoS (n.d.). Monthly Survey of Industrial Production & Employment (MIPE), Bureau of Statistics Planning & Development Department Government of Sindh, Available at: https://sbos.sindh.gov.pk/monthly-industrial-production-employment-mipe, Accessed on: August 21, 2026.

SBP (2015). The State of Pakistan's Economy, Annual Report FY15. State Bank of Pakistan, Karachi.

SBP (2019). The State of Pakistan's Economy, Third Quarterly Report FY19. State Bank of Pakistan, Karachi.

SBP (2022). The State of Pakistan's Economy, Annual Report FY22. State Bank of Pakistan, Karachi.

SBP (2025a). The State of Pakistan's Economy, Annual Report FY25. State Bank of Pakistan, Karachi.

SBP (2025b). The State of Pakistan's Economy, Half Year Report FY25. State Bank of Pakistan, Karachi.

SBP (2026). The State of Pakistan's Economy, Half Yearly Report FY26, State Bank of Pakistan, Karachi.

Scarpetta, S., Sonnet, A., & Manfredi, T. (2010). Rising Youth Unemployment during the Crisis: How to Prevent Negative long-term Consequences on a Generation? *OECD Social, Employment and Migration Working Papers,* No. 106.

Schmidt, V., Webster, E., Mhlana, S. & Forrest, K. (2023). Negotiations by workers in the informal economy, *ILO Working Paper*, No. 86.

Shaheed, F. & Mumtaz, K. (1981). Invisible Workers: Piece-work Labour Amongst Women in Lahore. Women's Division, Government of Pakistan, Islamabad.

Shakil, M. H., Hassan, A., Nadeem, M. & Ul Husnain, M. U. (2024). From Classroom to Career: The Role of Education, Training, and Academic Achievement in Shaping Earning Potential in Pakistan, *Asia-Pacific Journal of Futures in Education and Society, 3*(2), 1–14.

Sharma, S. (2019). Pakistan@100: Structural Transformation Policy Note, World Bank Group.

Sharma & Sharma. (2025). The Gig Economy and the Evolving Nature of Work in India: Employment, Policy, and Platform Realities in the Age of Convenience, *Journal of Digital Economy,* Vol, 4, 156-167.

Shi, A., & Michelitsch, R. (n.d.). Impact of Labour Productivity on Job Creation: Evidence from Global Enterprise Surveys International Finance Corporation, World Bank Group, Available at: https://documents1.worldbank.org/curated/en/947351468163442336/pdf/820440BRI0Prod00Box379851B00PUBLIC0.pdf, Accessed on August 15, 2026.

Shiferaw, A. & Hailu, D. (2016). Job Creation and Trade in Manufactures: Industry-level Analysis across Countries, *IZA Journal of Labor & Development,* 5(1), 3.

SMEDA & ILO (2002). Creating a Conducive Policy Environment for Micro, Small and Medium-Sized Enterprises in Pakistan, *SEED Working Paper,* No 9.

Soto, P. E., Thieu, M., & Allen, J. S. (2026, July 17). The AI buildout and the economy: Publicly available data to assess AI's impact, Federal Reserve, Available at: https://www.federalreserve.gov/econres/notes/feds-notes/the-ai-buildout-and-the-economy-publicly-available-data-to-assess-ais-impact-20260717.html, Accessed on August 5, 2026.

Srinivasan, S., & Azpúrua, A. E. (2026). Enhance or eliminate? How AI will likely change these jobs. Harvard Business School, Available at: https://www.library.hbs.edu/working-knowledge/enhance-or-eliminate-how-ai-will-likely-change-these-jobs, Accessed on August 8, 2026.

Stanford HAI (2026). Artificial Intelligence Index Report 2026. Stanford University, Stanford.

Stiglitz, J. E. & Lin, J. Y. (2013). The Industrial Policy Revolution I: The Role of Government Beyond Ideology, Palgrave Macmillan, London.

Sufi, A. (2025). The Role of Finance in Structural Transformation of the Economy. 25th Zahid Husain Memorial Lecture, State Bank of Pakistan, Karachi.

Tahir, H. M. A., & Yu, J. (2025). The Impact of Foreign Trade on Employment in Pakistan, *Transactions on Economics, Business and Management Research*, 15, 83-87.

Tahir, N. & Tahir, P. (2018). Informal Employment in Pakistan: Survivalist or Structuralist? *Pakistan Journal of Applied Economics,* Special Issue, 493–517.

