

Annual Report 2021-22

The State of Pakistan's Economy



State Bank of Pakistan

ANNUAL REPORT

2021 – 2022

THE STATE OF PAKISTAN'S ECONOMY



STATE BANK OF PAKISTAN

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LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
December 21, 2022

Dear Mr. Chairman,

In terms of Section 39 (2) of the State Bank of Pakistan Act, 1956, the Report on the State of the Economy for the year 2021-22 is hereby enclosed for submission to the Majlis-e-Shoora (Parliament).

With warm regards,

Yours sincerely,



(Jameel Ahmad)
Governor

Muhammad Sadiq Sanjrani
Chairman
Senate
Islamabad

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(Jameel Ahmad)
Governor

Raja Pervaiz Ashraf
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National Assembly
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Cover:

The Laboratory of the Natural Universe (1961) by Sadequain, SBP Museum

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The feedback from Financial Stability, Monetary Policy, Research, Core Statistics, Domestic Markets & Monetary Management Departments, and Development Finance Group; and logistic supports by Office of the Corporate Secretary, and External Relations Department are appreciated.

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Chapter 1

Economic Review

The analysis and projections presented in this report were prepared on data outturns for FY22 and finalized in October 2022, using data and developments as of then.

1 Economic Review

1.1 Overview

For a second consecutive year, Pakistan's real GDP growth reached around 6 percent in FY22 (Table 1.1). The growth was broad-based as both agriculture and industry saw a notable increase that spilled over to the services sector as well. Large-scale manufacturing (LSM), in particular, showed a double-digit increase. Private consumption mainly drove the expansion in GDP, while investment rose marginally. The continued reliance on consumption as an engine of growth amid sluggish improvement in productivity once again left the country vulnerable to adverse developments in the global economy. Hence, a combination of adverse global and domestic developments marred the country's economic performance, leading to the reemergence of macroeconomic imbalances during FY22.

In particular, the expansionary fiscal stance in FY22, an upsurge in global commodity prices, and the fallout of the Russia-Ukraine conflict, led to a marked deterioration in the current account deficit (CAD). In addition, the delay in the resumption of the IMF program and political instability exacerbated the country's vulnerability through the depletion of FX reserves to critical levels. The ensuing depreciation in PKR amplified inflationary pressures by compounding the pass through of elevated global commodity and oil price increases.

Pakistan's experience was somewhat similar to other countries at the start of FY22. Strong policy stimulus and access to inoculation aided a rebound in the global economy (Figure 1.1a). The robust momentum of economic growth widened global supply-demand imbalances, giving rise to inflationary pressures. In addition, rising global trade volumes, alongside the emergence of new Covid variants (Delta and Omicron) choked distribution networks and fueled large increases in freight costs. The eruption of the Russia-Ukraine conflict further propelled the

Selected Economic Indicators **Table 1.1**

	FY20	FY21	FY22
<i>Growth rate* (percent)</i>			
Real GDP ^a	-0.9	5.7	6.0
Agriculture	3.9	3.5	4.4
Industry	-5.7	7.8	7.2
o/w LSM	-11.2	11.5	10.5
Services	-1.2	6.0	6.2
National CPI (period average) ^a	10.7	8.9	12.2
Private sector credit ^b	2.9	11.2	21.1
Money supply (M2) ^b	17.5	16.2	13.6
Exports ^b	-7.1	13.8	26.6
Imports ^b	-15.9	24.4	32.9
Tax revenue –FBR ^c	4.4	19.2	28.9
Exchange rate (+app/dep%) ^b	-4.8	6.7	-23.1
Policy rate (end-period) ^b	7.00	7.00	13.75
<i>billion US dollars</i>			
SBP's reserves (end-period) ^b	12.1	17.3	9.8
Workers' remittances ^b	23.1	29.5	31.3
Current account balance ^b	-4.4	-2.8	-17.4
<i>percent of GDP</i>			
Fiscal balance ^d	-7.1	-6.1	-7.9
Current account balance	-1.5	-0.8	-4.6
Investment ^a	14.8	14.6	15.1

* The numbers relating to real GDP growth rate and its sub-components for FY20, FY21 and FY22 are on constant basic prices of 2015-16 and represent final, revised, and provisional estimates respectively.

Sources: ^a Pakistan Bureau of Statistics; ^b State Bank of Pakistan, growth based on US dollar values; ^{c,d} Ministry of Finance

commodity super cycle, with prices of energy and non-energy commodities soaring sharply (Figure 1.1b).

Rising global commodity prices strengthened inflationary pressures and widened current account imbalances across countries, especially commodity importers, warranting policy responses (Figure 1.1c). Some emerging economies had started to unwind policy stimulus and increased interest rates in FY21; whereas advanced economies followed suit in FY22 (Figure 1.1d). However, the rapid tightening of monetary policies in advanced economies stifled access to international

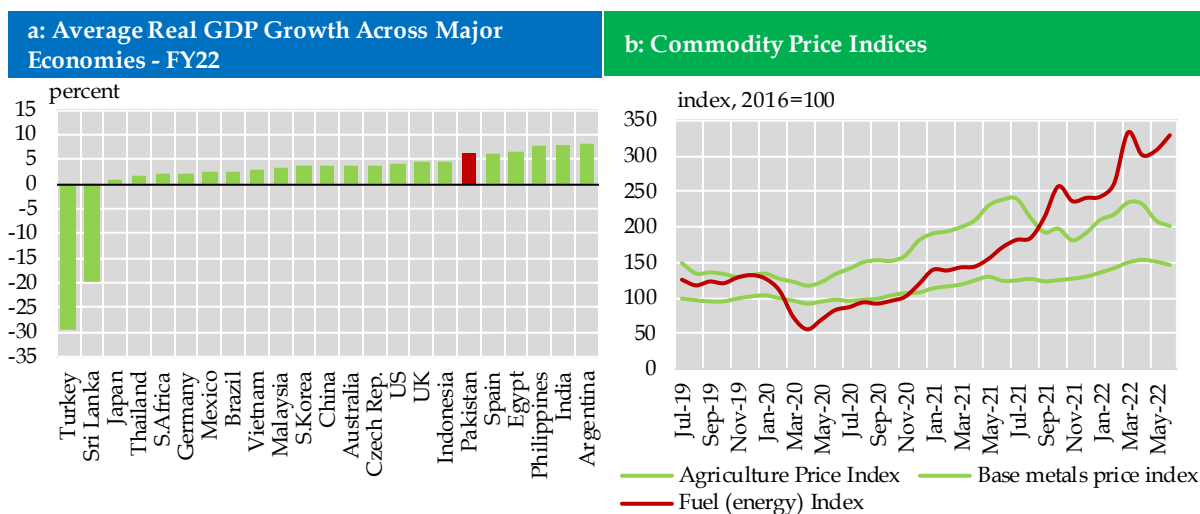
markets, engendering currency depreciations, and fueling further inflationary pressures in emerging and developing economies. With elevated inflation, rising supply chain disruptions, and spread of new Covid strain (Omicron), global growth began to taper off towards the end of H1-FY22.

Pakistan also witnessed a notable expansion in economic activity during FY22. The policy environment was mostly conducive for real economic activity during the fiscal year. Fiscal policy support in the form of tax incentives for industry, export and construction and a large increase in provincial development spending supported growth in these sectors. Similarly, the government introduced multiple tax

incentives and subsidies to protect consumers from the impact of rising international oil prices, which further shored up demand. This resulted in a large and unbudgeted fiscal expansion, marking a visible divergence from the fiscal consolidation agenda pursued in the past two years. At the same time, the lagged impact of monetary stimulus rolled out during the pandemic, SBP's targets for housing and construction, and capacity expansions under Temporary Economic Refinance Facility (TERF) and Long Term Financing Facility (LTFF) continued to underpin GDP growth. The sustained rally in domestic and global demand and receding concerns about the pandemic also catalyzed the momentum of economic activity during FY22. The country

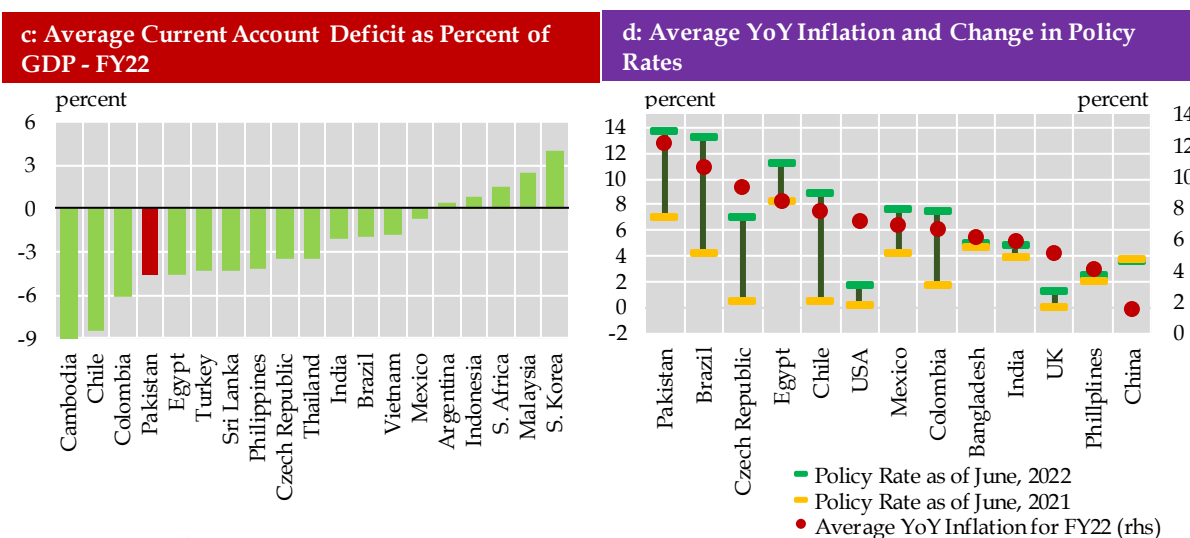
Commodity Price Shock Dominated Global Macroeconomic Dynamics in FY22

Figure 1.1



Source: Pakistan Bureau of Statistics and Haver Analytics

Source: International Monetary Fund

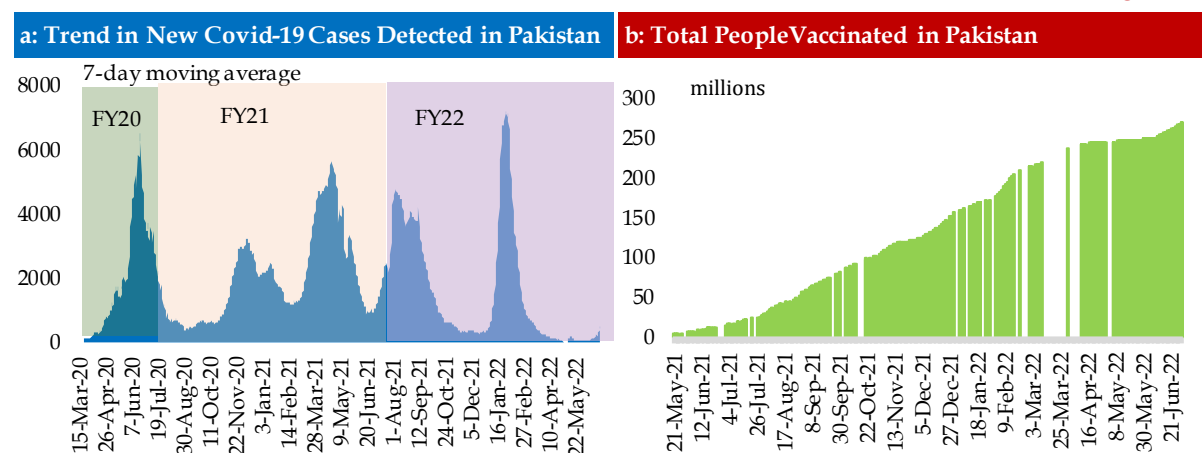


Source: Haver Analytics

Source: Haver Analytics, CBRates.com

COVID-19 Cases and Innoculation in Pakistan

Figure 1.2



Source: [ouworldindata.org](https://data.ouworldindata.org)

witnessed two waves of the pandemic (Delta and Omicron) during FY22. However, with the increased pace of inoculation and lowering severity of the infection, the pandemic did not obstruct economic activities during FY22 (Figure 1.2).

The GDP growth was broad-based with a prominent contribution of LSM and wholesale and retail trade; whereas agriculture also saw a notable increase. LSM presented an upbeat performance as 19 out of 22 sectors showed YoY increase, with major contributions from wearing apparel, sugar, automobiles, and pharmaceuticals. The increase in exports was mainly responsible for the expansion in wearing apparel that alone added about one-third to LSM growth in FY22. The sector benefitted from the post-pandemic revival of global demand, as the volume of ready-made garments exports rose sharply during FY22. To help the sector capitalize on elevated demand, the government provided a number of incentives for the sector, such as tax and duty relief on the import of raw materials, energy subsidies and faster payment of tax refunds. In addition, depreciation of PKR and increased international price of cotton also buoyed sector's profitability. Although, the increase in domestic cotton prices inflated the input costs, the gains from rising export unit values helped to neutralize this impact. In addition to the export thrust, sugar, automobiles and pharmaceuticals also demonstrated strong performance buoyed by high domestic demand.

The agriculture sector showed a strong growth during FY22 mainly because of improved performance of livestock and, on the back of favorable weather conditions, a sizeable increase in the production of all *Kharif* crops. In the case of cotton, large yield gains solely contributed to the expansion in production, as farmers continued to switch area to more profitable crops of rice, maize and sugarcane. Specifically, given a steady demand from poultry and livestock feed industry, availability of high yielding seeds and competitive prices, maize production is witnessing a consistent increase for the past many years, and had the highest contribution in GDP growth during FY22, within important crops. Similarly, elevated export demand motivated farmers to increase the area under rice cultivation; whereas higher procurement prices encouraged expansion in area under sugarcane. The production of wheat, a main *Rabi* crop, however declined during FY22, amid lower availability of water and fertilizer. The strong upturn in commodity producing sectors translated to a sustained expansion in wholesale and retail trade services for a second consecutive year.

In FY22, the impact of accommodative policies contributed to higher than planned growth in the economy. Together with the rapid rise in global commodity prices, this overheating of the economy posed risks to the country's macroeconomic stability. First, the commodity price rebound in conjunction with the continued pace of economic activity led to a

large increase in the import bill in FY22 that significantly outpaced the expansion in exports. Second, the external account pressures gave way to a substantial depreciation in the PKR, which further intensified inflationary pressures during the year. Third, the fiscal outcome was also affected. While the sharp pickup in imports boosted tax collection, a broad-based increase in fuel subsidies led to the deterioration of fiscal performance during the year. Fourth, rising interest rates during the year increased domestic debt servicing requirements amid increasing reliance on floating debt.

The combination of strong demand and commodity price increase placed considerable pressure on the country's external account in FY22. Central to this deterioration were imports, which surged by a marked 32.9 percent YoY during FY22. A large part of this increase came from rising prices of energy products (**Figure 1.3a**). Most of the expansion was observed during the first half as the persistent momentum of economic activity and the need to import Covid vaccines spurred import demand for both energy and non-energy products. The increase in global commodity prices became more intense with the emergence of a fresh Covid wave in China towards the end of H1-FY22 and the outbreak of the Russia-Ukraine conflict in February 2022 that caused additional disruptions in supply chains. Hence, the upsurge in commodity prices kept imports at an elevated level despite a visible slowdown in import demand (**Figure 1.3b**).

On the other hand, there was a substantial growth in earnings from both exports of goods and services and workers' remittances. Exports witnessed a pronounced 26.6 percent YoY broad-based increase and crossed the US\$ 30 billion mark for the first time. Among other factors, depreciation of PKR has also helped in improving export growth. Textile exports had a notable share in this increase, as the sector benefitted from elevated prices of cotton and its products in the international market. Higher export unit prices of textile products contributed about two-thirds to the entire increase in export earnings in FY22 (**Figure 1.3a**). The sector also enjoyed policy support in

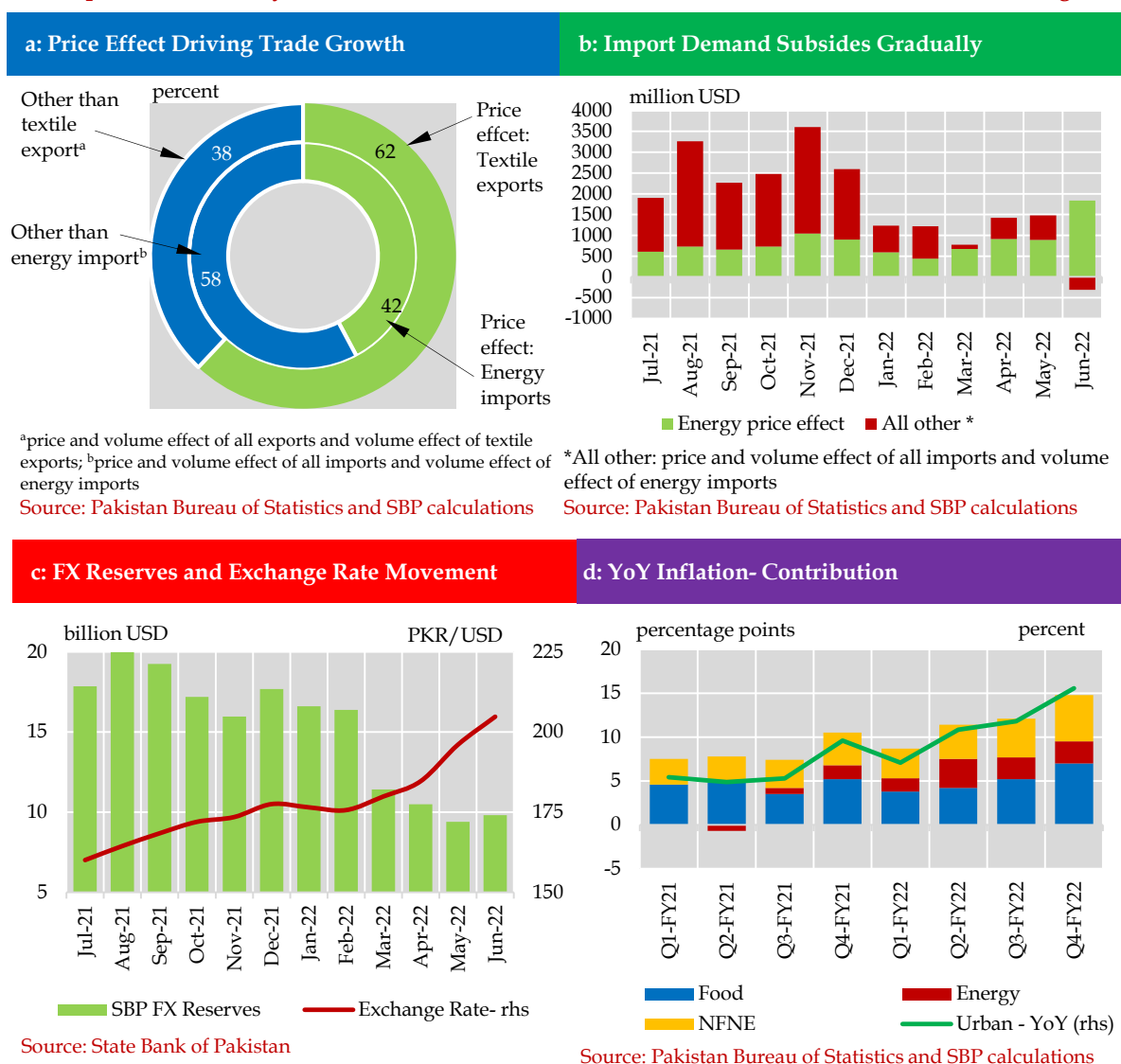
the form of energy subsidies, tariff rationalization for key textile imports, higher sales tax and customs duty refunds, and subsidized lending through refinance schemes, including TERF, that helped in maximizing gains from recovery in global demand.

Non-textile exports also remained strong, with rising volumes contributing one-tenth in the total expansion in exports during FY22. In addition to some traditional categories such as rice, some non-traditional exports such as sesame seeds; maize (corn); and refined copper also grew significantly. Improved production of agriculture commodities, duty-free access to China and increased demand in the international market were the main drivers of this increase. Similarly, inflows from workers' remittances remained above US\$ 2 billion per month, rising by 6.2 percent in FY22. However, this increase in foreign exchange inflows was not adequate to meet the growing financing requirements.

In addition to the deterioration in trade deficit, interest payments on external debt also edged up during FY22. The expiry of Debt Servicing Suspension Initiative (DSSI) in December 2021, increasing stock of external debt, and rising global interest rates were mainly responsible for the increase that further widened the CAD to a four-year high level. On the financing side, net inflow of FX loans and liabilities rose to US\$ 12.1 billion in FY22, compared to US\$ 5.7 billion in FY21. The largest increase was from bilateral sources, mainly Saudi Arabia and China. The country also received loan inflows from multilateral creditors, and the IMF released a tranche of US\$ 1.1 billion in February 2022 after the completion of the 6th Extended Fund Facility (EFF) review. This was in addition to the US\$ 2.8 billion inflows under the IMF global SDR allocation in August 2021 for Covid management. The government also mobilized US\$ 2 billion through sovereign bonds during the year. However, delay in the resumption of the IMF program and political instability led to significantly lower than planned external inflows. FDI flows showed a sluggish increase; whereas, portfolio investment witnessed net outflows from equity securities during the year. In overall

The Impact of Commodity Price Shock on Pakistan's Macroeconomic Performance

Figure 1.3



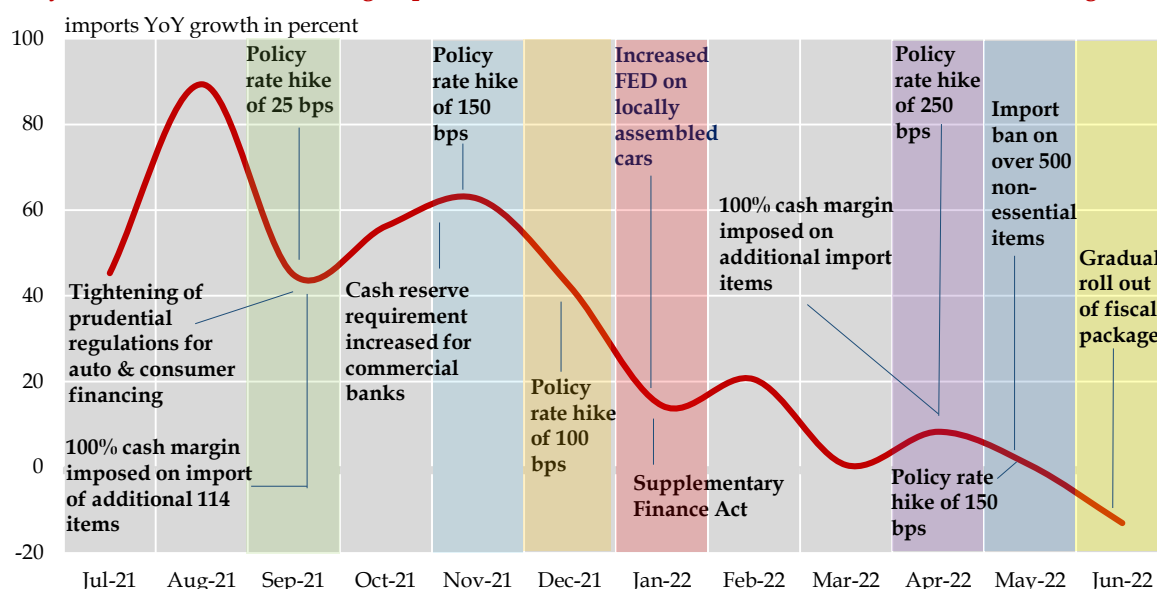
terms, net financial inflows were not adequate to meet the rising financing requirements, leading to a US\$ 7.5 billion drawdown of SBP's liquid FX reserves during FY22 (**Figure 1.3c**). With the mounting pressures in the external account, the PKR depreciated by 23.1 percent during FY22.