Tanaka, S. & Muzones, M. (2016). Policy Brief on Female Labor Force Participation in Pakistan. Asian Development Bank, Manila.

Tran, H. (2024). 'Connector economies' and the Fractured State of Foreign Direct Investment. Atlantic Council, Washington, D.C.

Tregenna, F. (2009). Characterising Deindustrialisation: An Analysis of Changes in Manufacturing Employment and Output Internationally, *Cambridge Journal of Economics,* Vol. 33, No. 3.

UN (2026). World Economic Situation and Prospects 2026. United Nations, New York.

UNCTAD (2025a). World Investment Report 2025. United Nations Conference on Trade and Development, Geneva.

UNCTAD (2025b). Foreign Direct Investment Trends in Emerging Markets: Focus on Africa. United Nations Conference on Trade and Development, Geneva.

UNCTAD (2026a). World Investment Report 2026. United Nations Conference on Trade and Development, Geneva.

UNCTAD (2026b). Invisible Barriers are Reshaping Global Trade. UNCTAD, Available at: https://unctad.org/news/invisible-barriers-are-reshaping-global-trade, Accessed on August 25, 2026.

UNDP (2024). Structural transformation and Labour Markets in Asia and the Pacific: Towards a More Inclusive and Sustainable Future. United Nations Development Programme, Bangkok.

UNESCO (N.D.). TVETipedia Glossary. UNESCO, Available at: https://connect.unevoc.unesco.org/home/TVETipedia+Glossary/lang=en/show=term/lang=en/term=Informal+employment, Accessed on August 20, 2026.

UNFPA (2021). Demographic dividend: Actualizing the youth potential in Pakistan. United Nations Population Fund, New York.

UNIDO (2026). UNIDO Statistics Portal, United Nations Industrial Development Organization, Available at: https://stat.unido.org/data/download?dataset=sdg&utm, Accessed on August 1, 2026.

Upwork (2024). Gen Z is Abandoning Conventional 9-to-5 Corporate Jobs for More Diverse, Flexible Careers in Freelancing, according to New Upwork Research, Upwork Inc, Available at: https://investors.upwork.com/news-releases/news-release-details/gen-z-abandoning-conventional-9-5-corporate-jobs-more-diverse, Accessed on: August 20, 2026.

Urdal, H. (2006). A Clash of Generations? Youth Bulges and Political Violence, *International Studies Quarterly,* 50(3), 607–629.

Verick, S. (2018). Female Labor Force Participation and Development. *IZA World of Labor, 2018*, 87.

Waseem, M. (2018). Taxes, Informality and Income Shifting: Evidence from a Recent Pakistani Tax Reform, *Journal of Public Economics,* Vol. 157(C), 41-77.

WB (N.D.a). World Bank Development Indicators. World Bank, Available at: https://databank.worldbank.org/source/world-development-indicators, Accessed on August 1, 2026.

WB (N.D.b). ASPIRE Indicators at a Glance. World Bank, Available at: https://www.worldbank.org/en/data/datatopics/aspire/indicator-glance, Accessed on September 2, 2026.

WB (2014). Skilling up Vietnam: Preparing the Workforce for a Modern Market Economy in Vietnam Development Report 2014. World Bank, Washington, D.C.

WB (2017). Pakistan Development Update: Managing Risks for Sustained Growth, Special Section: "Jobs and

Entrepreneurship in Pakistan." World Bank, Washington, D.C.

WB (2018). Jobless Growth. *South Asia Economic Focus*, World Bank, Washington, DC.

WB (2019). The Changing Nature of Work: World Development Report 2019. World Bank, Washington, D.C.

WB (2020, updated). Human Capital Index database.

WB (2022a). Women's Economic Empowerment in Pakistan, World Bank, Washington, D.C.

WB (2022b). Renewable Energy Jobs and Sector Skills Mapping for Pakistan. World Bank, Washington, D.C.

WB (2022c). From Swimming in Sand to High and Sustainable Growth: A Roadmap to Reduce Distortions in the Allocation of Resources and Talent in the Pakistani Economy. *Pakistan Country Economic Memorandum*, World Bank.

WB (2024a). South Asia Development Update: Women, Jobs, and Growth. World Bank, Washington, D.C.

WB (2024b). Pakistan Learning Poverty Brief. World Bank, Washington, D.C.

WB (2024c). Pakistan – Human Capital Review: Building Capabilities Throughout Life. World Bank, Washington, D.C.

WB (2025a). Pakistan Development Update: Reimagining a Digital Pakistan. World Bank, Washington, D.C.

WB. (2025b). Pakistan Development Update: Staying the Course for Growth and Jobs. World Bank, Washington, D.C.

WB (2025c). Jobs in a Changing Climate. World Bank, Washington, D.C.

WB (2025d). Business Ready 2025. World Bank, Washington, D.C.

WB (2025e). Labor force, Total - India. World Bank Data, Available at: https://data.worldbank.org/indicator/SL.TLF.TOTL.IN?locations=IN, Accessed on: August 20, 2026.

WB (2026). World Development Report 2026. World Bank, Washington, D.C.

WB, UNESCO & ILO. (2023). Building Better Formal TVET Systems: Principles and Practice in Low- and Middle-income Countries. World Bank, Washington, D.C.

WEF (2025a). Future of Jobs Report. World Economic Forum, Geneva.

WEF (2025b). Green Transition to Add 9.6 million Jobs Globally by 2030, but Risks Creating New Economic Divides. World Economic Forum. Available at: https://www.weforum.org/press/2025/11/green-transition-to-add-9-6-million-jobs-globally-by-2030-but-risks-creating-new-economic-divides-a8aea0c5f1/, Accessed on August 1, 2026.

White, D. (2026). Eight rules of thumb for tech booms, *Absolute Strategy Research.*

Winkler, D., Kruse, H., Luna, L. A., & Maliszewska, M. (2023). Linking Trade to Jobs, Incomes, and Activities. *World Bank Policy Research Working Paper*, 10635.

Yan, L. & Rodrik, D. (2025). The New Global Economic Order (p. 204). Taylor & Francis, London

Zeid, R., Alrayess, D., Ajwad, M. Ihsan, Soytas, M. Ali & Rivera, N. (2024). The Gig Economy and the Future of Work: Global Trends and Policy Directions for Non-Standard Forms of Employment. *World Bank Social Protection & Jobs Policy & Technical Note.*

Zhou, M. (2017). Pakistan's Hidden Workers: Wages and Conditions of Home-based Workers and the Informal Economy. International Labour Organization, Geneva.

## Annexure A: Data Explanatory Notes

1) **GDP:** In case of an ongoing year, for which the actual GDP data for full fiscal year is yet not 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 the 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 refers to the percent change of the *average* CPI (national, urban, or rural) from July to a given month of the year over the corresponding period last year. YoY inflation is percent change in the 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 a 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 of multiple factors, including: (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; (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 the SBP, and accrued profits on government securities, etc.

*Borrowing from scheduled banks*: This is mainly through (i) fortnightly auction of 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 the 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 the 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

| | |
|---|---|
| ACDs | Additional Customs Duties |
| ACFID | Agriculture Credit and Financial Inclusion Department |
| ADB | Asian Development Bank |
| ADF | Augmented Dickey-Fuller |
| ADR | Advances-to-Deposits Ratio |
| AEs | Advanced Economies |
| AI | Artificial Intelligence |
| AIC | Akaike Information Criterion |
| AIIB | Asian Infrastructure Investment Bank |
| AJK | Azad Jammu and Kashmir |
| APCMA | All Pakistan Cement Manufacturers Association |
| API | Active Pharmaceutical Ingredient |
| ARDL | Autoregressive Distributed Lag |
| ATM | Average Time to Maturity |

B

| | |
|---|---|
| B35 | Biodiesel blend containing 35% biodiesel |
| B40 | Biodiesel blend containing 40% biodiesel |
| BCI | Business Confidence Index |
| BCS | Business Confidence Survey |
| BEOE | Bureau of Emigration & Overseas Employment |
| BIS | Bank for International Settlements |
| BISP | Benazir Income Support Programme |
| BLS | Bureau of Labor Statistics |
| BOP | Bank of Punjab |
| BoS | Bureau of Statistics (Punjab) |
| BPO | Business Process Outsourcing |
| BPS | Basis Points |
| B-READY | Business Ready |
| BSC | Behbood Saving Certificates |
| BSP | Bangko Sentral ng Pilipinas |