The depreciation in PKR magnified the combined effect of elevated domestic demand and the global commodity price increase during the year. NCPI inflation reached the double-digit level of 12.2 percent in FY22, exceeding the SBP's revised projection of 9-11 percent. Inflation in the non-food-non-energy (NFNE) group also swelled during FY22, indicating both demand and cost push

pressures. Following the surge in global commodity prices, NCPI inflation escalated during the second half (**Figure 1.3d**). Food group, particularly the non-perishable category was the major source of inflation. Persistent increase in global food prices of imported commodities (such as palm oil and tea), alongside the supply-demand gaps in some commodities (in particular, milk and meat), spurred inflationary pressures in this group, and contributed one-third in overall inflation during FY22. On the other hand, supply shortages of some perishable categories such as tomatoes, fresh fruits and vegetables fanned food inflation during the second half of FY22.

Policy Efforts Aided in Containing Import Growth in FY22

Figure 1.4



Sources: State Bank of Pakistan, Pakistan Bureau of Statistics and Ministry of Finance

Fuel inflation also remained at an elevated level during the year. This was despite the tax relief provided to protect households from the effect of the global price surge for the most part of the year. With the outbreak of the Russia-Ukraine conflict, fuel prices came under further pressure from Q3-FY22 onwards. The government ramped up the volume of fuel subsidies, under the relief package announced in February 2022. However, the strain on the external account necessitated withdrawal of this policy support from end-May 2022. After the elimination of energy subsidies, fuel inflation spiked to 58.5 percent in Q4-FY22.

The non-budgeted energy subsidies and circular debt payments inflated the current expenditures above the last year level by a large margin, widening the fiscal and primary deficit during FY22. This unanticipated change in the policy mix of the last two years, which had been characterized by fiscal prudence together with monetary support, contributed to macroeconomic imbalances. The expansion in current spending pared the fiscal space for federal development spending during the year. Revenues, however, posted a healthy performance. Tax collection at both federal and provincial levels edged up. FBR taxes achieved a six-year high growth and slightly exceeded the upward revised budget estimate for the year. The major impetus came

from import related taxes that constituted more than two-third in overall FBR tax collection in FY22. These gains mainly emerged from the upturn in international prices, and PKR depreciation. In addition, policy efforts to broaden the tax base through removal of exemptions, administrative reforms and imposition of new taxes also contributed to growth in tax collection. Similarly, amid the pickup in domestic demand and tax policy efforts, provincial tax collection remained upbeat during FY22. The notable increase in the collection of the provincial revenues and an increase in receipts under federal divisible pool provided a significant boost to provincial development spending during the year. However, in overall terms, a lackluster performance of non-tax revenues partly neutralized the impact of the sizeable increase in tax collection. The drag mainly came from lower collection of petroleum development levy (PDL) and partial transfer of SBP profits due to change in transfer mechanism, under the amendment in SBP Act. According to the new mechanism, SBP profits will be transferred to the government on annual basis after the finalization of financial statements at the end of the financial year. Hence, the transfer of SBP profits halted after the passage of the Act in January 2022, leading to a decline in transfer of SBP's profits to the government during FY22.

In line with the widening imbalances in the external and fiscal account, public debt burden increased during FY22. In terms of composition, both external and domestic debt contributed to the accumulation of public debt during the year. Although the maturity profile of public debt continued to improve in FY22, the increasing reliance on floating rate debt securities magnified the interest rate risk, in an increasing rate environment. The rising burden of debt servicing, taints future debt repayment capacity of the country and squeezes fiscal space for other expenditures like development spending. Although the availability of debt relief under DSSI and an import led increase in taxes has propped up servicing ability in FY22, the durability of these gains requires strong commitment to fiscal consolidation.

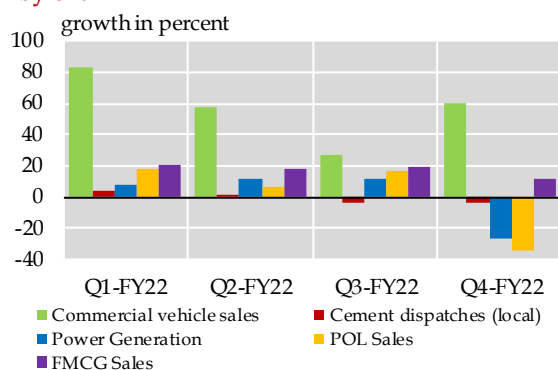
The government's reliance on the banking system to meet the deficit financing requirements contributed to a sharp growth in the net domestic assets (NDA) of the banking system. In accordance with the amendment in SBP Act, the government did not borrow from SBP and mainly relied on commercial banks for financing the deficit. Similarly, with the continued upsurge in economic activity and rising input costs, the credit requirements of the private sector spiked in FY22 both for short-term financing and fixed investment, adding further impetus to NDA. At the same time, the marked deterioration in the external account and ensuing contraction in net foreign assets (NFA) contained the growth in the money supply during FY22. The overall financial market conditions remained challenging during FY22, as the deviation of overnight rates from the policy rate increased progressively during the year. The gulf between market expectations of rate hikes and SBP policy stance amid rising inflationary pressures; soaring budgetary borrowing needs of the government; and greater demand for credit from the private sector mainly drove the increase in money market spreads during FY22.

In effect, the rising macroeconomic challenges during the year demanded a policy response. Therefore, the government and the SBP undertook various corrective measures to curb

the pace of domestic demand as the year progressed. These included: (i) raising the policy rate by a cumulative 675 bps; (ii) tightening the prudential regulations for auto and consumer financing; (iii) imposition of 100 percent cash margin requirements (CMR) on a number of import items; (iv) increasing the cash reserve requirement (CRR) for commercial banks; (v) increasing FED on locally assembled cars; (vi) elimination of various tax exemptions under the Supplementary Finance Act; (vii) imposition of ban on import of non-essential items; and (viii) gradual roll back of fiscal package. These measures succeeded in arresting the pace of growth in imports (**Figure 1.4**). High frequency demand indicators including cement dispatches and sales of petroleum products, also started to moderate towards the end of FY22 (**Figure 1.5**). However, the outlook for inflation and CAD continued to deteriorate.

The experience from FY22 brings to fore once again the need to address the country's structural weaknesses. Conforming to the boom-bust nature of the country's growth trajectory, the current episode of rapid growth also morphed into the familiar Balance of Payments (BoP) stress. A narrow base of the country's foreign exchange earnings and meagre inflows of foreign investment amid lower than expected official inflows, contributed to a sharp drawdown of SBP's liquid FX reserves. This deterioration eclipsed a substantial expansion in the country's export of goods and services during the year; such as, exports of information, communication and technology (ICT) services, which have doubled in the last four years.

Given the low sophistication level of Pakistan's manufacturing sector, a large share of the country's merchandise exports comprise low value added products. Transforming the structure of industry to a high technology intensive sector requires a voluminous increase in investment in physical and human resources for a sustained period. The rising share of young population in Pakistan also provides an opportunity to reap the demographic dividend. However, the realization of these gains requires a conducive,

Domestic Demand Loses Steam by end-FY22***Figure 1.5**

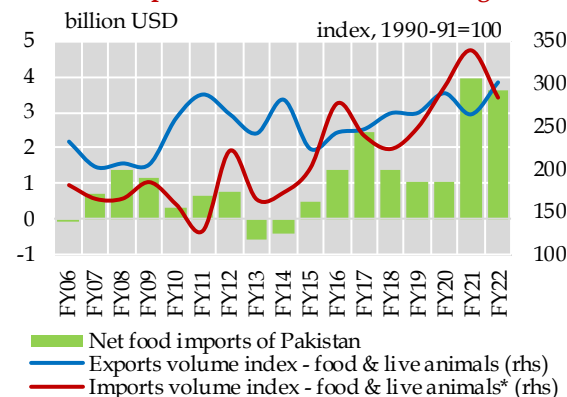
*cement dispatches in 000 tons, power generation in Gwh
POL sales in 000 MT, FMCG sales is million Rs

Sources: APCMA, PAMA, OCAC, NEPRA, Corporate reports (various issues)

nurturing environment. In this regard, the special chapter in this report sheds light on understanding the potential of demographic dividend in Pakistan. It outlines policies required to capitalize on the demographic window and harness benefits of a favorable age structure. The chapter suggests that investment to improve quality of human capital, good governance, alongside an enabling macroeconomic environment that ensures high savings and investments, pro-industrial policies, and efficient markets are some key requirements to yield gains from the demographic window.

Similarly, a concerted approach to encourage increased localization of the manufacturing base would be a viable option to relieve strains on the country's meagre foreign exchange earnings. There is also a need to curtail reliance on energy imports that constituted around one-quarter of the entire import bill on an average during FY20-22. This would require policy focus aiming at lowering the energy intensity of the economy by ensuring energy efficiency and conservation. Furthermore, in view of Pakistan's high dependence on fossil fuels, there is a need to move towards power generation through renewable resources that is self-sufficient, cost efficient and economically viable.

Food imports are another significant drag on the country's foreign exchange earnings. With the exception of a few years, Pakistan has mostly remained a net importer of food

Net Food Imports of Pakistan**Figure 1.6**

*also includes vegetable/animal oils & fats

Source: Pakistan Bureau of Statistics

commodities (Figure 1.6). Amid the growing challenges of climate change, the inadequate food security situation in Pakistan is a source of alarm. The increasing pace of climate change may lead to variation in rainfall pattern and recurrent flooding or droughts in the coming years. The unpredictability of weather pattern has serious repercussions for agriculture sector of Pakistan. In this background, there is an urgent need to formulate a well-thought-out strategy to meet the rising challenge of climate change. In particular, priority should be given to Research & Development in the seed development sector to produce new varieties of seeds that are suitable to varying weather conditions and to devise a policy framework that emphasizes water management strategies to increase agricultural productivity.

1.2 The Economic Outlook

Pakistan's economic growth is expected to moderate considerably during FY23. As suggested by the tapering sales of high frequency demand indicators, the demand compression measures introduced by the government and the SBP have started to cool down the overheated economy in the initial months of FY23. The economy was already in a stabilization phase, when wide scale flooding hit a large part of the country in the start of FY23.

The flooding in FY23 is likely to impinge on the country's real economic activity through various channels. Specifically, the losses in

agriculture emerging from the damages to crops and livestock are likely to transmit to the rest of the economy through various backward and forward linkages. Similarly, the wide scale destruction of infrastructure in the affected provinces may also undermine the country's growth prospects during the year.

On the other hand, continuing the policy efforts to arrest demand pressures, the government and the SBP announced further corrective measures in the ongoing year. These included: (i) temporarily halting fresh disbursements under the schemes of Mera Pakistan Mera Ghar (MPMG) and Kamyab Jawan Youth Entrepreneurship for revisiting it later (KJYE); (ii) imposition of additional import duties on various categories including steel, food preparations and transport; (iii) restoration of fuel taxation; (iv) introduction of temporary restrictions on certain imports; (v) a further 125 bps increase in policy rate in July 2022; and (vi) linking markup rates on EFS and LTFF loans with policy rate. These measures, together with the lagged impact of 675 bps hike in policy rate and other demand management measures announced in FY22, and the government decision to unwind the fiscal package for fuel and electricity subsidies towards the end of FY22 are likely to slow the momentum of economic activity during FY23. Taking into account the destruction caused by floods and the policy focus on stabilization, the SBP projects real GDP growth below the previously announced range of 3 – 4 percent for FY23.

The NCPI inflation is expected to rise above the previously announced range of 18-20 percent during FY23. Supply shocks in the form of the roll back of energy subsidies and resumption of fuel taxation and losses to agriculture produce caused by floods are likely to influence the inflation trajectory during the year. The elimination of subsidies and increase in fuel taxation triggered a sharp increase in inflation since June 2022, and the trend is likely to persist in FY23. Similarly, the supply shortages of perishable food commodities stemming from floods is expected to add further stimulus to prices. On the other hand, the stabilization policies introduced since last year and flood induced

losses to incomes may suppress the magnitude of demand-pull inflation during the year.

The government has targeted to reduce the fiscal deficit to 4.9 percent of GDP in FY23 from 7.9 percent in FY22. This outcome would be achieved through both revenue and expenditure measures. Widening of tax base through elimination of exemptions, increase in tax rates and reinstatement of fuel taxes are expected to boost tax receipts during FY23. The non-tax revenues will also recover with the re-imposition of PDL. On the expenditure side, the rationalization of subsidies is likely to keep current spending under check. However, the government has envisaged an increase in social protection grants under BISP, because of increase in the amount of stipend and extension in the coverage of beneficiaries. Similarly, the relief and rehabilitation efforts in flood affected regions may also raise spending needs during the year. The containment in the pace of non-priority current spending and increase in revenue collection may provide fiscal space to expand the volume of development spending during FY23.

The coordinated fiscal and monetary policy stance is likely to reduce external account pressures in FY23. The SBP projects CAD to fall below last year's level of 4.6 percent of GDP in FY23. This improvement would be driven by a sizeable contraction in import growth. As evident from the YoY declines in imports since July 2022, a range of demand compression measures introduced since last year, have succeeded in trimming the growth momentum of imports. Likewise, global commodity prices have also started to soften after reaching multiyear peaks in FY22, which will reduce the pressure caused by a large price impact.

However, the losses to agriculture produce, induced by the recent floods, is likely to step up import of agriculture commodities, particularly cotton. On the other hand, the slowdown in global demand may also weaken the growth in exports during FY23 and policy tightening in advanced economies would dampen the prospects of capital flows to emerging and developing economies. The

workers' remittances after witnessing a spike in FY21 appear to have plateaued in FY22 and are likely to remain at around the similar level in FY23. The windfall gain from oil price in GCC countries offers an upside risk to this projection. Moreover, with the resumption of the IMF program, the outlook of financial

account has also improved. Alongside the IMF program disbursements, the country is expected to receive external financing from multilateral and bilateral creditors that will considerably strengthen FX reserves position during FY23.

Chapter 2

Economic Growth

Pakistan's economy further consolidated the gains from a year earlier as it grew by 6.0 percent in FY22, compared to a 5.7 percent growth in FY21. In the agriculture sector, record production of rice, sugarcane and maize, coupled with improved output of cotton crop more than offset the decline in wheat production during FY22. The growth in industrial sector was largely driven by LSM. Whereas, the expansion in LSM was on the back of increase in development spending, tax relief for multiple sectors in the FY22 budget, and continuation of accommodative monetary policy in the first few months of FY22. An increase in private investment and public development spending resulted in pick-up in the construction sector; while, the electricity, gas, and water supply sectors also grew at a faster pace. Increased activity in the commodity producing sector has positive spillover effects on the services sector. Growth in services was led by the wholesale and retail, with a notable contribution from information and telecommunication. Labor market remained stable during FY22. More industrial workers were hired in both Punjab and Sindh. The wages in the services and construction sectors continued to grow during the period, albeit less than the overall inflation rate. However, towards the year-end, the SBP's Business Confidence Survey (SBP-BCS) and SBP's Consumer Confidence Survey (SBP-CCS) showed deterioration in employment prospects.

2 Economic Growth

2.1 GDP Growth

For the second year running, Pakistan's economy recorded an impressive growth in FY22, after going through a relatively mild Covid-induced contraction of FY20. The contribution came from all three major sectors of the economy. Barring wheat, almost all major and minor crops showed notable growth compared to last year. Supported by the commodity producing sector, services sector contributed more than half to overall growth.

A conducive policy environment played an important role in accelerating economic growth in the early part of FY22 as well. Fiscal and monetary policy stimulus were instrumental in driving growth especially during H1-FY22. Moreover, the economic activities remained broadly insulated from the two further waves of the Covid pandemic during FY22. However, as current account deficit started to widen, the policy environment was tightened as part of structural adjustment program. Overall, the impact of expansionary policies in the early part of FY22 was broad based and more than offset the tapering off of activities in some sectors in the later part of FY22.

GDP growth clocked in at 6.0 percent in FY22, compared to 5.7 percent in FY21 (**Table 2.1 and Figure 2.1**). In terms of sectoral breakdown, the agriculture sector expanded by 4.4 percent in FY22 against 3.5 percent growth last year. Crop and livestock sub-sectors contributed positively to agriculture sector growth during FY22. Record production

of rice, maize and sugarcane crops and increase in cotton output during FY22 more than offset for the decline in wheat output. Livestock continued to perform well and contributed to half the growth in agriculture value addition.

The industrial sector grew by 7.2 percent during FY22, compared to 7.8 percent last year. Notwithstanding a decline in mining and quarrying activities, the contribution to GDP of the industrial sector as a whole was close to last year. In particular, large-scale manufacturing (LSM) remained upbeat for most of the year, with wearing apparel, food, and automobile sectors making significant contributions to growth. An increase in development spending during FY22, tax relief for multiple sectors such as export-oriented industries, automobiles and construction coupled with accommodative monetary policy, including lagged impact of the concessionary financing schemes offered by the SBP, supported the manufacturing activities.

Within the services sector, expansion in the wholesale and retail segment had a positive impact on the overall economic performance. The share of wholesale and retail sector, rose to 18.8 percent in FY22 compared to 18.1 percent last year. Increase in the activities in the commodity producing sector coupled with the rise in imports had a positive impact on the output of this sub-sector.

There was also a notable improvement in the transport & storage, information and communication and education sectors.

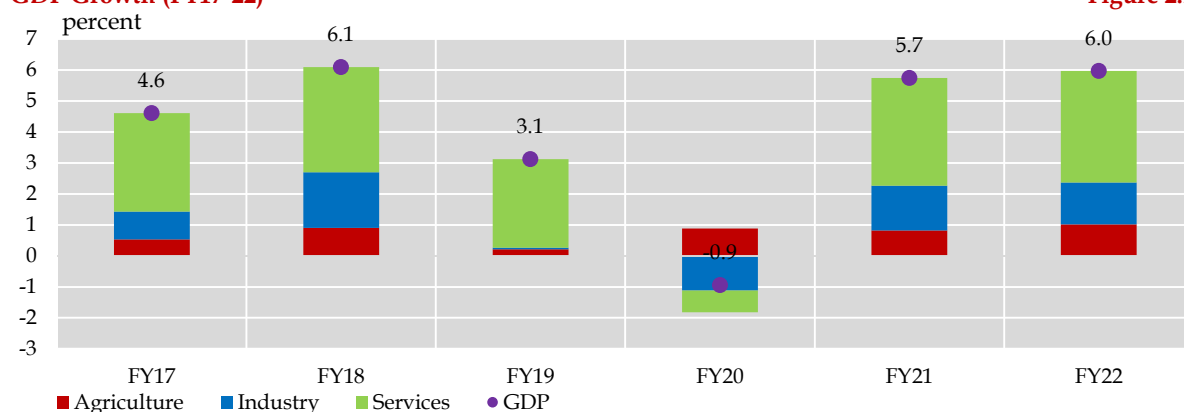
Growth, Contribution to GDP Growth and Sectoral Share

Table 2.1

	Growth		Contribution to GDP Growth		Sectoral Share	
	FY21 ^R	FY22 ^P	FY21 ^R	FY22 ^P	FY21 ^R	FY22 ^P
Agriculture	3.5	4.4	0.8	1.0	23.0	22.7
Industry	7.8	7.2	1.5	1.4	18.9	19.1
Services	6.0	6.2	3.5	3.6	58.1	50.2
GDP Growth Rate	5.7	6.0				

P: Provisional, R: Revised

Source: Pakistan Economic Survey 2021-2022

GDP Growth (FY17-22)**Figure 2.1**

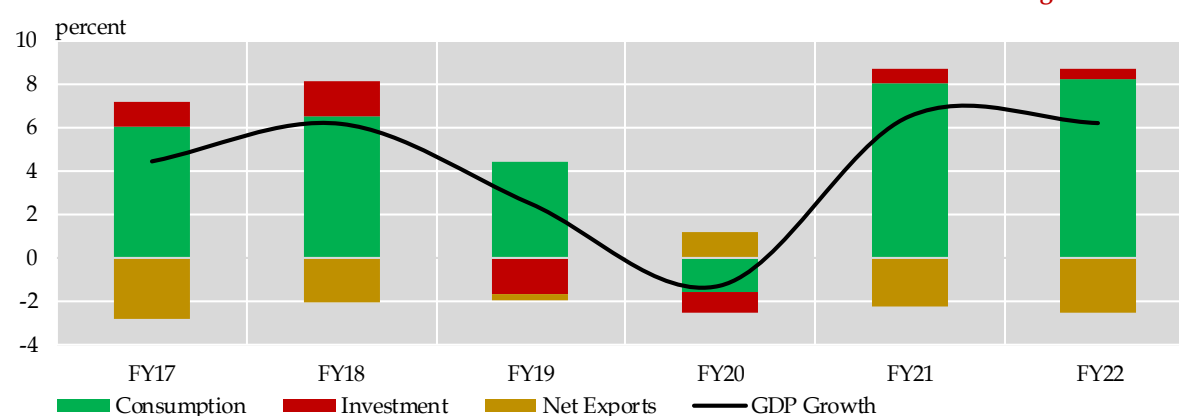
Source: Pakistan Bureau of Statistics

Increase in economic activity led to expansion in transport sector activities and information and communication sector.

Meanwhile in the labor market, employment as gauged by number of industrial workers in Sindh and Punjab, remained stable. The improvement in the market was more visible at the start of the year when several sectors were hiring but as the year progressed, it slowed down. The IBA-SBP confidence surveys showed optimism in H1-FY22, however, the optimism subsided largely owing to demand contraction policies coupled with geopolitical uncertainties. The wages continued to grow; however, the growth in wages was lower than inflation rate.

From the expenditure side, GDP growth was driven almost entirely by consumption with minimal contribution coming from the investments. (Figure 2.2 & Table 2.2). This lack of investments does not compare well with cross country analysis.¹ Additionally, Net exports continue to drag economic growth with a contribution of negative 2.5 percent

Private consumption was the main driver of growth whereas the share of government expenditure remained stagnant during the year. The increase in consumption coupled with stagnancy in investment is a cause for concern as it entails the use of foreign savings to finance consumption and investment in the form of Net Exports.

Contribution to GDP Growth**Figure 2.2**

Source: Pakistan Bureau of Statistics

¹ For recent cross-country analysis on investment, see Box 2.1 of the SBP's FY21 Annual Report on the State of Pakistan's Economy.