C

| | |
|---|---|
| CAD | Current Account Deficit |
| CAGR | Compound Annual Growth Rate |
| CBU | Completely Built Unit |
| CDPR | Centre for Development and Public Policy |
| CiC | Currency in Circulation |
| CIPD | Chartered Institute of Personnel and Development |
| CKD | Completely Knocked Down |
| CNIC | Computerized National Identity Card |
| COVID | Coronavirus Disease |
| CPEC | China-Pakistan Economic Corridor |
| CPI | Consumer Price Index |
| CPO | Crude Palm Oil |
| CPPA | Central Power Purchasing Agency |
| CRR | Cash Reserve Requirement |

D

| | |
|---|---|
| DAP | Diammonium Phosphate |
| DGKC | D. G. Khan Cement Company Limited |
| DISCOs | Distribution Companies |
| DITRC | Delta International Recruitment Agency |
| DLTL | Duty and Tax Remission for Exports (Drawback of Local Taxes and Levies) Scheme |
| DOI | Digital Object Identifier |

E

| | |
|---|---|
| ECB | European Central Bank |
| ECM | Error Correction Mechanism |
| ECMWF | European Centre for Medium-Range Weather Forecasts |
| EFF | Extended Fund Facility |
| EFS | Export Finance Scheme |
| EMDEs | Emerging Market and Developing Economies |
| EMIs | Electronic Money Institutions |
| EMPI | Exchange Market Pressure Index |
| ENSO | El Niño–Southern Oscillation |
| EOBI | Employees' Old-Age Benefits Institution |
| EPD Matrix | Export Portfolio Diversification (Matrix) |
| EPD | Exchange Policy Department |
| EPU | Economic Policy Uncertainty |
| EPZs | Export Processing Zones |
| ERA5-Land | Land Component of the Fifth-Generation ECMWF Reanalysis |
| ESFCAs | Exporter's Special Foreign Currency Accounts |
| ETD | Economic Transformation Database |
| EU | European Union |
| EUR | Euro |
| EV | Electric Vehicle |
| EXIM | Export-Import Bank (of Pakistan) |

F

| | |
|---|---|
| FAO | Food and Agriculture Organization of the United Nations |
| FAS | Foreign Agricultural Service |
| FBR | Federal Board of Revenue |
| FCA | Fuel Charge Adjustment |
| FCCL | Fauji Cement Company Limited |
| FCY | Foreign Currency |
| FDI | Foreign Direct Investment |
| FED | Federal Reserve |
| FI | Fixed Investment |
| FINDEX | Financial Development Index |
| FOB | Free on Board |
| FPI | Foreign Portfolio Investment |
| FPV | Floating Photovoltaics |
| FSC&RD | Federal Seed Certification and Registration Department |
| FSR | Financial Stability Review |
| FTA | Free Trade Agreement |
| FX | Foreign Exchange |
| FY | Fiscal Year |

G

| | |
|---|---|
| GB | Gilgit-Baltistan |
| GBs | Gigabytes |
| GCC | Gulf Cooperation Council |
| GDP | Gross Domestic Product |
| GFCF | Gross Fixed Capital Formation |
| GGGI | Green Growth Index |
| GHS | Government Hybrid Sukuk |
| GLCF | Global Landscape of Climate Finance |
| GMTN | Global Medium-Term Note |
| GOP | Government of Pakistan |
| GoP / GOP | Government of Pakistan |
| GPTs | General Purpose Technologies |
| GSP+ | Generalized Scheme of Preferences Plus |
| GST | General Sales Tax |
| GTCI | Global Talent Competitiveness Index |
| GVA | Gross Value Addition |
| GVC | Global Value Chain |
| GW | Gigawatt |
| GWh | Gigawatt-Hour |

H

| | |
|---|---|
| H1 | First Half (of fiscal year) |
| ha | Hectare |
| HCI+ | Human Capital Index Plus |
| HDIP | Hydrocarbon Development Institute of Pakistan |
| HDPE | High-Density Polyethylene |
| HIES | Household Integrated Economic Survey |
| HS | Harmonized System (code) |
| HSD | High-Speed Diesel |
| HY | Half Year |