Composition of Aggregate Demand²

Table 2.2

	As percent of GDP		Growth Rates		Point Contribution	
	2021	2022	2021	2022	2021	2022
Total consumption	94.3	96.2	8.4	8.5	8.1	8.3
Total investment	14.6	15.1	4.7	2.9	0.7	0.4
Net exports	-8.9	-11.4	0.2	0.2	-2.2	-2.5

Source: Pakistan Economic Survey 2021-2022

Investment at market prices increased by 24.1 percent during FY22 compared to an increase of 16.0 percent last year. Credit extension through SBP's concessionary financing schemes (LTFF and TERF) played an important role in this growth. Nonetheless, the investment to GDP ratio still remained below the level observed in regional economies (Figure 2.3). Lack of investments and increased reliance on consumption for economic growth made the country vulnerable to external sector shocks. Therefore, structural reforms that generate greater domestic savings, and channel the same into productive investments, remain imperative to provide a sound base for sustainable economic growth in Pakistan.

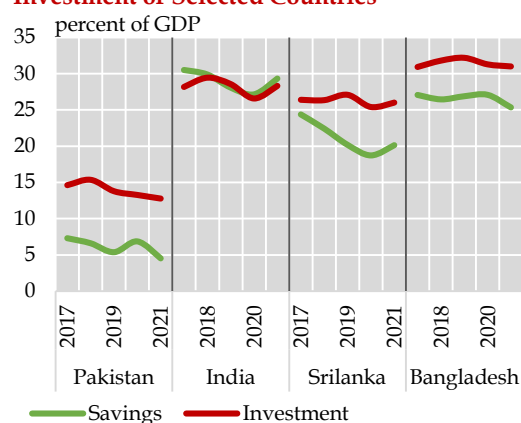
2.2 Agriculture

Agriculture sector growth of 4.4 percent in FY22 was not only more than 3.5 percent seen in FY21, (Table 2.3) it also surpassed the targeted growth of 3.5 percent. This was largely due to a considerable increase in the output of important crops and the growth in livestock sector.

Within the crop sector, production of important crops increased by 7.2 percent. Sugarcane, rice and maize exceeded their targets; whereas, wheat fell short of meeting its target by 2.6 million tons. Cotton, despite higher production than FY21, missed its target by 2.2 million bales. Production of important crops grew mainly because of an increase in area under cultivation and favorable weather conditions especially during the *Kharif* season. In contrast, the *Rabi* season was adversely affected by lower input availability and adverse weather conditions, which affected

Gross Domestic Savings and Investment of Selected Countries

Figure 2.3



Source: World Bank

wheat production. Overall, the increase in crop sector production in the *Kharif* season contributed the most to the sector's performance in FY22.

The contrast in performance between *Kharif* and *Rabi* crops can partly be attributed to input availability. Water availability in *Kharif* was almost the same as last year. However, it remained below average in *Rabi* season. Fertilizer offtake also remained lower than last year, especially in the *Rabi* season, when the global prices surged significantly and domestic gas shortages emerged in the winter season. Whereas, the overall credit availability improved as compared to last year.

The agriculture sector has been growing at a steady rate during the past few years – on average around 3.9 percent per annum in the last 3 years. The performance of the crop sector is even more impressive, which has grown at 6.3 percent during the same period. Despite this performance, the country had to import food products worth US\$ 9.0 billion

² The mismatch in growth between expenditure-based GDP and gross-value-added GDP is due to treatment of financial intermediation services indirectly measured (FISIM) and product taxes (minus subsidies). Available at: www.ecb.europa.eu/pub/pdf/other/mb200312_focus06.en.pdf

Agriculture Sector Growth and its Contribution in GDP Growth**Table 2.3**

	Sectoral Share		Growth		Contribution to GDP Growth	
	FY21	FY22 ^P	FY21	FY22 ^P	FY21	FY22 ^P
Agriculture	23.0	22.7	3.5	4.4	0.8	1.0
Crops	7.1	7.8	6	6.6	0.5	0.5
Important Crops	4.4	4.4	5.8	7.2	0.3	0.3
Other Crops	3.2	3.1	8.3	5.4	0.3	0.2
Cotton Ginning	0.3	0.3	-13.1	9.2	0.0	0.0
Livestock	14.4	14.0	2.4	3.3	0.4	0.5
Forestry	0.5	0.5	-0.5	6.1	0.0	0.0
Fishing	0.3	0.3	0.7	0.3	0.0	0.0

P: Provisional

Source: Pakistan Bureau of Statistics

while exports amounted to US\$ 5.4 billion during FY22 – causing a trade deficit of US\$ 3.6 billion in net food exports. There is a growing cause for concern for food security in Pakistan as it had to import wheat, a staple food, in significant volume for the second year

running. The country may face increased risks to its food security in the wake of growing population and global warming. **Box 2.1** explores the likely impact of climate change on Pakistan's food security.

Box 2.1: Food Security under Climate Change in Pakistan

As the world grapples with rising global temperature, changing rainfall patterns and extreme weather events, the spillover of climate change to food security in regions such as Pakistan is becoming a source of concern for various reasons. While the policymakers have traditionally relied on price intervention and input subsidies to ensure Pakistan is food-secure, the challenges to food security will intensify under climate change from floods, low productivity, poor infrastructure, among other factors.³ Pakistan is the 8th most affected country by climate change due to rising global temperatures – losing around 0.5 percent of GDP in 173 climate-related catastrophes from 2000-2019.⁴ In the worst-case scenario, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) estimates average annual losses in Pakistan can be up to 9.1 percent of GDP, which would be the highest in South-Asia.⁵ (**Figure 2.1.1**)

Due to these vulnerabilities, the impact of climate change on food security needs to be evaluated in Pakistan, which would facilitate the policymakers to adapt, or mitigate these risks. Ensuring food security in Pakistan is primarily linked to wheat – the staple food. Availability and stability in prices of the wheat crop is of critical importance due to its wide-ranging impact, especially on the most vulnerable segment of the society. Increasing temperatures will significantly increase the risks to Pakistan's food security since 77.5 percent of the agricultural production takes place in arid regions where temperatures are likely to increase more than in other climatic zones (**Figure 2.1.2**).

There are multiple channels through which food security will come under stress in Pakistan: (1) Little room to expand area under cultivation (in particular for wheat) in the short to medium term under the prevailing technological constraints. (2) Availability of water in the *Rabi* season acting as a constraint in the canal-irrigated areas of Pakistan. (3) Land degradation due to imbalanced used of fertilizer and also waterlogging. (4) Despite improving wheat yield in Pakistan over the years (**Figure 2.1.3**), climate change is likely to slow down the progress in the future – for instance global wheat yields are likely to drop by 17 percent globally due to changing

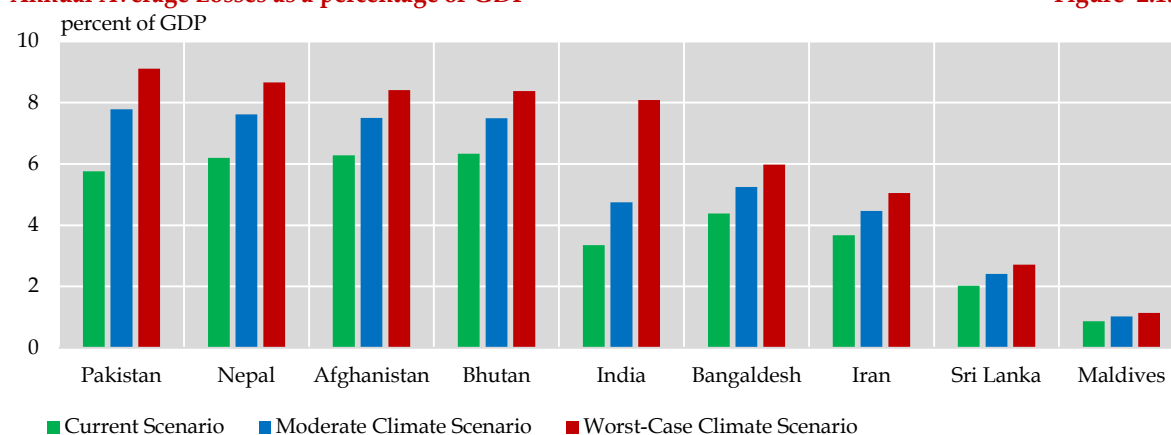
³ Chapter 5, Food Security, Special Report on Climate Change and Land, 2019, IPCC.

⁴ Source: The Long-Term Climate Index, 2019, Germanwatch

⁵ Source: Pathways to Adaptation and Resilience in South and South-West Asia – Subregional Report, 2022, ESCAP, United Nations. Available at: www.unescap.org/kp/2022/asia-pacific-disaster-report-2022-escap-subregions-pathways-adaptation-and-resilience-south

Annual Average Losses as a percentage of GDP

Figure 2.1.1



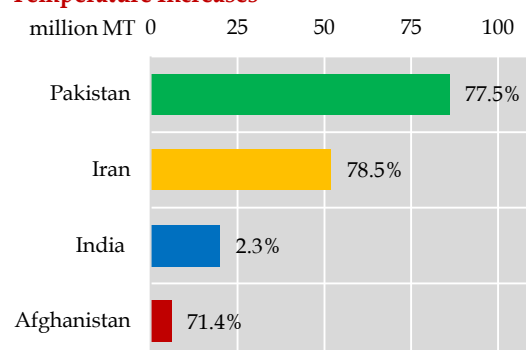
Source: United Nations Economic and Social Commission for Asia and the Pacific

weather patterns⁶. (5) Incessant population growth rate is posing resource availability challenges (6) Increased threat of locusts, especially in the rice-wheat farm systems.³

Climate change poses additional risks to these estimates that would increase the demand-supply gap. There are several policy options that can be considered to counter the threat of climate change to food security. There is a need to increase policy focus on introducing high-yielding varieties of wheat through research and development. Reducing some inefficient subsidies for input, such as water and gas, may help increase fiscal space. Imposition of carbon tax with border carbon adjustment will increase public revenues to fight climate change adversities. Food security in Pakistan has mostly focused on the availability of critical food items. Concentrating on other aspects of food security such as accessibility, utilization and stability may be more beneficial in the long run. This may lead to decreased reliance on wheat and shifting to more balanced diet that may, in turn, also reduce rate of malnourishment and stunted growth.

Agricultural Production Exposed to Aridity and Projected Temperature Increases

Figure 2.1.2



Source: United Nations Economic and Social Commission for Asia and the Pacific

Inputs

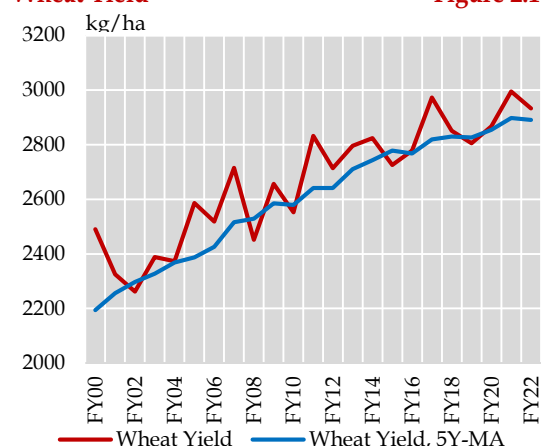
Fertilizer

Prices of fertilizer remained elevated, resulting in lower offtake

In terms of fertilizer usage, urea offtake remained higher than last year, whereas, the

Wheat Yield

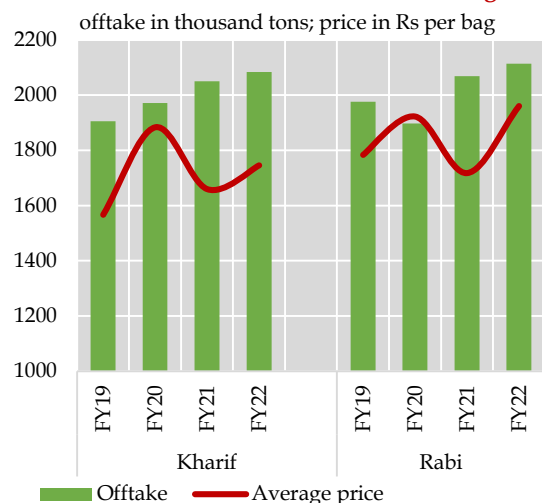
Figure 2.1.3



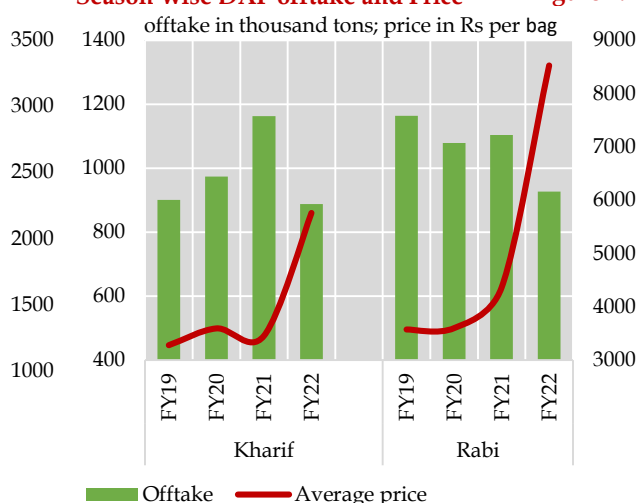
Source: Pakistan Bureau of Statistics Statistics

offtake of DAP contracted during *Kharif* season. Similarly, offtake of urea rose by 3.0 percent while the offtake of DAP contracted by 16 percent in *Rabi* FY22 (Figures 2.4a and 2.4b), compared to previous season. The decrease in the DAP offtake could be traced back to a significant rise in its price, during the *Rabi* season. Whereas, the global DAP price

⁶ J. Jägermeyr, C. Müller, A.C. Ruane et al. (2021), Climate impacts on global agriculture emerge earlier in new generation of climate and crop models. *Nat Food* 2, 873–885

Season-wise Urea Offtake and Price Figure 2.4a

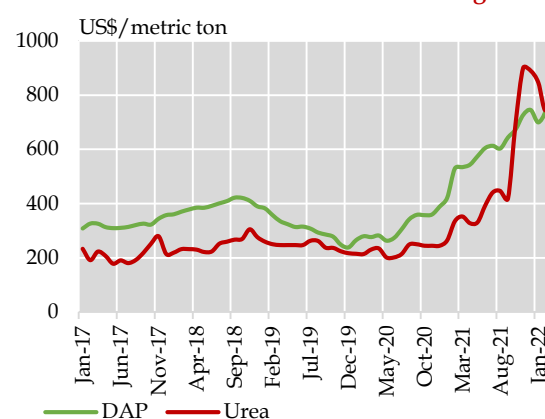
Source: National Fertilizer Development Centre

Season-wise DAP offtake and Price Figure 2.4b

Source: National Fertilizer Development Centre

had been increasing throughout FY22, the escalation was more pronounced at the onset of Russia-Ukraine conflict, which coincided with the *Rabi* season. Given that DAP is predominantly imported, the rise in global prices led to increase in domestic prices as well (Figures 2.4a, 2.4b & 2.5).⁷

With regards to urea application, supply side factors had initially affected its offtake during the sowing period. The suspension of urea production due to curtailment of gas supply during July-August 2021 had caused lower availability of fertilizer during the initial months of *Rabi* season.⁸ Later, the surge in the international urea prices created significant price differential between domestic and global markets which led to hoarding and smuggling of urea.^{9,10} Due to short supply, prices in the secondary market increased considerably.¹¹

Global Urea and DAP Prices Figure 2.5

Source: World Bank

Given these supply disruptions, the government allowed import of urea from China, through Trading Corporation of

⁷ Global prices of fertilizers are driven by surging energy costs, supply curtailments, and trade policies. Increase in the natural gas prices resulted in widespread production cutbacks in ammonia and escalating thermal coal prices in China led to a rationing of electricity use in some provinces and forced fertilizer factories to cut production. Moreover, China has announced the suspension of fertilizer exports to ensure domestic availability amid food security concerns. (Source: World Bank Group ; www.blogs.worldbank.org/opendata/soaring-fertilizer-prices-add-inflationary-pressures-and-food-security-concerns)

⁸ Specifically, the current *Rabi* season started with the opening inventory of 0.1 MMT as opposed to 0.5 MMT in the last year. (Source: MNFSR)

⁹ Punjab Government to Crackdown on Fertilizers' Hoarders, date Nov 11, 2021. Available at: www.punjab.gov.pk/node/4660

¹⁰ Source: 'Pakistan Customs, (FBR) foils an attempt of smuggling of urea fertilizers to Afghanistan worth Rs 7.2 million'. (www.fbr.gov.pk/pakistan-customs-fbr-foils-an-attempt-of-smuggling-of-urea-fertilizers-to-afghanistan-worth-rs-7/173311)

¹¹ According to market sources, the farmers were getting urea at Rs 2,200-2,600 against retention price of 1,725/bag for the manufacturers.

Agriculture Credit Disbursements**Table 2.4**

billion Rs

	FY20	FY21	FY22	Growth
1.Farm Sector (i+ii)	637.9	758.2	728.9	-3.9
i)Production	594.3	711.8	686.9	-3.5
All crops	215.3	458.9	374.7	-18.3
ii)Development	43.6	46.4	42.0	-9.5
Tractors	2.5	4.4	10.7	143.2
2.Non-Farm Sector(iii+iv)	576.8	607.7	690	13.5
iii)Working capital	538.9	552.5	620.3	12.3
Livestock/ dairy	279	319.7	349	9.2
Poultry	209.9	192.8	222.9	15.6
iv)Fixed Investment	37.9	55.1	69.7	26.5
Livestock/ dairy	14.5	22.7	41.2	81.5
Poultry	16.1	24.0	19.9	-17.1
Total Agriculture (1+2)	1214.7	1365.8	1418.9	3.9

Source: State Bank of Pakistan

Holding/Size-wise Agricultural Disbursement**Table 2.5**

billion Rs

Sectors	FY20	FY21	FY22	Growth
1.Farm Sector				
Subsistence Holding	180.6	226.0	269.0	19.0
Economic Holding	73.1	78.7	99.0	25.8
Above Economic Holding	384.2	453.5	359.0	-20.8
Sub Total	637.9	758.2	728.0	-4.0
2.Non-Farm Sector				
Small Farm	139.6	139.4	191.0	37.0
Large Farm	437.2	468.2	498.0	6.4
Sub Total	576.8	607.7	690.0	13.5
Total (1+2)	1,214.7	1,365.9	1,418.0	3.8

Source: State Bank of Pakistan

Pakistan (TCP).^{12,13} After easing of urea supply in the market, the offtake rose during February and March FY22, compared to FY21. The improvement offset the decline in offtake during the initial period of *Rabi* season.

Agriculture Credit Disbursements

In FY22, agriculture credit disbursements rose to Rs 14.2 billion, up from Rs 13.7 billion last year. Both production and development loans to the farm sector remained lower than last year (Table 2.4). The loans for tractors went up from Rs 4.4 billion to Rs 10.7 billion, as farmers benefitted from Kamyab Jawan Kamyab Kisan Tractor Loan Scheme launched by the government in January 2021.

Working capital and fixed capital disbursements to the livestock and dairy retained their momentum. The increase in the credit offtake can be attributed to higher input prices of feed and wages, which increased the borrowing needs of livestock and poultry sectors.

In contrast to farm sector credit, the credit offtake for non-farm sector grew by 13.5 percent during FY22. The livestock and poultry sectors were the main recipients of the credit

Looking at the composition of the lending, borrowers with small (subsistence) holdings saw an increase of around 19 percent; whereas, credit lent to borrowers with larger holding declined by almost 20 percent (Table 2.5). In the non-farm sector, borrowings of the small farm holders rose by almost 37 percent as small farmers benefitted from the crop and livestock insurance schemes.

There was a trend reversal in FY22 as previously it was the large land owners who had been the main recipient of credit. The large farmers were most likely in a better financial position to handle economic shocks compared to small growers. The former might have avoided further credit during FY22 as interest rates started to rise. Moreover, they may have utilized savings from higher agricultural income generated in FY21.

¹² Source: Press release dated January 05, 2022 (PR No. 680), Ministry of Finance, Government of Pakistan.

¹³ Pakistan imported 100,000 tons of urea during February and March 2022. (Source: MNFSR)

Rainfall during FY22

Table 2.6

	Q1-FY22	Q2-FY22	Q3-FY22
	Monsoon	Post-monsoon	Winter Rainfall
Normal*	140.9	26.4	74.3
Actual	125	23.5	72.7
Excess**	-15.9	-2.9	-1.6
In percentage terms	-11.3	-11.2	-2.2

* The normal level is defined as period average from 1961-2010 (in millimetres)

** The minus sign represents a shortage compared to 'normal'

Source: Pakistan Meteorological Department

Water

Average surface water availability remained lower than last year

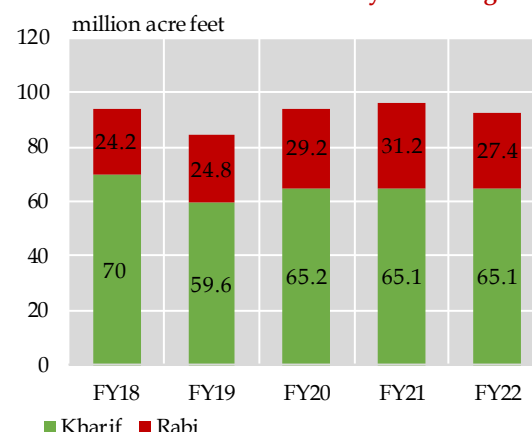
In terms of water input, surface water availability for this year was 4 percent lower than last year and 10 percent lower than the average system usage.¹⁴

During the initial months of FY22, water availability for *Kharif* season remained low, but the situation improved towards the end of the season. Overall, water availability for the season remained at the same level as last year. The surface water availability remained challenging during *Rabi* FY22. The country witnessed inflows of 27.4 million acre feet (MAF) during FY22, showing a decline of 12.3 percent compared to the previous year. In addition, overall rim-station inflows during current *Rabi* season remained 7 percent below Indus River System Authority's (IRSA) estimates.¹⁵ Furthermore, the irrigation water releases were also lower than the long-term average (Figure 2.6).

In terms of rainfall, *Kharif* season began with a dry spell but the situation improved in the later months. Overall, rainfall remained below average for most part of the season (Table 2.6) Lower rainfall and slower melting of ice may have resulted in lesser irrigation water availability during the review period.