I

| | |
|---|---|
| IBA | Institute of Business Administration |
| ICE | Internal Combustion Engine |
| ICLS | International Conference of Labour Statisticians |
| ICT | Information and Communication Technology |
| IEA | International Energy Agency |
| IFC | International Finance Corporation |
| IFEM | Interbank Foreign Exchange Market |
| IFR | International Federation of Robotics |
| IGCEP | Indicative Generation Capacity Expansion Plan |
| ILO | International Labor Organization |
| IMF | International Monetary Fund |
| INDSTAT | Industrial Statistics Database |
| INSEAD | Institut Européen d'Administration des Affaires |
| INV | Investment (model variable) |
| IoT | Internet of Things |
| IP | Intellectual Property |
| IPC | Integrated Food Security Phase Classification |

| | | |
|---|---|---|
| | IRENA | International Renewable Energy Agency |
| | IRSA | Indus River System Authority |
| | IT | Information Technology |
| | ITO | Information Technology Outsourcing |
| | IVR | Interactive Voice Response |
| K | | |
| | Kg | Kilogram |
| | KPO | Knowledge Process Outsourcing |
| | KPSS | Kwiatkowski-Phillips-Schmidt-Shin (test) |
| | KSA | Kingdom of Saudi Arabia |
| | kW | Kilowatt |
| | kWh | Kilowatt-Hour |
| L | | |
| | LFP | Labour Force Participation |
| | LFPR | Labour Force Participation Rate |
| | LFS | Labour Force Survey |
| | LIC | Low-Income Country |
| | LIMS | Land Information and Management System |
| | LLSM | Logarithm of Large-Scale Manufacturing Output |
| | LM | Lagrange Multiplier |
| | LMIC | Lower-Middle Income Countries |
| | LNG | Liquefied Natural Gas |
| | LPG | Liquefied Petroleum Gas |
| | LSM | Large-Scale Manufacturing |
| | LTD | Limited Company |
| | LTFF | Long-Term Financing Facility |
| M | | |
| | M2 | Square Meters |
| | MAF | Million Acre-Feet |
| | MDCE | Malaysia Digital Economy Corporation |
| | MEMO | Memorandum |
| | mm | Millimeter |
| | MM2 | Million Square Meters |
| | MMF | Man-Made Fibre |
| | MMT | Million Metric Tons |
| | MNFSR | Ministry of National Food Security and Research |
| | MoF | Ministry of Finance |
| | MoPD&SI | Ministry of Planning, Development and Special Initiatives |
| | MoPDSI | Ministry of Planning, Development & Special Initiatives |
| | MPC | Monetary Policy Committee |
| | MPR | Monetary Policy Report |
| | MSME | Micro, Small and Medium Enterprises |
| | MT | Metric Tonnes |
| | MTBs | Market Treasury Bills |
| | MVA | Manufacturing Value Added |
| | MW | Megawatt |
| N | | |

| | |
|---|---|
| NADRA | National Database and Registration Authority |
| NAIRU | Non-Accelerating Inflation Rate of Unemployment |
| NCPI | National Consumer Price Index |
| NDA | Net Domestic Assets |
| NDMA | National Disaster Management Authority |
| NEER | Nominal Effective Exchange Rate |
| NEET | Not in Education, Employment and Training |
| NEPRA | National Electric Power Regulatory Authority |
| NEV | New Energy Vehicle |
| NFA | Net Foreign Assets |
| NFDC | National Fertilizer Development Centre |
| NFNE | Non-Food Non-Energy |
| NOAA | National Oceanic and Atmospheric Administration |
| NPCs | Naya Pakistan Certificates |
| NTN | National Tax Number |

O

| | |
|---|---|
| OBOR | One Belt One Road |
| OCAC | Oil Companies Advisory Council |
| OECD | Organization for Economic Co-operation and Development |
| OGRA | Oil and Gas Regulatory Authority |
| OMO | Open Market Operation |
| OWID | Our World in Data |

P

| | |
|---|---|
| PACRA | Pakistan Credit Rating Agency |
| PAMA | Pakistan Automotive Manufacturers Association |
| PARE | Programa de Atragere a Remitentelor pentru Economie |
| PASSCO | Pakistan Agricultural Storage and Services Corporation |
| PBA | Pensioners Benefit Account |
| PBC | Pakistan Business Council |
| PBS | Pakistan Bureau of Statistics |
| PD | Premature Deindustrialisation |
| PDL | Petroleum Development Levy |
| PE | Price Effect |
| PFL | Pakistan Investment Bond - Floating |
| PHEVs | Plug-in Hybrid Electric Vehicles |
| PI | Portulans Institute |
| PIA | Pakistan International Airlines |
| PIAHCL | PIA Holding Company Limited |
| PIB | Pakistan Investment Bond |
| PIDE | Pakistan Institute of Development Economics |
| PIOC | Pioneer Cement Limited |
| PK | Pakistan |
| PKR | Pakistani Rupee |
| PMD | Pakistan Meteorological Department |
| PNSC | Pakistan National Shipping Corporation |
| POL | Petroleum, Oil and Lubricants |
| PPIB | Private Power and Infrastructure Board |
| PPP | Purchasing Power Parity |
| PR | Press Release |