Actual Surface Water Availability

Figure 2.6



Source: Indus River System Authority

Output

Cotton

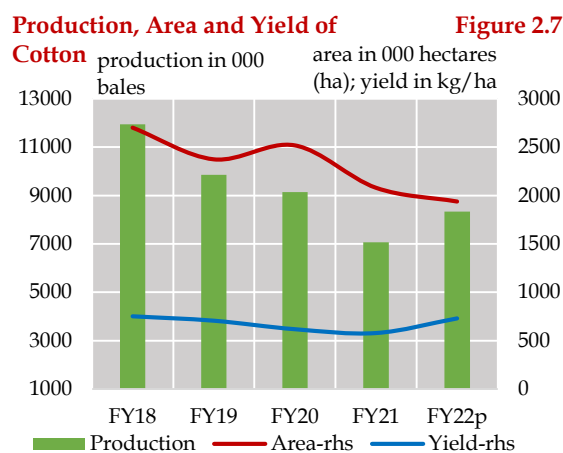
Despite a decline in area under cultivation cotton production was higher than last year

Production of cotton crop for FY22 stood at 8.3 million bales, a 17.9 percent increase over last year. Production of cotton crop increased despite a decrease in area under cultivation, mainly due to increased yields (Figure 2.7). This increase in yields can be attributed to favorable weather conditions and better input availability. The major impetus to this growth came from Sindh, where production grew by 61.0 percent in FY22 to 3.0 million bales. An increase of 25.1 percent area coupled with 28.8 percent growth in yield better prices in both local and international markets contributed to a significant increase in cotton production in Sindh.

Meanwhile in Punjab, the largest cotton producing province, a double digit increase in the yield more than offset the decrease in area under the crop which led to growth of 2.5 percent in FY22. The decrease in area can partially be attributed to growers' preference for sugarcane and in particular maize that is gaining popularity in Punjab.

¹⁴ As per IRSA estimates, the system average is 103 MAF, whereas, the availability for Surface water for FY22 was 92.5 MAF

¹⁵ Source: IRSA newsletter dated 1st – 30th March 2022.

Figure 2.7

Source: Pakistan Bureau of Statistics

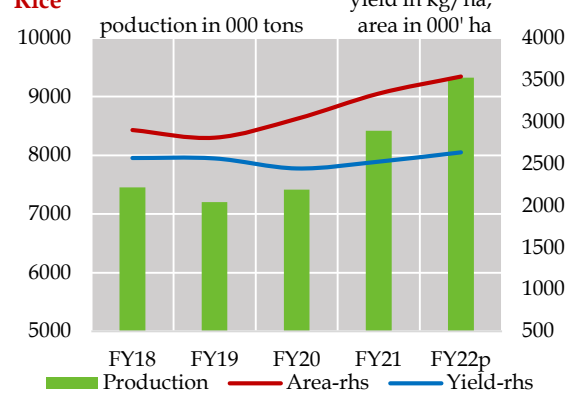
Over time, area under cotton cultivation has seen a secular decline. In Punjab alone the area has declined by almost 40 percent in the last three decades.¹⁶ A major issue in the decline in cotton production is that the genetic base of cotton germ plasm is highly prone to diseases and pest attacks.¹⁷

Rice

Record production of rice in FY22

Record rice production of 9.3 million tons was achieved in FY22 compared to 8.4 million tons last year (Figure 2.8). This increase was mainly attained due to a 6 percent increase in area under cultivation, as farmers continued to shift away from cotton production towards more resilient alternatives; hybrid rice varieties offer a viable option to the growers in this regard.

For the past couple of years, area under rice cultivation is witnessing a rising trend. It has gained popularity especially in Punjab. Higher demand for domestic rice in the export markets and its competitive pricing has made it lucrative for international markets. Despite increase in freight charges and shortage of containers, export earnings from rice increased. As per PBS, rice exports increased by 23.1 percent during FY22.

Figure 2.8

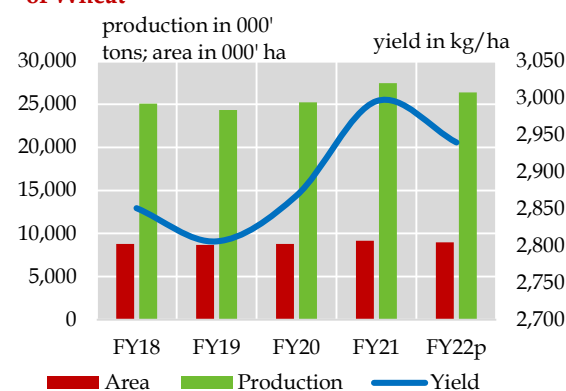
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Source: Ministry of Finance

Wheat

Wheat output was affected by decline in cultivated area and yield

Wheat production declined by 4.0 percent in FY22 to 26.4 million tons, compared to 27.5 million tons last year (Figure 2.9).¹⁸ The output was also lower than the target of 27.8 million tons set for FY22. The drop in output stemmed from reduction in area and yield, which, in turn, could be linked to lower input availability and above normal temperatures during the *Rabi* season (Table 2.7).

Figure 2.9

Source: Pakistan Bureau of Statistics

¹⁶ According to Punjab crop reporting service, In 1990 the area under cultivation was 5.2 million acres, whereas, in FY22 it was 3.2 million acres.

¹⁷ USDA, Cotton and Products annual report, dated April 02, 2021

¹⁸ Pakistan Economic survey 2021-2022

Despite an upward revision in MSP, area under wheat cultivation declined by 2.1 percent compared to previous *Rabi* season (Table 2.7).¹⁹ Multiple factors induced farmers to dedicate lesser area to wheat in the *Rabi* season. One reason was the shortage of irrigation water (Figure 2.6).²⁰ Water reservoirs of Tarbela Dam and Mangla Dam had water storage of 34 percent and 44 percent respectively as compared to last year (end – September, that is the start of *Rabi* season) indicating short irrigation supplies during the initial stages of crop growth.²¹ Moreover, rain-fed areas also witnessed dry spells during the sowing months, making conditions relatively challenging for wheat growers. Other than water availability, the increased cost of production also adversely affected the wheat crop as fertilizer prices, especially of DAP remained elevated due to global market developments (Figure 2.5).

Moreover, there were widespread reports of hoarding by fertilizer dealers in local media; the hoarders were taking advantage of global price hikes and domestic supply shortages, especially of urea, which can be traced to lower availability of gas and suspension of production activities due to maintenance of various fertilizer plants. This prompted government to import urea to discourage hoarding activities.

Maize

Maize delivered record production on the back of higher area under cultivation

Maize production increased by 19 percent to 10.6 million tons during FY22, mainly because of a 16 percent increase in area under cultivation, along with a 2 percent increase in yield. (Figure 2.10). Maize dominated crops performance in FY22, owing to an increase in area under cultivation and improved yield (Figure 2.11).

Area Under Wheat Crop (p)

Table 2.7

area in mn hectares; production in mn metric tons

	Area		
	FY21	FY22 Target	FY22
Punjab	6.8	6.6	6.6
Sindh	1.2	1.2	1.2
KP	0.8	0.9	0.8
Balochistan	0.5	0.6	0.5
Pakistan	9.18	9.20	9.0

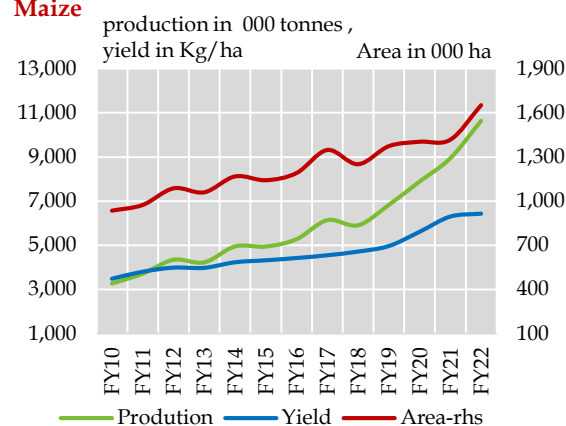
p: provisional

Source: Ministry of National Food Security & Research

Maize cultivation area has witnessed a steady increase over the years, as farmers are substituting cotton crop with maize.^{22,23} In comparison to the long-term yield of cotton, the yield for maize has increased more than threefold since FY01 (Figure 2.12). Area under cultivation of maize has been increasing due to increase in demand and the use of high-yielding seed varieties. In FY22, additional factors such as attractive output prices and an increase in the demand originating from the livestock sector played a part. The demand from poultry sector returned to normalcy after resumption in economic activities in the food services industry such as restaurants.

Production, Area and Yield of Maize

Figure 2.10



Source: Pakistan Bureau of Statistics

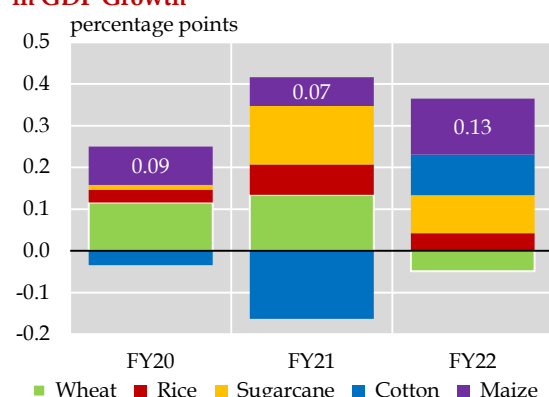
¹⁹ The minimum support price was increased from Rs 1950/40kg to Rs 2200/40kg.

²⁰ Monthly Agromet Bulletin, National Agromet Centre, Pakistan Meteorological Department. Vol: 11-2021, November, 2021.

²¹ Pakistan: Satellite Based Crop Monitoring System, Volume XII, Issue 04, Serial No. 136 dated 1-April 2022

²² According to Ayub agricultural research institute, maize crop is normally cultivated twice a year in Punjab.

²³ USDA, Grain and Feed Annual report, USDA, dated March, 22, 2022.

Contribution of Important Crops in GDP Growth**Figure 2.11**

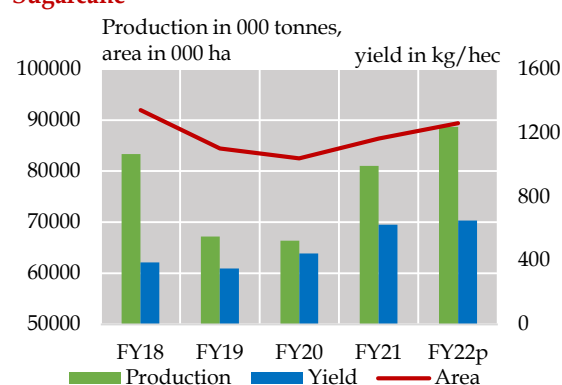
Source: Pakistan Bureau of Statistics and SBP calculations

Sugarcane

Highest ever output of sugarcane in FY22

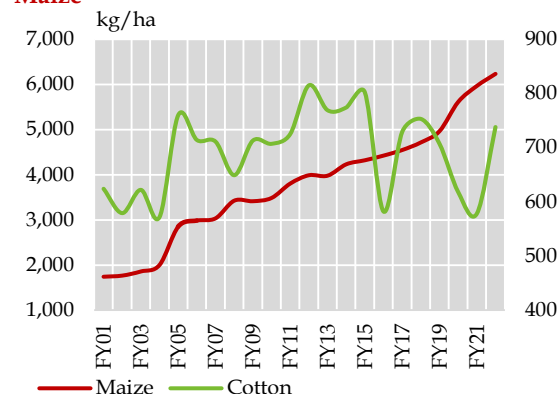
Production of sugarcane crop increased to 88.7 million tons in FY22 from 81.0 million tons last year (**Figure 2.13**). The record production was achieved on the back of increase in area in Punjab, where it rose by double digits. Moreover, Sindh also recorded an increase in sugarcane cultivation. However, it may be noted that the yields in both provinces remained lackluster, with no improvements over the last year.

In Punjab, the increase in area can largely be attributed to three factors: (i) increase in indicative price of sugarcane from Rs 200 per maund to RS 225 per maund (ii) government's

Area, Production and Yield of Sugarcane**Figure 2.13**

p: provisional

Source: Pakistan Bureau of Statistics

Yield Comparison of Cotton and Maize**Figure 2.12**

Source: Pakistan Bureau of Statistics

direction to sugar mills to clear their outstanding dues to farmers, (iii) better credit support by banks.

Minor Crops

Among minor crops, gram and potato production grew significantly

As per estimates, minor crops such as potatoes, moong and gram showed a notable increase of 35 percent, 30 percent, and 51 percent respectively. (**Figure 2.14**) Increase in potato production is mainly due to expanding acreage. In Punjab, which contributes more than 80 percent of the national production, area under cultivation went up by 36 percent.²⁴ The increase in acreage can be attributed to a rise in international demand for potatoes.

Domestic production of oilseeds is also gaining momentum. In FY22, oilseeds production increased by 24.8 percent as it continues to benefit from National Oilseed Enhancement Program.²⁵

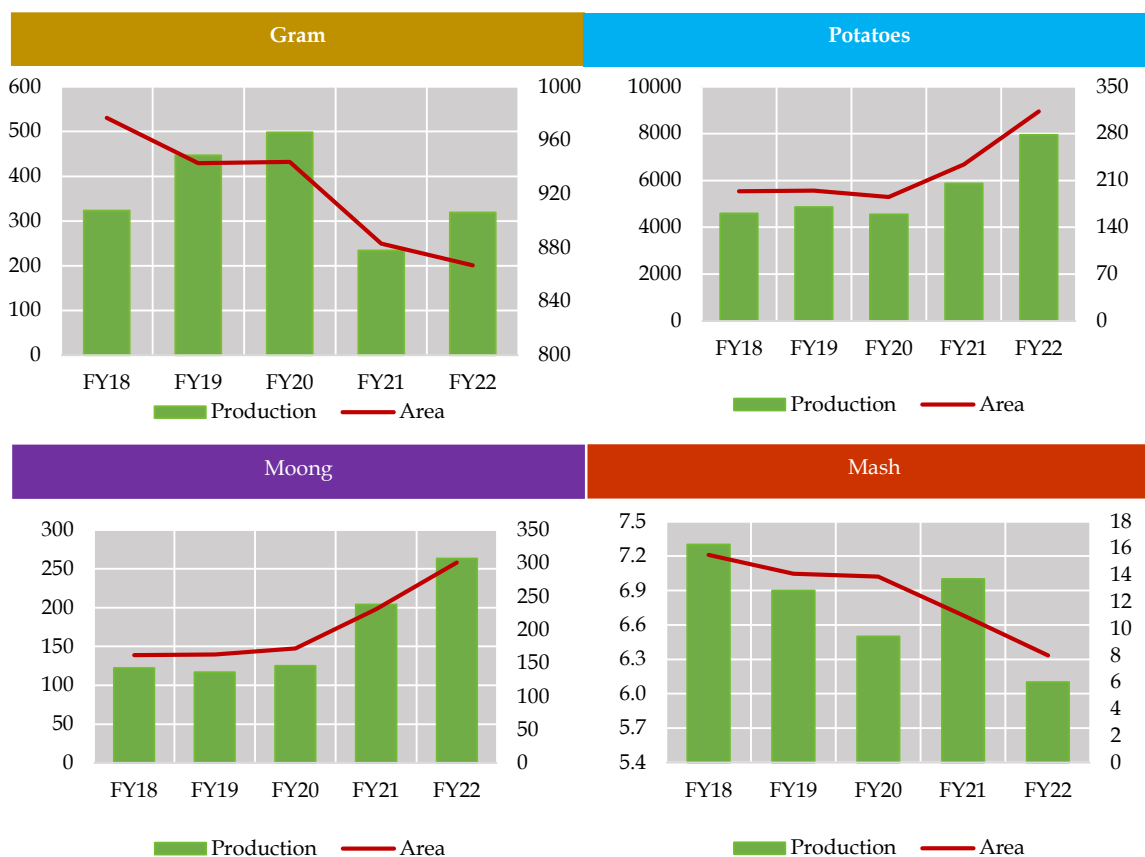
Moreover, production of pulses such as gram and moong increased due to favorable weather conditions and availability of certified seeds. The significant increase in the gram production mainly emanated from better yields, as area under cultivation was lower compared to previous year. The yield of gram rose by 54.4 percent and stood at 409.3 kg per hectare. Although, the achieved output was

²⁴ Crop Reporting Service Punjab, Government of Punjab

²⁵ Pakistan Economic Survey 2021-2022

Area and Production of Different Pulses

production in 000 tonnes, area in ha

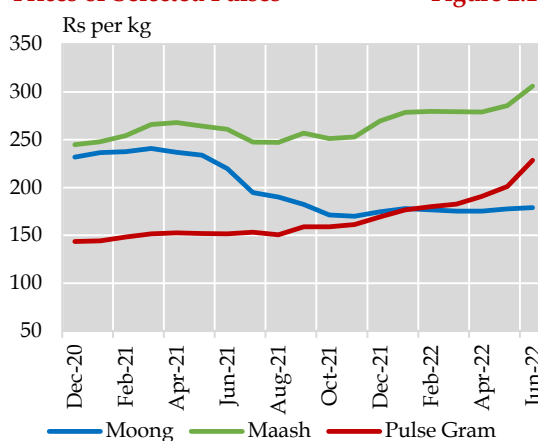
Figure 2.14

Source: Pakistan Bureau of Statistics

higher compared to previous season, it was still lower than the annual consumption, which hovers around 650 thousand tons per annum. Owing to the supply-demand gap, prices of gram started to increase (Figure 2.15).

Livestock

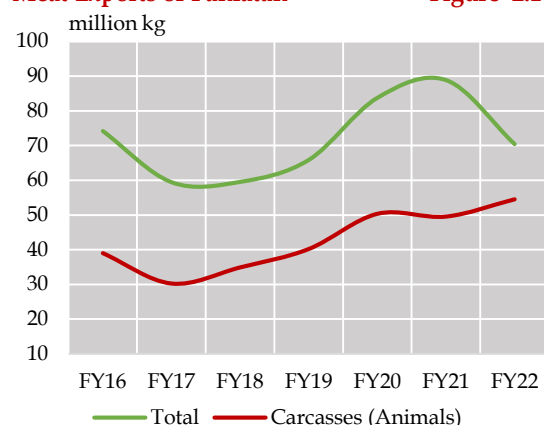
Livestock sector²⁶ posted a growth rate of 3.3 percent in FY22, against an increase of 2.6 percent in FY21. Moreover, the contribution of livestock to GDP growth increased to 0.5 percent in FY22, up from 0.4 percent in the last fiscal year. Within the livestock sector, major impetus for growth came from the poultry sector, which has been growing at a rate of 10-12 percent per annum (Table 2.8 and 2.9).²⁷

Prices of Selected Pulses**Figure 2.15**

Source: Pakistan Bureau of Statistics

²⁶ While most sectors of the economy had been re-estimated on the basis of new information and census for the rebasing of the National Income Accounts to FY16, some sectors, most notably livestock, had not been updated. The lack of new information and the old estimation methodology put some constraint in analyzing the livestock sector (Box 2.1 "Rebasing of National Income Accounts" Chapter 2, the State of Pakistan's Economy, Half-Yearly Report, State Bank of Pakistan).

²⁷ Pakistan poultry association, annual report 2020-2021

Meat Exports of Pakistan**Figure 2.16**

Source: Pakistan Bureau of Statistics

Meanwhile, milk production went up from 63.7 million tons in FY21 to 65.7 million tons in FY22. Milk of cows (24 million tons) and buffalos (39 million tons) contributed majorly to the overall milk production.

The growth in the livestock sector is also reflected in the meat exports (**Figure 2.16**). Pakistan is a net exporter of meat of bovine animals (fresh and chilled). In FY22, the export of meat of bovine animals maintained its upward trend even as the total exports in the category declined. Pakistan's access to the global markets was limited due to the foot and mouth disease, lack of traceability of animals and adequate cold chain infrastructure.²⁸

2.3 Industry

The industrial sector growth was recorded at 7.2 percent for FY22, compared to 7.8 percent last year (**Table 2.10**). While the growth moderated during FY22 compared to FY21, some of this apparent slowdown stemmed from the high base effect. The last year's growth reflected a rebound from the decline in FY20 triggered by strict Covid lockdowns. In terms of contribution to GDP, the industrial sector's contribution remained similar to last year, with the mining and quarrying sub-sector registering negative growth, as it declined by 4.5 percent during FY22, compared to 1.2 percent growth last year.

Livestock Population**Table 2.8**

million	FY20	FY21	FY22
Buffalo	41.2	42.4	43.7
Cattle	49.6	51.5	53.4
Goat	78.2	80.3	82.5
Sheep	31.2	31.6	31.9
Poultry	1,443	1,578	1,725
Camels	1.1	1.1	1.1
Asses	5.5	5.6	5.7
Horses	0.4	0.4	0.4
Mules	0.2	0.2	0.2

Source: Pakistan Bureau of Statistics

The fiscal stimulus, especially during H1-FY22, played a key role in industrial growth during the review period. Increase in development spending by the provincial government, tax relief afforded to the export-oriented sectors such as textile, wearing apparel, automobiles and furniture sectors helped prop up industrial growth. The construction sector activities continued to grow as a result of the *Prime Minister's Package for Construction Sector* announced previously.

Estimated Domestic/Rural and Commercial Poultry**Table 2.9**

million	FY20	FY21	FY22
Day old chicks	1370	1504	1651
Poultry bird	1443	1578	1725
Eggs	20,133	21,285	22,512
Poultry meat	1657	1809	1977

Source: Ministry of National Food Security & Research

Industrial Sector Growth**Table 2.10**

percent	FY20 ^F	FY21 ^R	FY22 ^P
Industrial Activities	-5.7	7.8	7.2
Mining and Quarrying	-7.2	1.2	-4.5
Manufacturing	-7.8	10.5	9.8
Large Scale	-11.2	11.5	10.5
Small Scale	1.4	9.0	8.9
Slaughtering	5.9	6.1	6.2
Electricity, gas, and water supply	3.5	6.3	7.9
Construction	-3.1	2.5	3.1

F: final, R: revised, P: provisional

Source: Pakistan Bureau of Statistics

²⁸ Available at: www.pbc.org.pk/wp-content/uploads/scaling-up-bovine-meat-exports-of-pakistan.

Low interest rates, in particular during Q1-FY22, and concessionary financing schemes such as LTFF, and to some extent, TERF also contributed to industrial sector growth during FY22. The export-oriented textile sector availed the major chunk of fixed investments loans, which led to capacity expansions in the sector due to increase in foreign demand amidst improved international competitiveness in the market-determined exchange rate regime.

Mining and quarrying output declined during the year. This may be traced to drop in extraction of gypsum and limestone minerals. As these minerals are predominantly utilized in manufacturing of cement; the lower production of cement may help explain the drop in output of these commodities. Moreover, there was also a drop in marble extraction during FY22. Increase in energy prices had an adverse impact on the industry as extraction, cutting, grinding, and polishing costs increased. Increase in domestic prices of the local produce due to increasing extraction and transportation costs may also have dampened demand.

Growth in the electricity, gas, and water supply sector accelerated to 7.9 percent during FY22, compared to 6.3 percent in FY21. This was primarily attributed to higher subsidies during the current period compared to last year.²⁹ It is worth recalling that subsidies of Rs 511 billion and Rs 85 billion were allocated for WAPDA/PEPCO and K-Electric in the FY22 Budget, compared to the revised allocation of Rs 350.4 billion and Rs 16 billion last year. Additionally, electricity production rose by 33.1 percent during Jul-Mar FY22 compared to last year.

Meanwhile, growth in the construction sector also picked up to 3.1 percent during FY22,

compared to 2.5 percent a year earlier. This was primarily attributed to an increase in development spending and expansion in construction activities in private sector. In particular, considerable provincial development expenditure was channeled into infrastructure projects, such as the construction of roads and transport services across Sindh and Punjab.

LSM growth picked up from last year, spurred by growth-inducing policies³⁰

LSM sector output grew by 11.9 percent during FY22, compared to 11.6 percent in FY21 (Table 2.11). The expansion was relatively broad-based, with 19 out of 22 sectors registering growth during the review period, compared to 15 sectors in FY21. The wearing apparel, food and automobile sectors made the most notable contributions to growth during FY22.

Growth-inducing policies played an important part in generating the LSM momentum. The wearing apparel sector benefitted from power subsidies, tax concession on raw material imports and the SBP's concessionary financing schemes such as TERF and LTFF. Increase in cotton production compared to last year and imports of raw material benefitted textile and wearing apparel industries, however the industry had to rely on imported raw material to meet demand for its products. Within the food sector, the sugar subsector's growth was driven by record output of sugarcane, which in turn benefitted from a significant increase in support prices.³¹ Meanwhile, the automobile sector, benefitted from tax and duty relief offered in the FY22 Budget, as well as from the lagged impact of accommodative monetary policy.

²⁹ For the electricity sub-sector, the subsidies extended at the distribution stage are made a part of the output. Source: PBS (National Accounts of Pakistan, 2015-2016 Base Year)

³⁰ The analysis of LSM sector is based on data released by the Pakistan Bureau of Statistics' Quantum Index of LSM Industries for full year FY22 in October 2022. The LSM numbers in the National Accounts data for the calculation of GDP and overall industrial sector were based on provisional estimates at the time, which was March 2022.

³¹ Specifically, the Punjab and Sindh government set the sugarcane support price at Rs 225 and Rs 250 per maund for the current season, compared to Rs 200 and Rs 202 last year respectively.

LSM Performance

Table 2.11

	wt.	Growth								Contribution			
		Q1		Q2		Q3		Q4		FY21	FY22	FY21	FY22
		FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22				
LSM	78.4	-2.4	9.9	5.7	5.5	9.6	15.7	40.6	16.1	11.6	11.9		
Textile	18.2	-1.9	6.5	10.1	0.7	16.9	2.8	64.3	4.1	18.3	3.5	3.7	0.7
Wearing apparel	6.1	-44.8	20.3	-36.7	20.5	-23.2	58.7	74.9	95.3	-23.3	49.4	-2.6	3.8
Food	10.7	46.8	3.0	48.7	0.3	8.4	23.6	4.8	-4.1	22.2	8.4	3.5	1.4
Sugar	3.8	NA	NA	72.1	-4.0	0.4	59.3	16.5	113.9	16.7	39.1	0.7	1.7
Beverages	2.1	-2.3	7.7	-6.7	2.3	9.8	-6.0	12.0	2.9	3.6	2.0	0.2	0.1
Tobacco	6.7	31.2	16.7	0.9	26.9	23.8	8.0	-4.1	13.1	11.8	15.9	0.3	0.4
Coke & Petroleum Products	6.5	1.5	6.1	6.3	-4.2	34.6	4.0	37.1	-2.6	17.9	0.7	1.2	0.0
Chemicals	3.9	5.4	1.5	13.5	4.9	8.2	18.3	22.9	10.5	12.3	8.7	0.9	0.7
Fertilizers	5.2	2.2	-7.3	13.6	-1.7	2.1	21.5	11.8	1.2	7.4	2.7	0.4	0.1
Pharmaceuticals Products	5.0	13.1	4.7	9.4	-13.9	9.5	8.1	8.0	54.8	9.9	13.6	0.6	0.9
Non Metallic Mineral	4.6	17.7	1.2	12.4	2.3	26.4	-0.3	34.7	0.9	22.1	1.0	1.6	0.1
Cement	3.4	22.8	1.4	19.2	-2.9	34.1	-6.5	34.4	-5.8	27.3	-3.6	1.7	-0.3
Iron & Steel Products	0.4	-17.6	18.7	-6.5	18.1	-1.5	13.2	83.6	15.7	4.9	16.3	0.2	0.7
Fabricated Metal	3.1	-13.9	-4.1	3.6	-5.5	12.0	-10.1	60.8	5.6	9.0	-3.7	0.0	0.0
Automobiles	0.7	-12.9	81.9	41.4	57.1	63.8	33.4	463.3	32.2	65.9	47.4	1.5	1.6
Other transport Equipment	0.2	17.1	-1.3	16.0	-12.6	25.0	-17.7	139.6	-12.4	35.8	-11.2	0.3	-0.1
Electrical Equipment	2.0	-15.5	-3.7	-19.7	-4.0	-16.3	5.6	83.4	11.9	-2.3	2.7	-0.1	0.1
Machinery and Equipment	0.4	13.3	10.8	61.8	18.6	95.5	11.3	44.9	20.5	49.7	15.4	0.2	0.1
Paper & Board	1.6	-2.2	11.3	-3.2	5.5	3.7	9.8	18.0	16.2	3.4	10.6	0.1	0.2
Leather Products	1.2	-44.5	13.5	-40.5	-0.1	-27.9	-4.5	61.9	-2.4	-25.6	0.9	-0.3	0.0
Furniture	0.5	-16.7	848.0	-12.2	407.0	212.5	152.0	872.2	53.1	171.0	180.2	0.4	1.1

Source: Pakistan Bureau of Statistics (based on data released in October 2022) and SBP calculations

Wearing apparel was a significant driver of growth

Wearing apparel production grew by 49.4 percent during FY22, compared to a 23.3 percent decline in FY21. Last year, restrictions in the wake of Covid outbreak had disrupted international trade of goods and services which also affected the export-oriented textile industry. The rebound in FY22 is attributed to the improved performance of the readymade garments sector, whose exports responded to strong demand from Pakistan's major export destinations such as the US, EU-27 and UK.³² The foreign demand was higher as consumers increasingly turned towards cotton based products during work-from-home arrangements in these regions. (Chapter 6: External Sector)

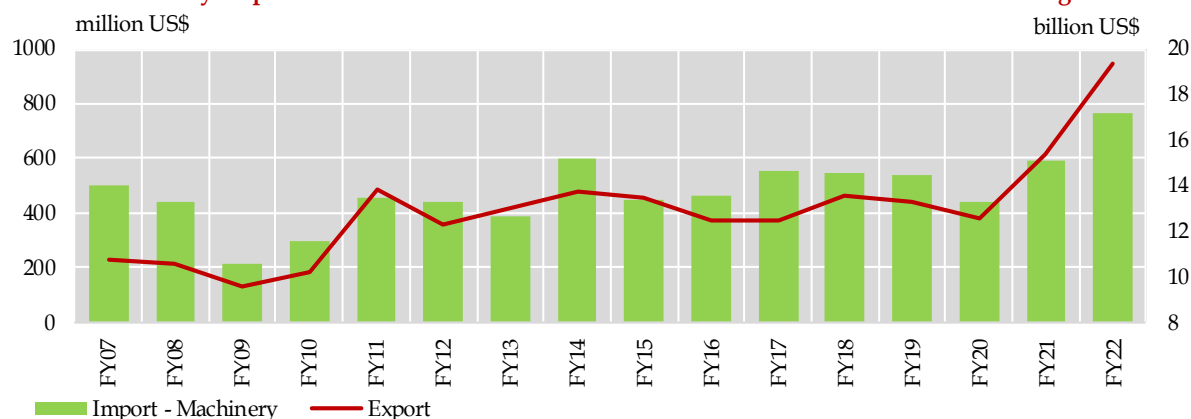
Recent capacity expansions have also supported the sector's prospects. For instance, annual textile machinery imports were recorded at US\$ 765.7 million in FY22, rising by 43.3 percent over the last five-year average) (Figure 2.17). Textile firms also undertook fixed investment by availing SBP's concessionary financing schemes.³³ Moreover, the central bank enhanced the scope of its Export Finance Scheme (EFS) during FY22, which facilitated exporters – including manufacturers of wearing apparel – in meeting their working capital needs.³⁴

Conducive policies and capacity expansions aided growth of exports of readymade garments, which surged by 55.3 percent during FY22 compared to 23.3 percent contraction last year. Depreciation of PKR also

³² In value terms, the exports of readymade garments grew by 28.7 percent to US\$ 3.9 billion in FY22, compared to US\$ 3.0 billion last year.

³³ Within credit to private sector, the borrowing by textile manufacturers for fixed investment purpose amounted to Rs 42.9 billion in FY20, Rs 66.0 billion in FY21, and Rs 122.2 billion in FY22, respectively.

³⁴ The measure allowed exporters to obtain financing against their proceeds through discounting of export bills/receivables at supportive rates. For details, see the SBP press release titled 'SBP expands Export Refinance scheme to improve exports and forex inflows', dated February 16, 2022.

Textile Machinery Imports

Source: Pakistan Bureau of Statistics

contributed to the sector acquiring competitiveness in the international market.

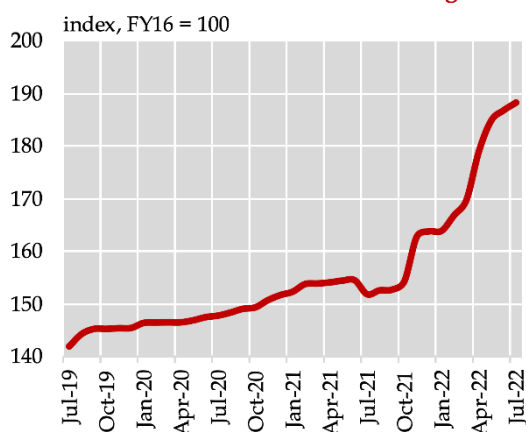
The automobile sector capitalized on favorable policies and a broader pick-up in economic activity

The automobile sector posted 47.4 percent growth during FY22, compared to 65.9 percent in FY21 (Table 2.11). Lower taxes and duties announced in the FY22 Budget and expansionary monetary policy maintained during Q1-FY22, in continuation from last year, had a favorable impact on the automobile prices and access to auto finance (Figure 2.18). The broader pick-up in economic activities, workers' remittances, improved farm incomes, and launch of new models and variants also contributed to sectoral demand. Even with the end of expansionary monetary policy stance from

late-September 2021, automobile production remained relatively robust during FY22 overall.

With respect to tax relief, the government had reduced the federal excise duty (FED) on vehicles up to 3,000cc by 2.5 percent, cut the general sales tax for vehicles up to 1,000cc to 12.5 percent from 17.0 percent, and also allowed locally manufactured cars of 850cc or less to be exempted from value-added tax (VAT), in the FY22 Budget. However, the Finance (Supplementary) Bill, 2021 amended the FED structure (Table 2.12). The amendment led to upward adjustment in prices as automobile assemblers passed them on to the consumers.

Similarly, the SBP tightened the monetary policy since September 2021. The relatively costlier access to finance led to a slowdown in auto-financing, with the Q1-FY22 flow of Rs 30.1 billion giving way to more subdued quarterly flows of Rs 15.5 billion, Rs 9.9 billion

Index of Motor Vehicle**Figure 2.18**

Source: Pakistan Bureau of Statistics

FED Structure and Rates**Table 2.12**

percent

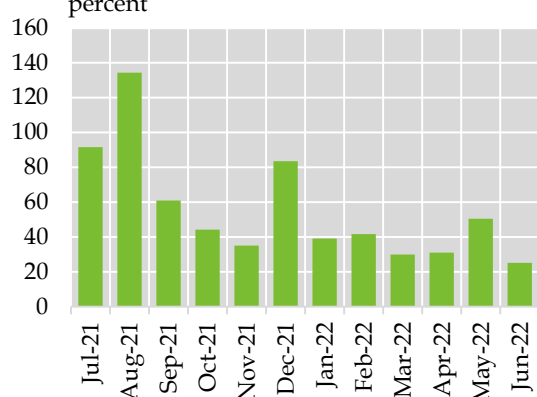
Vehicle Slab	Rate
Old structure:	
0-1,000cc	0.0
1,001-2,000cc	2.5
> 2,000cc	5.0
New structure*:	
0-1,300cc cars	2.5
1,301-2,000cc	5.0
> 2,000cc	10.0

* After the Finance (Supplementary) Bill 2021

Source: Federal Board of Revenue

**Automobile Manufacturing
(YoY Growth)**
percent

Figure 2.19



Source: Pakistan Bureau of Statistics

and Rs 4.3 billion in Q2, Q3 and Q4, respectively (**Figure 2.19**).³⁵ It is worth highlighting that the SBP also introduced restrictions on car financing in September 2021, which prohibited the financing for imported vehicles and tightened regulatory requirements for financing of domestically manufactured/assembled vehicles of more than 1,000 cc engine capacity.³⁶

The reversal of monetary and fiscal stimuli during the year was required under the stabilization program, especially with respect to narrowing the external deficit. Imports of road motor vehicles that had risen sharply during H1-FY22 tapered off in H2-FY22 as a result of ban on luxury items, including the

automobiles sector. **Figure 2.20** illustrates how imports subsided over the year. The resulting situation facilitated the domestic automobile producers, as consumers shifted to locally produced vehicles despite the hike in prices.

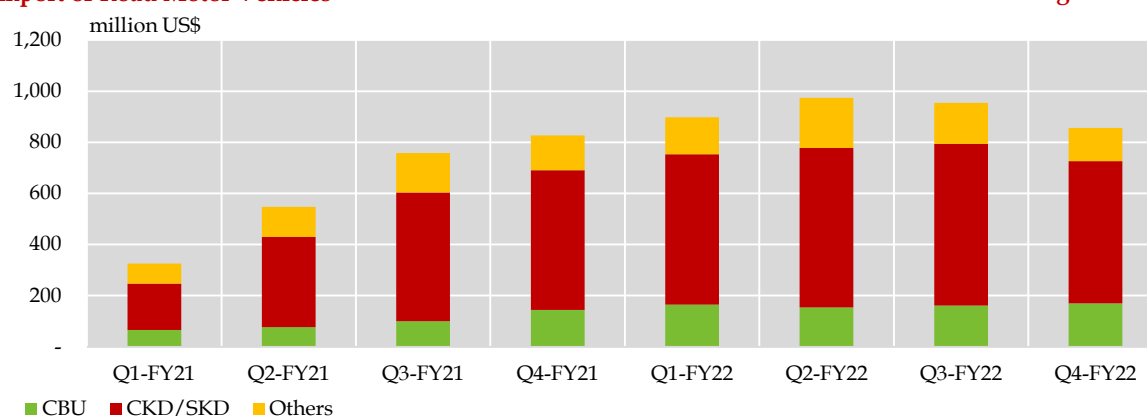
Automobile assemblers also faced headwinds in the form of exchange rate depreciation, elevated prices of raw material and freight, and the global shortage of semiconductor chips, which played a part in delayed deliveries of some models during the review period. Nonetheless, the production and sale of automobiles remained robust, and the manufacturers were able to pass on some of the rising costs to consumers in the form of price hikes.

Construction-allied sectors benefitted from policy support extended

The construction-allied sectors continued to benefit from several policy measures that had been announced last year. These included the government's incentive package for the construction sector, Prime Minister's Package for Construction Sector, SBP's mandatory targets for housing and construction finance, and the pricing and promotion of Mera Pakistan Mera Ghar (MPMG) scheme. During FY22, the central bank advised banks to ensure that the financing for housing and construction targets were met. Banks were

Import of Road Motor Vehicles

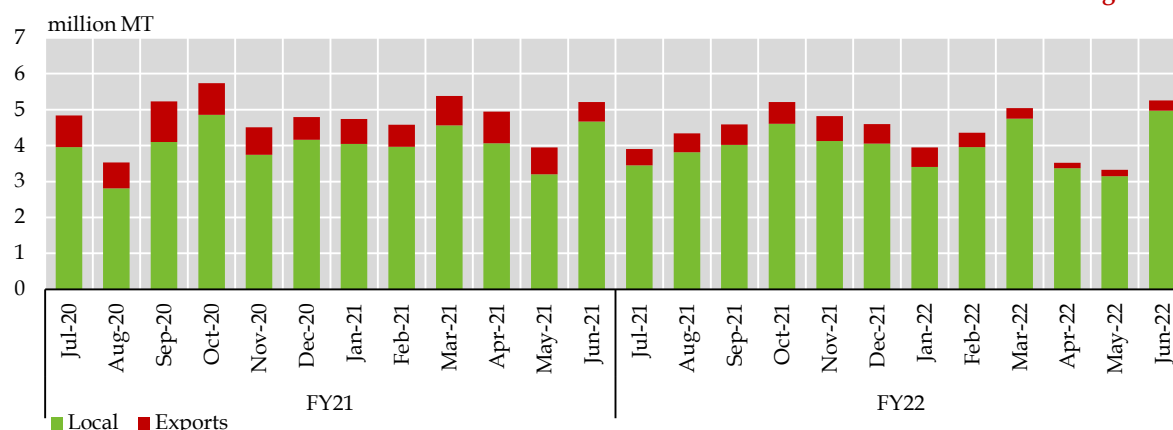
Figure 2.20



Source: Pakistan Bureau of Statistics

³⁵ On cumulative basis, auto financing flows moderated to Rs 59.7 billion during FY22, compared to Rs 97.0 billion during FY21.

³⁶ For details, see the SBP's press release titled 'State Bank of Pakistan revises Prudential Regulation for Consumer Financing to moderate import and demand growth', dated September 23, 2021.

Cement Sales**Figure 2.21**

Source: All Pakistan Cement Manufacturers Association

advised to sanction at least 7 percent of the total domestic private sector credit to the housing and construction sector by December, 2022.³⁷ Furthermore, there was a 33.5 percent growth in PSDP expenditure during FY22, compared to an 11.2 percent growth last year, which supported construction activities on large-scale infrastructure projects.

Marginal growth in local dispatches and declining exports hurt the cement industry in FY22

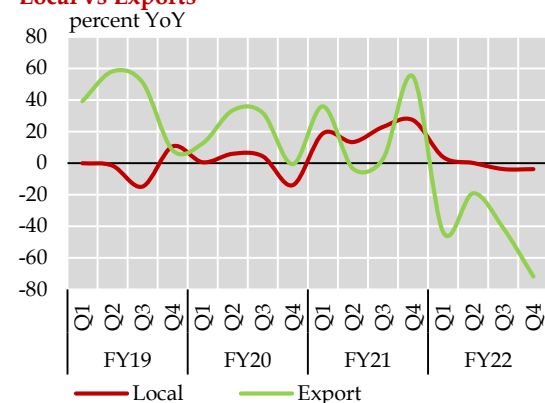
The cement sector's output declined by 3.6 percent in FY22, compared to a growth of 27.3 percent in FY21. Cement exports declined considerably during the review period,

whereas domestic dispatches witnessed an increase in H1-FY22 before posting a decline during H2-FY22 compared to FY21, more specifically in Q4-FY22 (**Figure 2.21**).

Specifically, cement dispatches declined by 7.9 percent during FY22, compared to 20.1 percent growth last year (**Figure 2.22**). On the one hand, export dispatches faced a steep drop of 43.6 percent during FY22, compared to 18.7 percent growth in FY21. This was primarily attributed to elevated freight costs and reduced demand for cement and clinker from Afghanistan and Bangladesh, respectively.

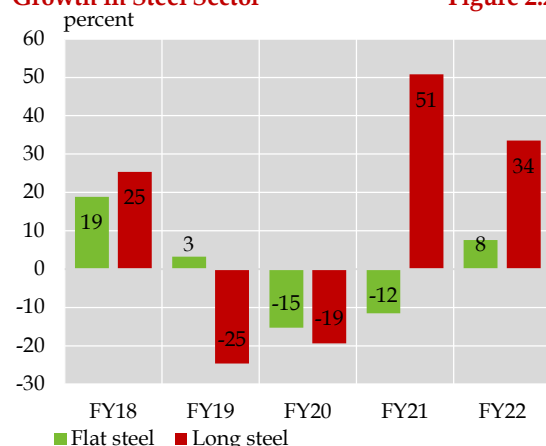
On the other hand, domestic dispatches declined by 1.0 percent in FY22 to fall below the 48 million ton mark set last year. The decline can be traced to slower offtake during the months of April and May 2022, as political uncertainty had an adverse impact on the construction sector activities. The slowdown was also partly attributed to the rising prices of cement in the domestic market. Specifically, the price of cement rose by 28 percent on average during FY22, compared to 3.1 percent in FY21. By extension, the elevated domestic prices could be traced to a combination of rising global prices of inputs such as coal, as well as the PKR depreciation.

Growth in Cement Dispatches - Local vs Exports

Figure 2.22

Source: All Pakistan Cement Manufacturers Association

³⁷ For details, see IH&SMEFD Circular No. 02 of 2022, January 21, 2022. Previously, the SBP had advised banks to ensure that the financing for housing and construction of (residential and non-residential) buildings was at least 5 percent of their domestic private sector credit by December, 2021 (IH&SMEFD Circular No. 10 of 2020, dated July 15, 2020).

Figure 2.23

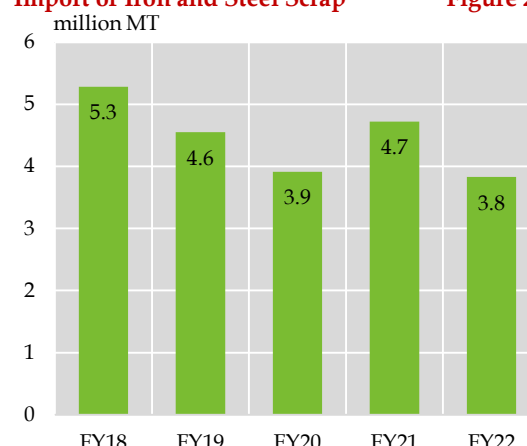
Source: Pakistan Bureau of Statistics

Steel sector's revival was aided by a pick-up in manufacturing of automobiles and appliances

The steel sector's output grew by 16.3 percent in FY22, compared to a 4.9 percent growth in FY21. Within this, the flat steel sub-sector posted 7.4 percent growth in FY22, compared to 9.8 percent decline last year (**Figure 2.23**). Robust growth in manufacturing of automobiles (as previously discussed) and domestic appliances pushed up the demand for flat steel.

On the other hand, the long steel sub-sector grew by 33.1 percent in FY22, compared to 51 percent last year. This was mainly attributed to PSDP spending, (which was 33.5 percent higher during FY22 compared to FY21, and construction activities related to infrastructure development projects. In addition, some large steel manufacturers have also gained market share by differentiating their graded rebars as superior products compared to those produced by smaller, informal sector firms.

The structural change in the steel industry away from energy-intensive cottage producers towards modern large-scale and efficient units may explain significant increase in billets production. The private large-scale steel sector has been expanding its capacity in recent

Figure 2.24

Source: Pakistan Bureau of Statistics

years, in order to cover the domestic demand-supply gap after the closure of Pakistan Steel Mills and to provide high quality products that the local consumers demanded.³⁸

For the long steel, real estate developers turned to certified and differentiated products used in construction of high-rise complexes.³⁹ The change has been driving out inefficient producers due to steadily rising energy prices. At the same time large-scale units have benefitted from this development as they have expanded capacity and differentiated products. This is also evident from secular decrease in imports of iron and steel scrap that is largely a raw material for small-scale firms in the industry (**Figure 2.24**).