| | | |
|---|---|---|
| | PSB | Private Sector Businesses |
| | PSC | Private Sector Credit |
| | PSDE | Pakistan Software Development Export (Strategy) |
| | PSDP | Public Sector Development Program |
| | PSE | Public Sector Enterprise |
| | PSID | Payment Slip ID |
| | PSO | Pakistan State Oil |
| | PTA | Pakistan Telecommunication Authority |
| | PV | Photovoltaic (solar) |
| Q | | |
| | QTA | Quarterly Tariff Adjustment |
| R | | |
| | R&D | Research and Development |
| | RBA | Reserve Bank of Australia |
| | RDAs | Roshan Digital Accounts |
| | RDs | Regulatory Duties |
| | RE | Renewable Energy |
| | REER | Real Effective Exchange Rate |
| | REM | Remittances (model variable) |
| | RFO | Residual Fuel Oil |
| | rhs | Right-Hand Side |
| | RLNG | Regasified Liquefied Natural Gas |
| | RPI | Relative Prices Index |
| | Rs. | Rupees |
| | RSF | Resilience and Sustainability Facility |
| S | | |
| | S.R.O. | Statutory Regulatory Order |
| | SBP | State Bank of Pakistan |
| | SBVAR | Structural Bayesian Vector Autoregression |
| | SDG | Sustainable Development Goals |
| | SEADRIF | Southeast Asia Disaster Risk Insurance Facility |
| | SEZ / SEZs | Special Economic Zone / Zones |
| | SIM | Subscriber Identity Module |
| | SKD | Semi Knocked Down |
| | SME | Small and Medium Enterprises |
| | SMEFD | Small and Medium Enterprises Finance Department† |
| | SMEs | Small and Medium Enterprises |
| | SNA | System of National Accounts |
| | SOE | State-Owned Enterprise |
| | SSM | Small-Scale Manufacturing |
| | ST | Structural Transformation |
| | STEM | Science, Technology, Engineering, and Mathematics |
| | SVAR | Structural Vector Autoregression |
| T | | |
| | T-Bill | Treasury Bill |
| | TCI | Trade Complementarity Index |
| | TL | Total loans |
| | TTCIS | Telegraphic Transfer Charges Incentive Scheme |

| | | |
|---|---|---|
| | TV | Television |
| | TVET | Technical and Vocational Education and Training |
| | TWh | Terawatt-hour |
| U | | |
| | UAE | United Arab Emirates |
| | UK | United Kingdom |
| | UN | United Nations |
| | UNCTAD | United Nations Conference on Trade and Development |
| | UNCTADstat | UNCTAD Statistics (Data Centre) |
| | UNDP | United Nations Development Programme |
| | UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| | UNFPA | United Nations Population Fund |
| | UNIDO | United Nations Industrial Development Organization |
| | UNU-WIDER | United Nations University World Institute for Development Economics Research |
| | UR | Unemployment Rate |
| | US | United States |
| | US$ | United States Dollar |
| | US/USA | United States (of America) |
| | USA | United States of America |
| | USDA | United States Department of Agriculture |
| V | | |
| | VAR | Vector Autoregression |
| | VE | Value Effect |
| | VECM | Vector Error Correction Model |
| | VET | Vocational Education and Training |
| W | | |
| | WADR | Weighted Average Deposit Rate |
| | WALR | Weighted Average Lending Rate |
| | WAONR | Weighted Average Overnight Repo Rate |
| | WAP | Working-Age Population |
| | WAPDA | Water and Power Development Authority |
| | WB | World Bank |
| | WC | Working Capital |
| | WDI | World Development Indicators |
| | WEF | World Economic Forum |
| | WFP | World Food Programme |
| | WJP | World Justice Project |
| | WMO | World Meteorological Organization |
| | Wp | Watt-Peak |
| | WPI | Wholesale Price Index |
| | WRT | Wholesale and Retail Trade |
| | WTO | World Trade Organization |
| Y | | |
| | YoY | Year-on-Year |