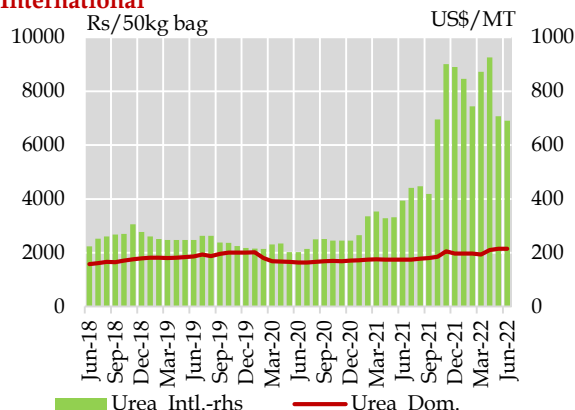
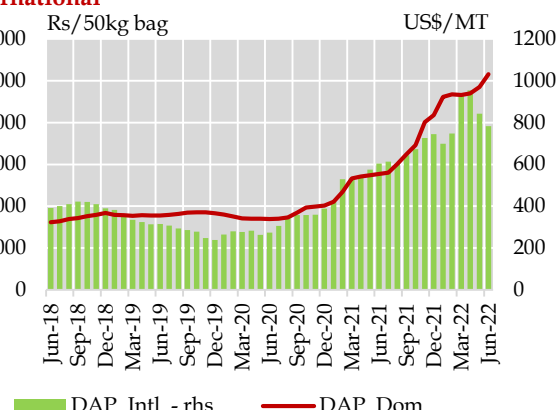
Fertilizer sector experienced a slowdown due to a combination of domestic and global factors

Fertilizer manufacturing registered 2.7 percent growth in FY22, compared to 7.4 percent growth last year. The slowdown was evident across both nitrogen- and phosphorus-based fertilizers.

From the demand side perspective, the sharp escalation of price of DAP had an adverse impact on offtake of the fertilizer, which, in turn, slowed down activities in the segment.

³⁸ Box 2.1, Developments in the Steel Sector of Pakistan, State of Pakistan's Economy Annual Report 2017-18, State Bank of Pakistan

³⁹ For the flat steel, automobile and appliances sector took advantage of the domestically produced steel products, which lowered their costs.

Urea Prices: Domestic vs International**Figure 2.25a****DAP Prices: Domestic vs International****Figure 2.25b**

Source: National Fertilizer Development Centre & World Bank

The increase in DAP prices can be traced to surge in global price of the product, which is largely imported due to limited domestic capacity (**Figure 2.25a**). In comparison, domestic urea prices remained largely stable despite significant increase in global prices (**Figure 2.25b**). The installed capacity for urea production in Pakistan closely matches the current demand for the product and this insulates the urea from global price fluctuations.

Specifically, the production of nitrogen-based fertilizer – mainly urea – grew by 2.0 percent during FY22, compared to 5.9 percent in FY21. Meanwhile, phosphatic fertilizer production posted 7.5 percent growth in FY22, compared to 18.6 percent expansion last year.

Among urea producers, the production of large firms rose marginally during FY22 compared to FY21. This was mainly attributed to suspended production of some plants for maintenance and upgrades. In addition, the production of small firms was affected by disruption in gas supplies, in particular during Q1-FY22.

The price and demand for DAP was affected by a sharp increase in the commodity's global prices. Pakistan is not self-sufficient in DAP production, so global price fluctuations affects prices in the domestic market. The global prices of fertilizer escalated during FY22, owing to rising input costs, supply chain issues, China's restrictions on fertilizer exports, and the on-going Russia-Ukraine conflict. Since Russia and Belarus – are the

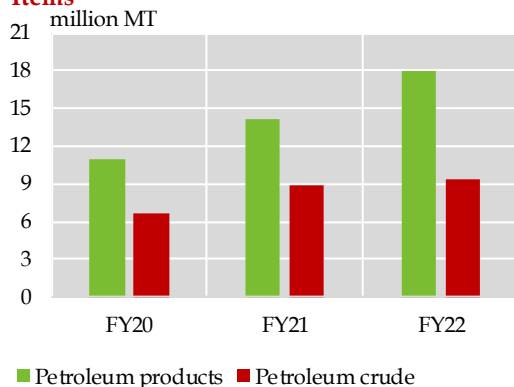
major producers of potash-based fertilizers, restrictions on trade with these countries led to price hike of the commodities. In addition to the conflict, the PKR depreciation also contributed to domestic price rise.

The high price of DAP relative to urea has increased the imbalanced use of fertilizer. This is reflected in fertilizer offtake numbers, with urea offtake expanding by 6.8 percent during FY22 compared to a year earlier, even as DAP offtake declined by 14.0 percent during the same period.

POL sector's growth moderated amidst capacity issues and growing import of refined petroleum

Growth in the POL sector slowed to 0.7 percent during FY22, compared to 17.9 percent in FY21. Several factors hurt production activities. The refineries have not been upgraded to produce Euro-5 compliant fuels, leading to excess production of furnace oil, for which there is relatively low demand and is environmentally hazardous. This led to increase in imports of refined petroleum products during the period compared to petroleum crude. Specifically, the volume of imports of refined petroleum grew 28.3 percent during FY22 to 18.1 million MT, compared to 14.1 million MT during FY21 (**Figure 2.26**). By contrast, petroleum crude imports grew 5.3 percent to 9.3 million MT, compared to 8.8 million MT last year.

Import Quantum of Petroleum **Figure 2.26**
Items

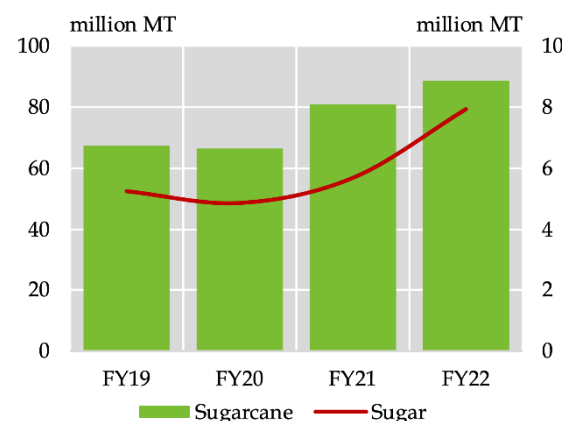


Source: Pakistan Bureau of Statistics

Capacity issues explain part of the preference for rising imports of refined products, as some oil refineries are in the process of upgrading their plants and reconfigure production in favor of Euro-5 compliant fuels in keeping with changing market dynamics and regulations. Globally, advanced economies have continually upgraded to newer Euro standards, from Euro 1 introduced in 1992 to Euro 6 in 2014, with the aim of cutting down air pollution. Pakistan, however, is transitioning to Euro-5 since 2020, having previously adhered to the Euro-2 standard between 2008-2020. The petroleum industry has still not adjusted to the scale of upgrades required, which involve considerable financial cost.⁴⁰

Moreover, in its existing refining process, the industry produces significant amount of furnace oil, which was largely consumed by power plants. As government moved towards cheaper sources of energy in the form of gas, coal, nuclear and renewables, the demand for furnace oil started to decrease over the past few years.⁴¹ Resultantly, there has been a significant build-up of furnace oil. The situation is likely to prevail unless local refineries upgrade to crack furnace oil into refined products such as low-sulphur diesel and petrol. Local refiners are planning to invest in plant upgradation that will reduce

Sugarcane and Sugar **Figure 2.27**



Source: Pakistan Bureau of Statistics

production of furnace oil, while increasing production of in-demand products such as petrol.⁴²

Meanwhile, following its exemption from customs duty under the revised China Pakistan Free Trade Agreement (CPFTA), importing fuel from China became lucrative for OMCs. Resultantly, there was a nearly four-fold YOY increase in import volume of motor spirit from China during FY22 – 4.1 million MT compared to 1.2 million MT last year.

Food sector growth was driven by sugar production

The food sector grew by 8.4 percent during FY22, on top of 22.2 percent growth in FY21. The production of sugar expanded by 39.1 percent during FY22, compared to 16.7 percent last year. The increase was mainly attributed to a 9.4 percent increase in sugarcane production compared to a year earlier (**Figure 2.27**). Rise in sugarcane production can be attributed to its relative profitability compared to high-maintenance cotton crop. In terms of timing, much of this enhanced output was reflected in the Q3-FY22 LSM data, given the relatively delayed harvesting and late crushing of sugarcane this season compared to a year earlier.

⁴⁰ For example, the estimated cost of the Pakistan Refinery Limited's Refinery Expansion and Upgrade Project (REUP), incorporating the switch to Euro-5 compliance and doubling of production capacity, is US\$ 1.2 billion. Source: Pakistan Refinery Limited Financial Report for Nine Months ended March 31, 2022.

⁴¹ Source: NEPRA

⁴² Local refiners such as Pakistan Refinery Limited and Cnergyico are investing in deep conversion processes.

Services Sector Growth**Table 2.13**

	Growth, in percent		Contribution to GDP Growth	
	FY21	FY22	FY21	FY22
Services	6.0	6.2	3.5	3.6
Wholesale & retail trade	10.6	10.0	1.8	1.8
Transport & storage	5.1	5.4	0.5	0.6
Accommodation and food services	4.1	4.1	0.1	0.1
Information and communication	7.5	11.9	0.2	0.3
Finance & insurance activities	5.9	4.9	0.1	0.1
Real estate activities	3.6	3.7	0.2	0.2
Public administration and social security	-0.5	-1.2	0.0	-0.1
Education	3.3	8.7	0.1	0.3
Human health & social work activities	2.8	2.2	0.0	0.0
Other private services	5.0	3.8	0.4	0.3

Source: Pakistan Bureau of Statistics & SBP calculations

Furniture

Furniture manufacturing industry expanded by 180.2 percent in FY22, compared to a growth of 171.0 percent last year. The performance of the sector can partly be attributed to the exports of wooden furniture. Exports of furniture grew by 180.7 percent during the review period, compared to an increase of 171.0 percent last year. Analysis of exports sector data suggests that exports of wooden furniture to the United States increased considerably. Meanwhile, anecdotal evidence suggests that exports of domestic-use wooden furniture to eastern European countries is also picking up.

2.4 Services

Services sector output expanded by 6.2 percent in FY22 compared to 6.0 percent in the previous year (**Table 2.13**). Activity pickup in the sector was driven by continued policy support, which led to increase in imports and

Wholesale and Retail**Table 2.14**

Agri credit in bn Rs, Imports in bn US\$

	FY21	FY22
LSM YoY Growth (%)	10.2	11.7
Agri Credit disbursements	13.6	14.2
Imports	56.4	80.1

Source: State Bank of Pakistan & Pakistan Bureau of Statistics

aided production in the commodity producing sectors.

Moreover, Schemes like Mera Pakistan Mera Ghar and Roshan Apna Ghar also led to positive spillover effects in sectors like banking and real estate.⁴³

Wholesale and retail**Wholesale and retail sector continued to expand on the back of commodity producing sector**

The growth momentum in wholesale and retail sector continued, as it grew by 10 percent for the second consecutive year. Growth in agriculture and manufacturing resulted in an expansion of output in the wholesale and retail sector (**Table 2.14**), as agriculture sector grew by 4.4 percent and LSM grew by 11.9 percent on YoY basis.

Imports also increased to US\$ 80.1 billion in FY22, up from US\$ 56.4 billion last year - showing an increase of 42.1 percent⁴⁴. The rise in imports was mainly due to increase in demand for consumer goods such as food, and inputs for agriculture and industry.

Transportation**Transportation sector witnessed an increase in activity**

Transportation sector output rose by 5.4 percent in FY22, compared to 5.1 percent growth last year (**Table 2.15**). The growth in the sector is mainly due to the improved economic activity in the country.

Air transport rebounded after the removal of restrictions imposed during Covid. POL sales

⁴³ Ministry of Finance, Mid-year Economic Review, July 2021 – December 2021

⁴⁴ Pakistan Bureau of Statistics

Transport, Storage and Communication - GVA of Top 3 Segments
growth

Table 2.15

	FY21	FY22
Road transport	9.0	5.0
Air transport	-59.6	26.5
Communication	-12.1	0.3

Source: Pakistan Bureau of Statistics

to the transport sector grew by 10 percent during FY22, compared to 3 percent growth last year.⁴⁵ (Figure 2.28). Sales to aviation and railways; also accelerated during FY22⁴⁶, along with an increase in the sales of light commercial vehicles (LCVs). These indicators point to increased activity in the transport sector.

Sales of tractors showed a considerable increase. Tractor sales in FY22 stood at 58,940 units, whereas, in FY21 the number of units sold were 50,920⁴⁷. This rise in sales can be attributed to continuation of relief package by the government that had allowed the supply of imported farm machinery and equipment at reduced tariffs.⁴⁸

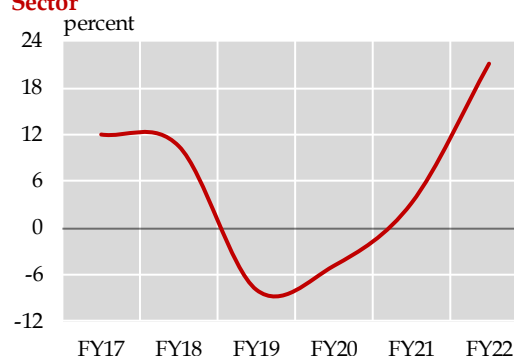
Information and telecommunication

Information and telecommunication gained considerable momentum

The information and communications sector grew by 11.9 percent in FY22, compared to 7.5 percent growth last year. Teledensity rose to 88.34 percent by June FY22, up from 84.6 percent in FY21.⁴⁹ There was also a jump in the number of broadband users during FY22, which may be traced to increase in work-from-home, online learning, and continued rise in e-commerce platforms in the country.

Meanwhile, export of ICT services, including telecommunication, computer and information services, reached US\$2.6 billion in FY22, from US\$ 2.1 billion in FY21. Notable growth was visible in the software, call centers and

Growth in POL Sales to Transport Sector **Figure 2.28**



*MS and HSD

Source: Oil Companies Advisory Council

consultancy services, which can be attributed to increase in global demand for ICT services in the wake of Covid pandemic.⁵⁰

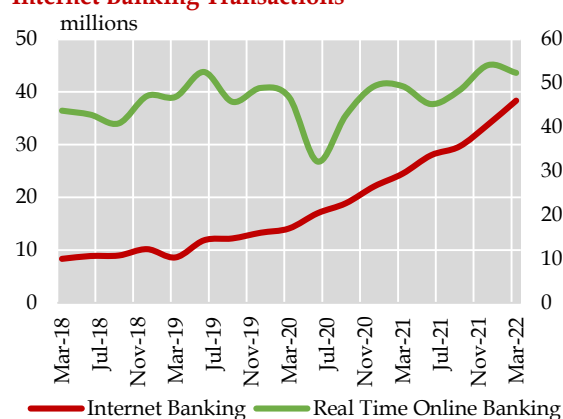
Moreover, digital banking adoption is increasing across the country as transactions via channels like real time online branches continue to gain momentum (Figure 2.29)

Finance and insurance

Finance and insurance activities decelerated

Finance and insurance activities grew by 4.9 percent, as compared 5.9 percent in

Real Time Online Banking and Internet Banking Transactions **Figure 2.29**



Source: State Bank of Pakistan

⁴⁵ Oil Industry Statistics, OCAC

⁴⁶ OCAC

⁴⁷ PAMA (2022). Annual Sales & production report

⁴⁸ Customs duty 0-2 percent and GST at 5 percent, Pakistan Economic Survey

⁴⁹ Pakistan Telecommunication Authority

⁵⁰ For details, see Box 6.1 - Factors Underlying Expansion in Pakistan's ICT Services Exports, Chapter 6.

GVA of Finance and Insurance**Table 2.16**

percent			
	Point contribution	FY21	FY22
Other Monetary intermediation	5.2	7.1	6.1
Scheduled banks	4.9	7.0	5.9
Non-scheduled banks	0.3	14.0	18.0
Insurance, reinsurance and pension funds	-0.1	0.0	-2.1
Activities auxiliary to financial services	-0.1	15.6	-1.9
Central banking	0.0	-25.0	0.6
Other financial services	-0.1	15.6	-1.9
Finance and insurance	4.9	5.9	4.9

Source: Pakistan Bureau of Statistics & SBP calculations

FY22. Growth in this sector was mainly driven by the banking sector (**Table 2.16**). Pickup in the banking sector activity is reflected in the increase in assets and deposits. In FY22, banks' deposits increased by 15 percent to Rs 22.8 trillion from Rs 19.8 trillion in FY21. The increase in deposits was mainly due to high remittances and an increase in interest rates. Other indicators such as profit after tax, return-on-assets and return-on-equity, also showed visible improvement during FY22.

Additionally, in FY22, banks' advances also increased by 21 percent, driven by the higher economic growth and disbursements under refinance schemes of SBP.

Gross value added (GVA) of other financial services witnessed a contraction (**Table 2.16**) as Pakistan Stock Exchange witnessed headwinds due to political uncertainty, widening current account deficit and a delay in the resumption of IMF program. Insurance, reinsurance and pension funds also witnessed a contraction, as the asset base of life insurance sector slowed down.⁵¹

Real Estate

Real estate maintained its momentum

The real estate sector grew by 3.7 percent in FY22, almost similar to last year's growth of 3.6 percent. The contribution of real estate to

Growth in Prices of Real Estate**Figure 2.30**

Note: Residential property prices; real estate index has been rebased to FY16 to correspond with CPI base year

Source: Zameen.com, Pakistan Bureau of Statistics

GDP has also hovered around 5 percent in the last five years.⁵² However, deceleration in the commodity-producing sector during Q3-FY22 compared to preceding quarters also started to affect real estate activities (**Figure 2.30**).

However, the escalation in real estate prices remained higher than the overall inflation rate, which indicates continuing profitability of the real estate sector.

Two subsidy schemes by SBP, *Mera Pakistan Mera Ghar* (MPMG) (for country residents) and *Roshan Apna Ghar* (for overseas Pakistanis), also played a role in boosting activities in the sector.

Other Services

Activities in the education sector picked with the resumption of normal, in-class sessions as the effects of Covid subsided in FY22. Last year, due to mobility restrictions, education institutions had resorted largely to online classes.

The health sector contracted despite an increase in the number of health personnel⁵³. Expenditure on health and education has mostly remained unchanged in recent years.

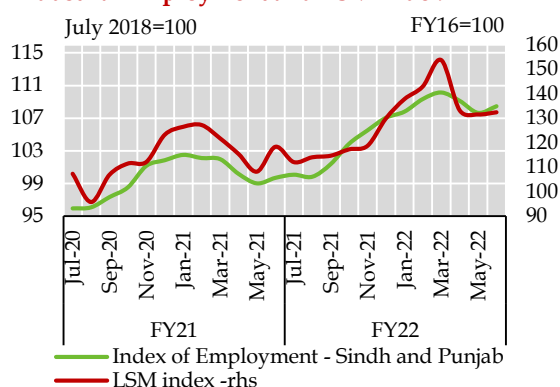
The food and accommodation sector registered an increase of 4.1 percent, same as

⁵¹ Chapter 6.3: Financial stability review – 2021, State bank of Pakistan

⁵² Pakistan Economic survey 2021-2022

⁵³ Pakistan Economic survey 2021-2022

Combined Punjab and Sindh Industrial Employment and LSM Index **Figure 2.31**



Source: Bureau of Statistics, Punjab, Bureau of Statistics Sindh and Pakistan Bureau of Statistics

last year. Whereas, public administration and social security contracted by 1.2 percent, compared to 0.2 percent in FY21.

2.5 Labor Market

Provisional estimates suggest that the labor market remained stable in FY22. More industrial workers were hired in both Punjab and Sindh, and the wages in both the services and construction sectors continued to grow during the period. Meanwhile, SBP's Business Confidence Survey (SBP-BCS) and SBP's Consumer Confidence Survey (SBP-CCS)

Average Number of Employees Hired /Fired in the Industrial Sector during FY22 **Table 2.17**

	FY21	FY22
Punjab	4,873	5,638
Cotton Textiles	2,901	2,592
Wheat Milling	1,384	1,037
Sugar	1,053	655
Leather Footwear	-157	1,751
Cement	-76	54
Pharmaceutical	-200	366
Automobile	4	-2
Sindh*	-1,909	19,550
Cotton textiles	-744	15,629
Sugar	-261	3,673
Leather tanning	440	-1,131
Cement	419	-2,191
Pharmaceutical	2,714	6,840
Automobile	1,153	-5,464

*Excluding the steel industry

Source: Bureau of Statistics, Punjab and Bureau of Statistics, Sindh

showed slight deterioration in employment prospects in the latest outturns.

Industrial employment rose both in Sindh and Punjab

As gauged by the index of industrial employment for Sindh and Punjab, 8.8 percent more workers were hired in the industrial sector during FY22, compared to 4.7 percent growth last year (**Figure 2.31**). Job growth in Sindh was higher in pharmaceutical and sugar sectors, whereas, in Punjab, more workers were hired in the leather footwear industry.

Punjab hired more workers in textile, leather and wheat milling industries

Employment in the industrial sector in Punjab rose by 1.6 percent FY22 compared to an expansion of 1.6 percent last year.⁵⁴ The growth was primarily driven by leather footwear, cotton textiles and wheat milling industries. The increase in job growth in these sectors point to elevated production levels in these industries (**Table 2.17**). The textile and wearing apparel industry growth in production was driven by exports, which grew by 25.5 percent in dollar value terms during FY22. The volume of exports also increased; in particular, for the readymade garments whose volume rose by 55.3 percent during the period.

In the leather footwear industry, foreign demand for products may have contributed to job opportunities. The volume of exports rose by 11.4 percent during FY22 on the back of higher shipments. In similar vein, growth in employment in the cotton textile sector can largely be traced to increase in foreign demand for locally produced goods. Textile exports surged by 25.5 percent during FY22 to US\$ 19.3 billion, compared to US\$ 15.4 billion last year.

The job market for wheat milling workers remained robust in Punjab, as additional job opportunities were created during FY22. Despite lower output of wheat crop in the

⁵⁴ Monthly Survey of Industrial Production & Employment, Bureau of Statistics, Sindh

review period, the increase in industrial workers in this particular industry may point to more wheat growers selling wheat to larger industrial units rather than utilizing the cottage industry for flour. The country also imported 2.2 million tons of wheat during FY22, which also boosted activity in the sector, leading to more workers being hired.

Employment generation in Sindh was impressive – especially in the pharmaceutical sector

More workers were hired in the manufacturing sector in Sindh during FY22.⁵⁵ (Table 2.17). On average, employment during the period rose by 19,550 workers, compared to a decline of 1,909 workers last year. Similar to the situation in Punjab, employment opportunities in cotton textile sector rose significantly.

Increase in private sector healthcare activities, and double-digit growth in production of pharmaceutical products helped create job openings in the industry during FY22. Pharmaceutical sector output expanded by 13.3 percent during FY22, compared to 9.9 percent growth last year. Consequently, the industry, added on average, 6,840 more workers in FY22 compared to 2,714 employees hired last year. It may be traced to increase in economic activities in the healthcare sector, especially in Sindh, where the pharmaceutical

sector production activities are predominantly located.

Meanwhile, record production of sugarcane helped create more job openings in Sindh, compared to Punjab. The automobile and cement industry lost more workers during FY22. A decrease in foreign demand, owing partly to an increase in freight costs, hampered growth of the cement producers in the south, which may have led to layoffs in the province. In case of automobile, sharp increase in prices of automobiles, lower localization of parts, and shortage of semiconductor chips adversely affected the demand for labor, which led to lay-offs in the industry.

SBP Confidence Surveys remained broadly positive

The SBP-BCS and SBP-CCS in June 2022 and July 2022 respectively revealed that optimism about employment dipped, which may be attributed to relative slowdown in economic activities during H2-FY22 compared to the preceding period.

For services, the past-six-months-employment index during FY22 fell by 4.7 points and for the next-six-months, the decline was 8.6 points in employment prospects (Figure 2.32a).⁵⁶ For the past six-month period, the index dropped below 50, which indicates that negative

BCS Employment Index for Service Sector

Figure 2.32a



Source: State Bank of Pakistan

BCS Employment Index for Industrial Sector

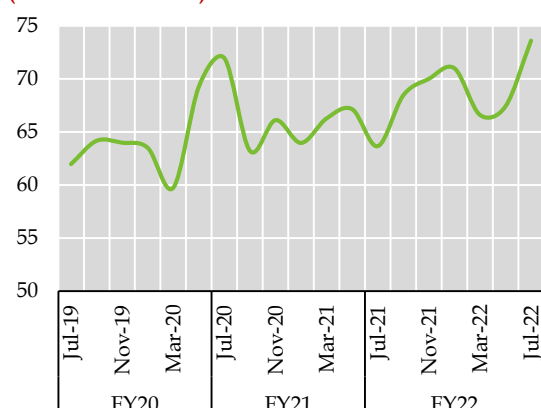
Figure 2.32b



Source: State Bank of Pakistan

⁵⁵ Monthly Survey of Industrial Production & Employment in Sindh

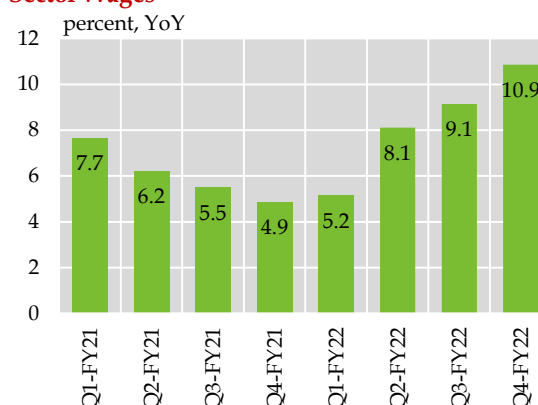
⁵⁶ From the June 2021 wave to June 2022 of the SBP Business Confidence Survey

Future Unemployment Index (Next Six Months) -SBP CCS**Figure 2.33**

Source: State Bank of Pakistan

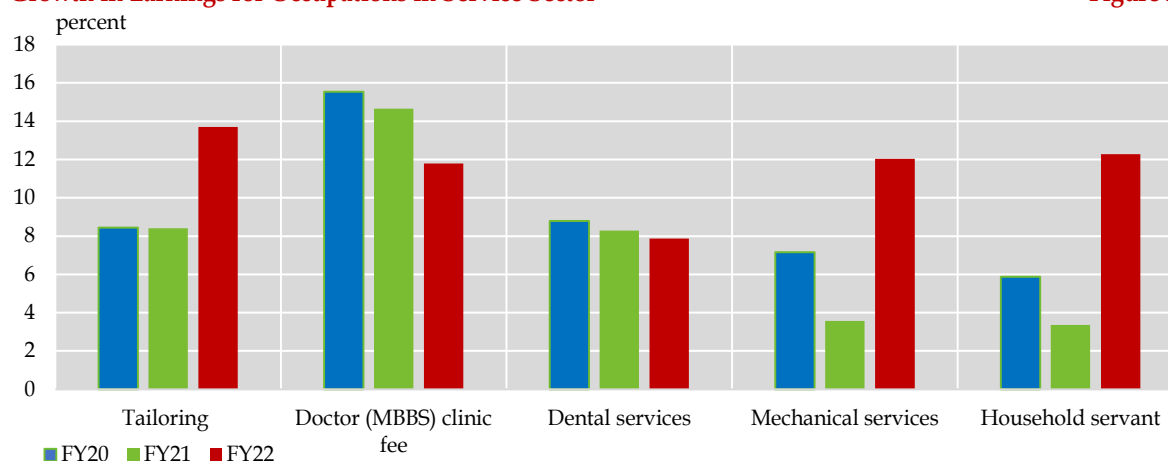
sentiments outweighed the positive sentiments.⁵⁷

Similarly, in the case of industry, the next six-month employment indices also fell by 7.0 points, however the past six-month index remained at the same level (**Figure 2.32b**). In contrast to the services sector, the indices remained broadly positive as both remained above the threshold level of 50 during FY22.

Growth in Construction Sector Wages**Figure 2.34**

Source: Pakistan Bureau of Statistics

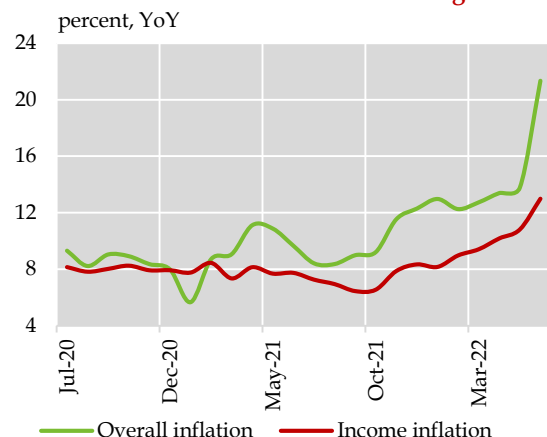
Meanwhile, the results of SBP-CCS indicate deterioration in perceptions about the labor market during FY22 (**Figure 2.33**). The Diffusion Index of unemployment increased by 10 points between the July 2021 and July 2022 rounds of the SBP CCS. However, since the unemployment index remained above 50, the pessimism about job prospects remained entrenched throughout.⁵⁸ The unfavorable change in unemployment index in the CCS

Growth in Earnings for Occupations in Service Sector**Figure 2.35**

Source: Pakistan Bureau of Statistics

⁵⁷ The survey results of BCS and CCS are presented in Diffusion Index (DI) format, which varies between 0 and 100. The DI can be interpreted as follows: DI < 50 indicates that positive views regarding credit/ availability of funds/ borrowing cost are less than the negative views; DI = 50 shows that positive views are equal to negative views; and DI > 50 indicates that positive views are more than negative views.

⁵⁸ The deviation between consumer and business expectations about economic conditions is not a new phenomenon and may be key to macroeconomic dynamics, according to Mankiw *et al* (2003). Despite sharing the same available set of information, expectations across economic agents varies; the amount of disagreement can be large and vary over time, and some people form expectations based on outdated information. (Source: N.G. Mankiw, R. Reis and Justin Wolfers (2003). *Disagreement about inflation expectations*. NBER Chapters. NBER Macroeconomics Annual 2003, Volume 18, pages 209-270. Massachusetts, NBER.)

Overall vs Income Inflation **Figure 2.36**

Source: Pakistan Bureau of Statistics

highlights concern about rising energy prices and their subsequent second-round impacts.

Wages increased during the year

Indicators of wages in both the services and construction sectors showed growth during FY22. In the construction sector, remuneration of laborers increased. In services sector, there was also a broad-based increase. That said, the inflation in wages remained lower than the

overall inflation rate in FY22.

In the construction sector, wages started to increase marginally at the start of FY22 but gathered pace as the year progressed. A quarterly break-up of wage growth is presented in **Figure 2.34**. Overall during FY22, the wages rose by 11.8 percent during FY22, compared to 5.1 increase percent last year.

In the services sector, wage growth in high-income professions such as medical consultation and dentistry decelerated during the period. However, wages in low-income professions such as mechanical services and household servants rose at higher pace than the professions such as doctors and dentists. (**Figure 2.35**).

That said, wage growth in the services and construction sectors remained well below the inflation rate throughout the year, which points to deterioration in the real incomes in these professions (**Figure 2.36**). The gap between wage growth and overall inflation widened during FY22 compared to last year.

Chapter 3

Monetary Policy and Inflation

The monetary policy committee (MPC) reversed the accommodative monetary policy stance and increased the policy rate by a cumulative 675 bps during FY22, as a host of domestic and global developments weighed heavily on Pakistan's performance and increased the risks to macroeconomic stability during the year. The post pandemic recovery in global demand and supply chain disruptions had given rise to a global commodity price super cycle in 2021, which was intensified by the outbreak of Russia-Ukraine conflict in February 2022. The spread of a new Covid wave in China in Q2-FY22, added further impetus to global commodity prices. Many central banks across countries responded by increasing policy rates, which led to stringency in financial markets and caused additional pressures on Pakistan's external account. On the domestic side, an unexpected fiscal stimulus, a strong recovery, political instability, and lingering policy uncertainty presented additional risks to the outlook of inflation and external account during the year. In line with these developments, the national consumer price inflation rose to 12.2 percent in FY22, exceeding the government inflation target as well as SBP revised inflation projection range of 9-11 percent for the year. A rising trend was also observed in core inflation, indicating underlying demand-pull inflationary pressures in the economy. Reflecting rising cost-pressures and strong domestic growth outturns, credit growth more than doubled from 10.5 percent to 21.1 percent in FY22. Besides expansion in the working capital loans, the SBP's concessionary financing schemes (LTFF and TERF) augmented the demand for fixed investment loans during FY22.

3 Monetary Policy and Inflation

3.1 Policy Review

Pakistan like other countries across the globe faced significant headwinds from the consistent increase in global commodity prices and the fallout of Russia-Ukraine conflict during FY22. In the case of Pakistan, a host of domestic factors including, a sustained increase in economic activity, an unplanned expansionary fiscal policy, domestic political instability, and uncertainty around the resumption of the IMF program that weighed on the rupee also contributed to higher-than-expected inflation outturns and widening of current account deficit (CAD) during FY22.

The average headline National CPI (NCPI) inflation reached 12.2 percent in FY22, exceeding the government inflation target as well as SBP revised projection range of 9-11 percent for the year (**Figure 3.2**). Pakistan's experience was not different from the other South Asian economies. Rising fuel and food prices alongside the expansion in economic activity pushed the overall headline inflation numbers above targets in these countries in H1-CY22 (see **Box 3.1**).

Reflecting the impact of rising commodity prices and domestic demand, CAD in Pakistan also rose to US\$ 17.3 billion during FY22, from US\$ 2.8 billion last year. The market-based exchange rate played its role as a shock absorber and depreciated considerably by 23.1 percent during FY22. However, this situation presented the need to address the elevated risks

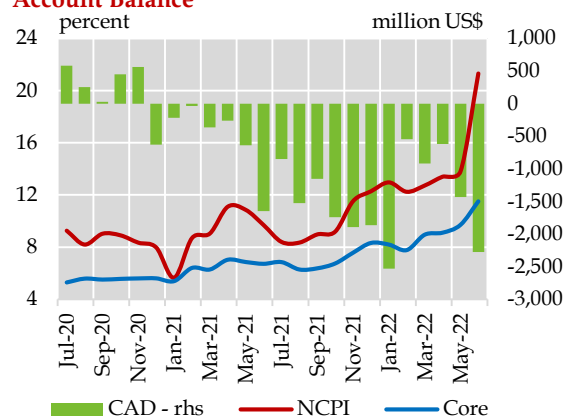
to outlook of inflation and external account to avoid

turbulence in the financial markets that could moderate economic growth (**Figure 3.1**). Therefore, after maintaining an accommodative monetary stance during FY21, SBP substantially tightened the policy rate over the course of FY22, raising it by a cumulative 675 bps, from 7.0 percent to 13.75 percent. In addition, SBP also introduced other regulatory measures to rein in demand pressures and anchor inflation expectations.

At the time of the MPC meeting in July 2021, inflationary pressures appeared to have eased. Inflation, although at an elevated level, had declined from 11.1 percent in April 2021 to 9.7 percent in June 2021. Moreover, core inflation remained stable in both urban and rural areas, whereas inflation expectations fell in July 2021. In addition, the macroeconomic rebound from the Covid-led downturn strengthened further. Particularly, large-scale manufacturing (LSM) registered 11.6 percent growth in FY21, while high-frequency demand indicators continued to show robust growth.

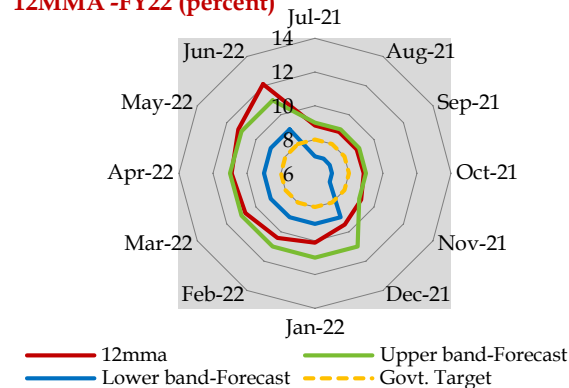
Keeping in view these developments, SBP projected the inflation range for FY22 at 7-9 percent, which was subject to both downside and upside risks. The key upside risks included: (i) higher than expected increase in global commodity prices; (ii) upward adjustment in energy tariffs and petroleum

Inflation and Current Account Balance **Figure 3.1**



Source: Pakistan Bureau of Statistics & State Bank of Pakistan

Inflation Projection and 12MMA -FY22 (percent) **Figure 3.2**



Source: Pakistan Bureau of Statistics, Planning Commission and SBP projections and calculations

development levy (PDL); (iii) unfavorable exchange rate movement that could exacerbate imported inflation; and (iv) fiscal slippages that could amplify demand pressures. The primary downside factor was a resurgence in the spread of the pandemic that could stall domestic and global economic recovery. In view of the continued domestic recovery and improved inflation outlook, the MPC decided to keep the policy rate unchanged at 7 percent in its July 2021 decision.

As the first quarter of FY22 progressed, the consistent increase in global commodity prices and pressures from domestic demand started to pose risks to the outlook of inflation and CAD. The unexpectedly expansionary fiscal policy and continued supportive stance of monetary policy boosted the pace of economic recovery, above expectations. Agriculture performance was also satisfactory as seen from the increase in area under rice, maize and sugarcane cultivation. Based on these trends, SBP projected the range for real GDP growth for FY22 at 4.0–5.0 percent. However, the combined effect of faster than expected economic recovery, commodity price rally and external account pressures translated into depreciation in PKR that further fueled imported inflation. Hence, not only did monthly inflation momentum pick up in July and August 2021, but the inflation expectations of both households and businesses also inched-up compared to the earlier survey iteration.

The MPC was faced with the challenge of navigating the balance between an adequate policy response to dampen inflationary pressures, and the need to safeguard the economic recovery during the year. With receding uncertainty of the pandemic, the economic recovery appeared to be on a firmer footing, and a shift in monetary policy settings was required to ensure the durability of growth, keep inflation expectations anchored, and tame the growth in CAD. Thus, at this more mature stage of the economic recovery, the MPC decided to increase the policy rate by 25 bps, to 7.25 percent in September 2021, indicating a turning point, as monetary policy shifted gears after maintaining a 14-month spell of unchanged stance.

The persistent increase in global commodity prices, upward adjustment in domestic energy prices and a robust expansion in economic activity further stoked up inflationary pressures during the second quarter; while the risks to CAD outlook also became more pronounced. Specifically, the m-o-m NCPI inflation reached over a decades' high level in November 2021; whereas, trade deficit for the month also stayed elevated. Meanwhile, high-frequency indicators of domestic demand suggested that economic growth remained buoyant, although sales and production levels of some manufacturing items started normalizing, especially in automobiles and consumer durables. With the broadening inflationary pressures, MPC in December 2021 revised the forecast for inflation in the range of 9-11 percent for FY22 upward from 7-9 percent.

Thus, with the balance of risks shifting quicker-than-expected away from growth and towards inflation and the deteriorating current account, the MPC raised policy rates twice in the second quarter: 150 basis points in November 2021, followed by 100 basis points in December 2021. The MPC also provided forward guidance stating that with the increase in the policy rate the end goal of mildly positive real interest rates was close to be achieved and monetary policy settings were forecast to remain broadly unchanged in the near term under the baseline projection. In addition, SBP also introduced other measures to contain strengthening demand pressures. These included: increase in Cash Reserve Requirement (CRR), tightening of Prudential Regulations (PRs) for consumer financing, and imposition of cash margins on import of a number of items (**Table 3.1**). Moreover, in November 2021 the MPC decided to increase the frequency of monetary policy reviews from six to eight times a year, in continuation of efforts to make the process of monetary policy formulation more predictable in line with the international best practices.

The normalization of Pakistan's monetary policy stance was in line with the global experience, as many central banks around the world also increased the policy rate during the year to keep inflation expectations anchored.

Demand Stabilizing Measures-FY22**Table 3.1**

Category	Description	
Consumer Financing	PRs effectively prohibited financing for imported vehicles, and tightened regulatory requirements for financing of domestically manufactured/ assembled vehicles of more than 1000 cc engine capacity and other consumer finance facilities like personal loans and credit cards. Also, the maximum tenure of auto finance facility was reduced from five years to three years for vehicles above 1,000 cc engine displacement and from seven years to five years for vehicles up to 1,000 cc engine displacement.	Sep-2021
Imports	100 percent cash margin was imposed on the import of additional 114 items	Sep-2021
Prudential Tools	Average Cash Reserve Requirement (CRR), to be maintained during a period of two weeks by scheduled banks, was increased from 5 percent to 6 percent and minimum CRR to be maintained each day from 3 percent to 4 percent.	Nov-2021
Imports	100 percent cash margin on the import of additional 177 items	Apr-2022

Source: State Bank of Pakistan

In line with the forward guidance, MPC kept the policy rate unchanged in Q3-FY22. Around the time of MPC meeting in January 2022, the momentum in inflation (MoM) started to wane, whereas YoY inflation outturns were relatively higher, compared to the earlier readings. Moreover, demand side pressures as gauged by the high frequency demand indicators including, cement dispatches and sales of petroleum products, tractors and commercial vehicles started to moderate. On the supply side, LSM production slowed to 3.3 percent YoY in Jul-Nov FY22, reflecting the impact of rising cost of production and various corrective measures taken to contain the pace of economic activity.

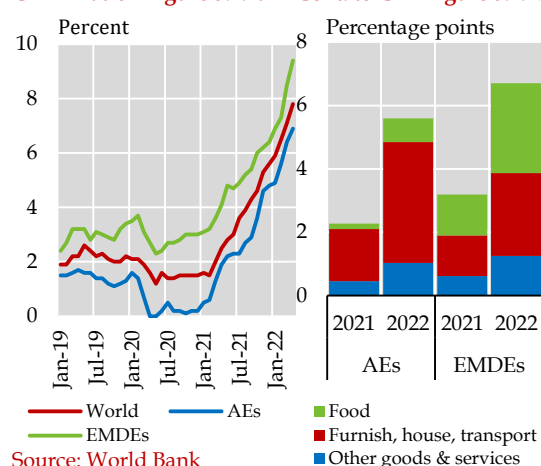
In the subsequent meeting held in March 2022, MPC also maintained status quo, noting that the outlook for inflation had improved amid cuts in fuel prices and electricity tariffs, announced as part of the government's relief package, as long as these were fully financed. Furthermore, enactment of the Finance (Supplementary) Act 2022, represented additional fiscal consolidation compared to the budget and improved the outlook for inflation in FY23. Core inflation fell in urban areas in February 2022, whereas the slowdown in domestic demand also eased pressure on CAD. The trade deficit witnessed a further 10 percent contraction on MoM basis in February 2022, following a 29 percent decline recorded a month earlier despite the rise in global prices. High-frequency indicators suggested that growth continued to moderate.

Inflation expectations of both consumers and businesses, though elevated, remained broadly unchanged in Q3-FY22. In particular, the consumer's inflation expectation index stayed

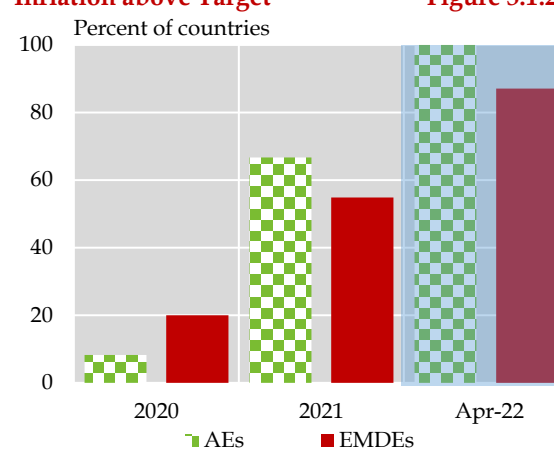
almost unchanged in January 2022 at the level observed in November 2021, indicating that second-round effects from higher commodity prices remained contained. Similarly, inflation expectation index for businesses remained stable in February 2022 at previous level, which dropped significantly in December 2021.

Just when the macroeconomic indicators started to move towards sustainable levels, some unfavorable global and domestic developments posed serious challenges to Pakistan's macroeconomic stability towards the last quarter of FY22. First, the start of Russia-Ukraine crisis introduced a serious supply shock to global economy. As the impact of the conflict propagated globally through supply chain disruptions and fresh hike in commodity prices, it also worsened the outlook for inflation and external account of Pakistan. Second, the US Federal Reserve introduced its first rate hike since 2018, in March 2022 and outlined its program of aggressive tightening of Fed rate during 2022. This, along with the anticipated tightening by major central banks was likely to have implications for global financial conditions. Like other emerging economies, Pakistan was also witnessing net outflows from equity markets, while the cost of external financing had also increased, mounting pressures on Pakistan's external account. Third, domestic political instability, along with policy uncertainty further aggravated the macroeconomic outlook. Fourth, Supply chain disruptions emerging from new Covid wave in China presented fresh risks to inflation outlook.

In view of these developments, the MPC increased the policy rate by 250 basis points to 12.25 percent in the emergency MPC meeting in April 2022, whereas a further hike of 150 bps

CPI Inflation Figure 3.1.1a Cont. to CPI Figure 3.1.1b

was introduced in May 2022 to 13.75 percent. The MPC revised the forecast for headline

Inflation above Target Figure 3.1.2

average NCPI inflation to slightly above 11 percent in FY22.

Box 3.1: South Asian Economies- Breaching Inflation Tolerance Bands

The uptrend in global commodity prices strengthened during CY21 amid sustained pace of global economic recovery, Covid-related supply chain bottlenecks and weather uncertainties.¹ The economies faced further price pressures during CY22, on account of the Ukraine-Russia conflict (**Figure 3.1.1a and b**) as the invasion and resulting sanctions on Russia escalated the already surging commodity prices. CPI inflation not only rose significantly but also edged above the central banks' target rates in both advanced economies (AEs) and emerging and developing economies (EMDEs) (**Figure 3.1.2**). In the same vein, the conflict in Ukraine had significant impact on South Asian EMDEs during CY22. Notably, consumer price inflation in South Asia has been rising rapidly and have started exceeding central banks' targets (**Figure 3.1.2**).

In terms of contribution, energy and food groups mainly contributed to headline inflation during CY2022 across regions (**Figure 3.1.1b**). In AEs, the spike in oil and gas prices led to a significant increase in energy costs. However, in EMDEs, given larger share of food in the consumption baskets, rising food prices also played substantial role in overall inflation along with fuel prices.² Core inflation also surpassed pre-pandemic rates across most economies amid demand pressures as well as supply-chain issues.³ Similarly, in Pakistan, inflationary pressures not only surged significantly from January 2022 onwards but also remained higher than other South Asian economies barring Sri Lanka. Rising energy and food inflation mainly contributed to high inflation outturns (**Figure 3.1.3**). However, larger currency depreciation amid rising external sector vulnerabilities amplified the impact of imported inflation in the case of Pakistan (**Figure 3.1.4**).

3.2 Monetary Aggregates

The broad money growth stood at 13.6 percent during FY22 compared to 16.2 percent last year.⁴ On the asset-side, it was mainly the impact of a sharp contraction in the net foreign assets (NFA) that contained the growth of money supply. In contrast, the expansion in net domestic assets (NDA) was more than

double in FY22, compared to last year (**Table 3.2**).

A substantial increase in net government budgetary borrowings from the banking system and private credit offtake propped up NDA, where the impact of the former dominated. The upsurge in commodity prices driven by the global factors, SBP's concessionary financing schemes, and

¹ For details see Box 3.1 of First Quarterly Report FY22 on the State of the Pakistan's Economy

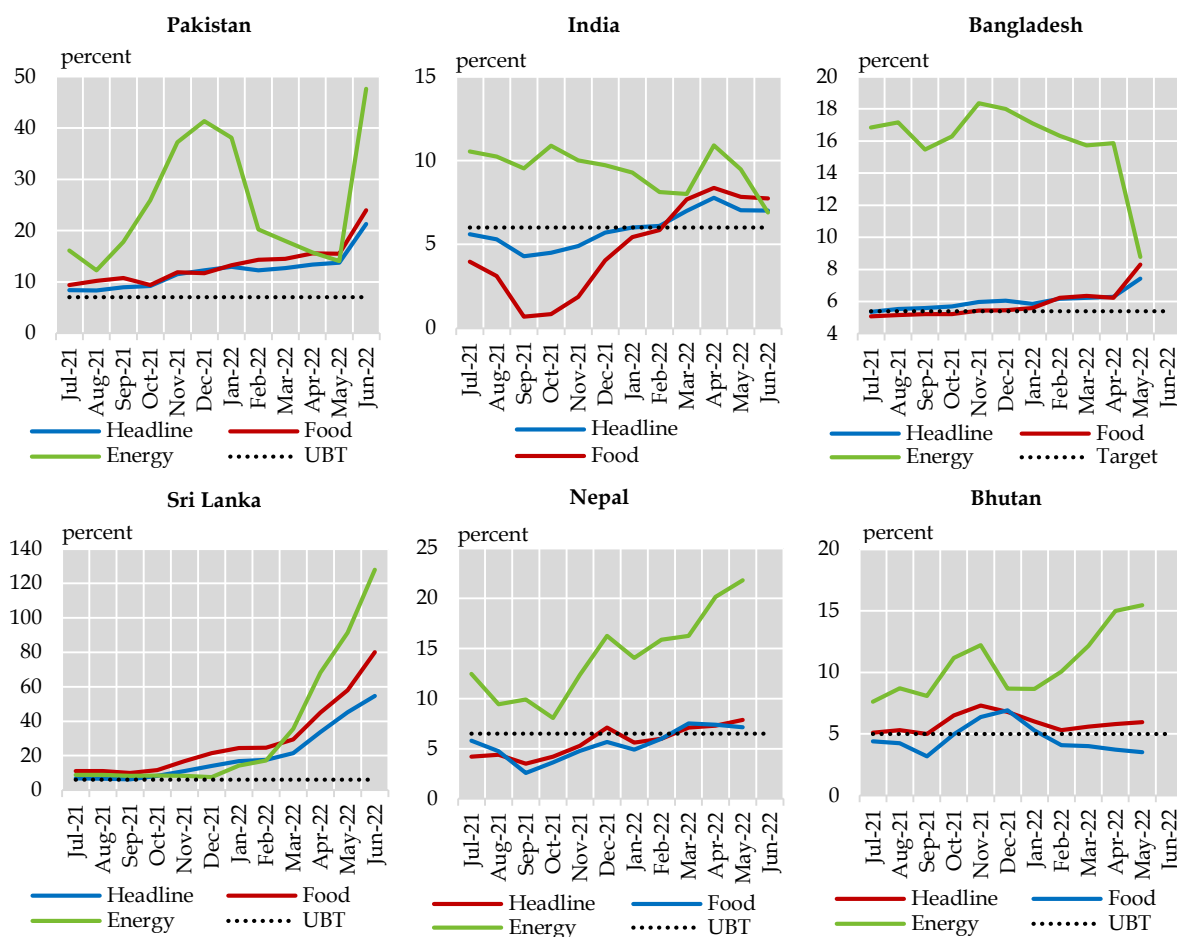
² F. Davide (2015), "Global Food Prices and Domestic Inflation: Some Cross-Country Evidence", IMF Working Paper

³ World Economic Outlook, April 2022

⁴ M2 to GDP ratio fell from 44 percent in June 2021 to 41 percent in June 2022.

Inflation in South Asian Economies

Figure 3.1.3



*UBT: Upper Band Target

Source: Central Bank Websites, Haver Analytics

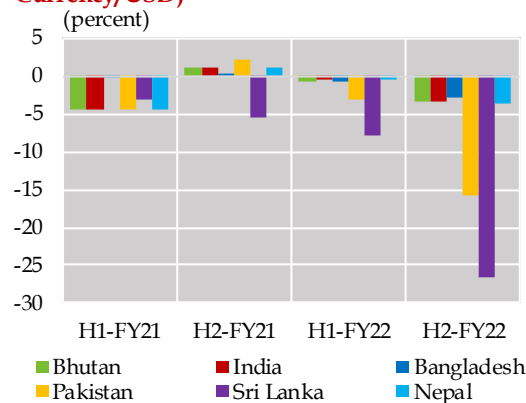
expansion in economic activity, inflated private sector borrowing to Rs 1,612.1 billion in FY22, compared to Rs 766.2 billion in the same period last year. Likewise, the government borrowing needs from the banking system also remained at an elevated level. In addition, higher borrowings by the government commodity procurement agencies amid looming risk of supply shortages and an upward revision in support prices of wheat and sugarcane, also contributed to the expansion in the NDA during FY22.

NFA of the banking system continued to contract in all four quarters of FY22. Cumulatively, during FY22, the NFA fell by Rs 1,481.3 billion compared to an expansion of Rs 1,240.9 billion in the same period last year. The contraction mainly came from SBP's NFA that fell by Rs 1,493.8 billion during FY22, against

an increase of Rs 1,111.9 billion in FY21. This reflects the impact of significant deterioration in the current account deficit during the year, which rose to US\$ 17.4 billion in FY22

Exchange Rate (National Currency/USD)

Figure 3.1.4



Source: Haver Analytics

Monetary Aggregates^P

flow in billion Rupees

Table 3.2

	Change in Stock		Growth		Contribution to M2 Growth	
	FY21	FY22	FY21	FY22	FY21	FY22
M2 (A+B)	3,389.7	3,305.3	16.2	13.6	16.2	13.6
A. NFA	1,240.9	-1,481.3	240.4	-204.4	5.9	-6.1
B. NDA	2,148.8	4,786.6	10.0	20.2	10.3	19.6
Budgetary borrowing	1,625.2	3,177.0	11.8	20.5	7.8	13.0
SBP	-1,206.3	-147.1	-18.4	-2.8	-5.8	-0.6
Scheduled banks	2,831.5	3,324.1	39.3	32.9	13.5	13.6
Commodity operations	90.6	229.7	11.1	25.4	0.4	0.9
Private sector credit	766.2	1,612.1	11.2	21.1	3.7	6.6
PSEs	-53.8	-43.3	-3.7	-3.1	-0.3	-0.2
Other items net	-311.0	-193.5	-20.8	-10.7	-1.5	-0.8
Reserve money	983.6	662.9	12.8	7.7	-	-
Currency in circulation	767.9	662.5	12.5	9.6	3.7	2.7
Deposits	2,595.0	2,615.0	17.6	15.0	12.4	10.7

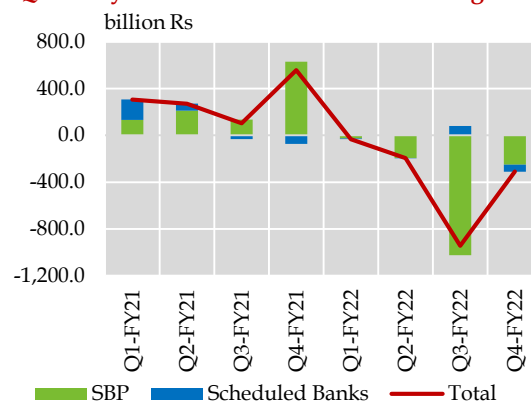
P: provisional

Source: State Bank of Pakistan

compared to only US\$ 2.8 billion in last year. In addition, the scheduled repayments of external debt increased the gross financing requirements of the country. However, in the absence of adequate external inflows, these payments were partially financed by drawdown in SBP reserves during FY22.

Bulk of decline in the SBP reserves came in Q3-FY22 (**Figure 3.3**), because of large external debt repayments, leading to a sizeable contraction in SBP's NFA. In contrast, the NFA of commercial banks posted an increase of Rs 12.5 billion compared to an increase of Rs 129.0 billion in last year. This is partially on the back of a 6.1 percent YoY growth in workers' remittances during FY22 compared to last year and inflows in Roshan Digital Accounts.

On the liability-side, currency in circulation grew by 9.6 percent in FY22 compared to a growth of 12.5 percent in FY21. While commercial bank deposits posted a growth of 15.0 percent during FY22, compared to an increase of 17.6 percent in last year. It is important to recall here that during H1-FY22, the deposit growth maintained a positive

Quarterly Flows of NFA**Figure 3.3**

Source: State Bank of Pakistan

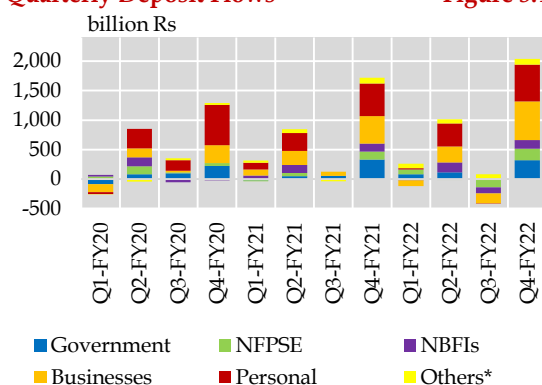
momentum, which helped in bringing the currency to deposit ratio to 38.2 percent in Dec 2021 – lowest level since December 2018.

However, in Q3-FY22, deposits posted a contraction as private businesses, PSEs and NBFIs recorded deposit withdrawals (**Figure 3.4**). Three main factors contributed to deposit withdrawals: (i) seasonal impact of a slowdown in deposit growth during the third quarter; (ii) political and policy uncertainty; and (iii) one-off deposit withdrawals driven by three PSEs in Q3-FY22.⁵

⁵ Pakistan Petroleum Limited, Oil and Gas Development Co Limited and Government Holdings (Pvt) Limited posted deposit withdrawals for settlement of acquisition of stake in Tethyan Copper Company Pakistan (Pvt.)

Quarterly Deposit Flows

Figure 3.4



* Others include: trusts and non-resident deposits

Source: State Bank of Pakistan

However, from May 2022 onwards, the deposit mobilization regained its momentum. This, in turn lowered the currency to deposit ratio to 38.0 percent in June 2022. This was mainly on the back of seasonal factors and stability around the political situation relative to the preceding quarter. Besides, enabling policies for deposit mobilization such as removal of withholding tax on banking transactions at the start of FY22⁶ and high interest rates also helped in improving the currency to deposit ratio.

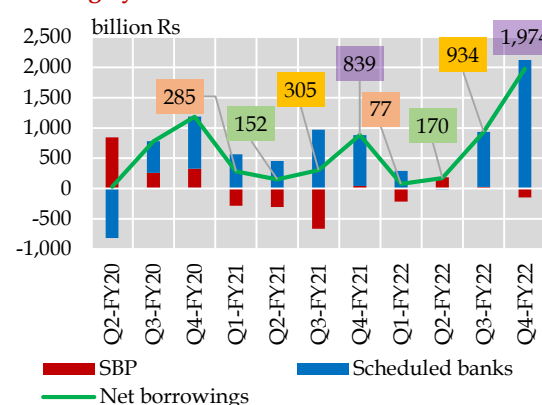
Government Borrowings

The net budgetary borrowings from the banking system nearly doubled to Rs 3,177.0 billion during FY22 compared to Rs 1,625.2 billion in last year. At the start of the fiscal year, the budgetary borrowings from the banking system remained lower compared to last year. However, the government mainly relied on commercial banks to meet its financing requirements in accordance with the SBP Act Amendment (2022). A slight reduction in fiscal deficit during Q1-FY22, compared to same period last year, along with the ample inflow of external financing eased financing pressure on domestic banking system, during the first quarter of FY22.

As the year progressed, the government's reliance on banking system picked up pace.

Government Borrowings from the Banking System

Figure 3.5



Source: State Bank of Pakistan

Specifically, in Q3-FY22, the government ended up borrowing Rs 934.1 billion, compared to Rs 304.9 billion in the same period last year. The momentum continued in the fourth quarter as well (Figure 3.5). This reflects the impact of a sizeable increase in the fiscal deficit from Q3-FY22 onwards. However, in the absence of adequate external loan inflows, increasing financing requirements elevated pressure on domestic banking system during H2-FY22.

Primary Auctions

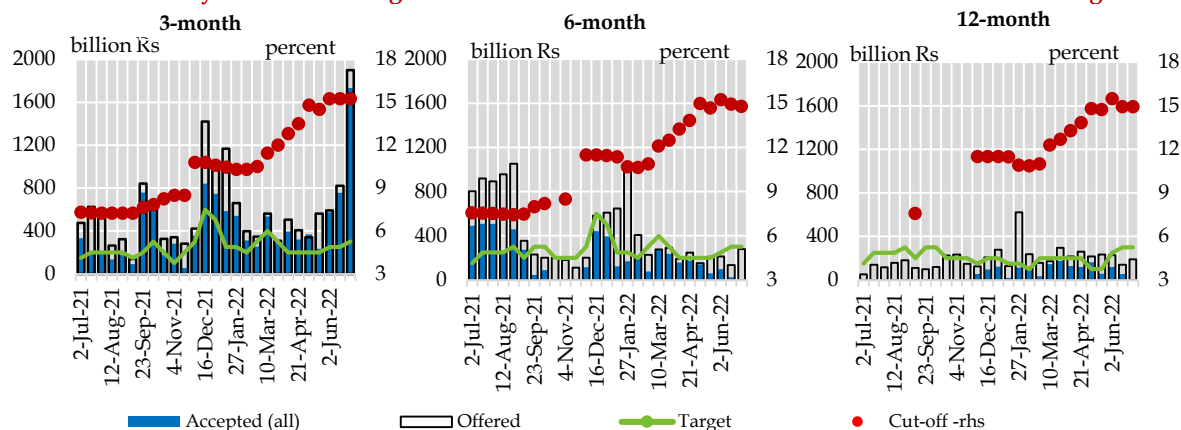
The government met its financing requirements mostly through floating rate PIBs during FY22. In overall terms, around 50 percent of the auction targets for government securities, on net of maturity basis, were assigned to floating rate PIBs, followed by 23 percent to MTBs, 20 percent to Sukuks and 6 percent to fixed rate PIBs during FY22.

During FY22, SBP shifted its monetary policy stance and increased the policy rate by a cumulative 675 bps through the course of year. Subsequent to the first rate hike in September 2021, short-term interest rates started to rise that were stable previously (Figure 3.6). Relative to short-term rates, the increase in long-term rates was less pronounced, leading to a decline in term premiums. On net of

Limited (TCCP). Source:

www.ogdcl.com/sites/default/files/Nine%20Monthly%20Report%20for%20the%20Period%20Ended%2031%20March%202022.pdf

⁶ Ministry of Finance, 2021. (www.download1.fbr.gov.pk/Docs/2021751375221891FinanceAct2021.pdf)

Auction Summary of T-bills during FY22

Source: State Bank of Pakistan

maturity basis, the targets for T-bills during H1-FY22 stood at Rs 772.6 billion. Keeping in view the pressures on short-term yields, the government reduced the net of maturity targets for T-bills during H2-FY22 to Rs 368.5 billion. For PIBs, the government assigned higher targets to floating rate PIBs on net of maturity basis compared to fixed rate PIBs during FY22.

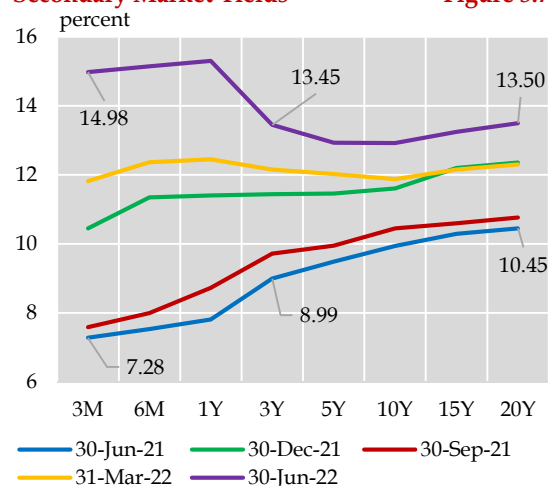
At the onset of the fiscal year FY22, with the expectation of bottoming out of interest rates, the market was more inclined towards shorter tenor MTBs and floating coupon PIBs. In H2-FY22, the market's interest revived in long-term fixed rate bonds to capitalize on flattening of the yield curve.

In the light of market's increasing appetite for fixed rate PIBs during second half of FY22, the government leveraged the opportunity by increasing its acceptances (net-of-maturity) as the year progressed (**Table 3.3**). During FY22, the government mobilized Rs 1839.8 billion from fixed coupon PIBs against the target of Rs 1,400.0 billion. Meanwhile, tightening of the monetary policy continued to attract market participants in the floating rate PIBs. The acceptances were in excess of the pre-auction target: Rs 2,722.3 billion were mobilized compared to the target of Rs 2,475.0 billion during the fiscal year FY22.

As far as the Shariah compliant instruments are concerned, at the start of the fiscal year, the market was mainly interested in Variable Rental Rate Sukuk (GIS-VRR) but as the rates

increased sharply, the market's interest in fixed rental rate Sukuk (GIS-FRR) revived from Q2-FY22 onwards. On a cumulative basis, however, the total acceptances of GIS-VRR surpassed the acceptances of GIS-FRR. This trend was also in line with the government's higher target for GIS-VRR compared to GIS FRR.

In secondary market, the yields remained relatively stable in the beginning of fiscal year. However, pressures began to emerge in the second quarter subsequent to the first rate hike of the fiscal year (**Figure 3.7**). As a result, the spread between the policy rate and 3-month T-bill rate continued to indicate a sharp increase on quarter-on-quarter basis, whereby, it stood around 115 bps in Q2, and from there rising to a high of 305 bps in April 2022. This was due

Secondary Market Yields**Figure 3.7**

Source: Financial Market Association of Pakistan

Auction Summary**Table 3.3**

billion Rupees

	Target	Maturity	Offered*	Accepted
<u>Treasury bills</u>				
Q1-FY22	4,700.0	4,174.6	9,335.2	4,425.4
Q2-FY22	5,950.0	5,702.8	7,821.3	4,375.4
Q3-FY22	4,400.0	4,528.0	7,876.0	4,158.7
Q4-FY22	4,500.0	4,004.00	8,041.91	5,684.82
FY22	19,550.0	18,409.4	33,074.4	18,644.3
<u>Pakistan Investment Bonds</u>				
<i>Fixed Rate</i>				
Q1-FY22	450.0	1,053.0	943.9	399.6
Q2-FY22	300.0	37.0	990.1	287.6
Q3-FY22	300.0	0.0	1,793.2	592.0
Q4-FY22	350.0	0.0	1,075.6	657.9
FY22	1,400.0	1,090.0	4,802.8	1839.8
<i>Floating Rate</i>				
Q1-FY22	495.0	0.0	1,325.6	913.1
Q2-FY22	650.0	0.0	1,004.9	606.2
Q3-FY22	600.0	0.0	990.1	794.4
Q4-FY22	700.0	0.0	1,038.6	480.3
FY22	2,475.0	0.0	4,359.2	2,722.3
<u>Ijarah Sukuk</u>				
<i>GIS-VRR</i>				
Q1-FY22	0.0	0.0	0.0	0.0
Q2-FY22	300.0	0.0	585.4	507.2
Q3-FY22	225.0	0.0	313.0	201.7
Q4-FY22	225.0	0.0	514.9	430.7
FY22	750.0	0.0	1,414.3	1,138.6
<i>GIS-FRR</i>				
Q1-FY22	0.0	0.0	0.0	0.0
Q2-FY22	75.0	0.0	185.2	80.7
Q3-FY22	75.0	0.0	422.9	255.8
Q4-FY22	75.0	0.0	115.8	41.0
FY22	250.0	0.0	746.8	374.7

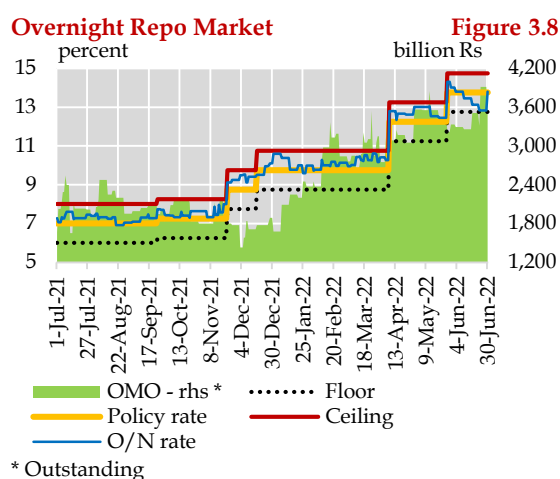
*competitive bids only

Source: State Bank of Pakistan

to a confluence of extraordinary developments such as: (i) expectations of interest rate hikes in the light of heightened inflationary concerns on account of commodity super cycle, Russia-Ukraine conflict, and pressures on exchange rate caused by rising CAD and monetary tightening by the central banks of advanced economies; (ii) increased reliance of the government on domestic banks amid lack of adequate financing from non-bank and external sources and increased financing needs due to widening of budget deficit; (iii) rising demand for private sector credit; iv) heightened policy uncertainty stemming from abolition of energy subsidies, and market expectations of the possibility of emergency monetary policy meetings also resulted in higher spreads. This sharp increase in the

short-term yields led to the flattening of yield curve after September 2021 reflecting market's concerns of rising inflationary pressures and deterioration of the external sector position.

The continued uptrend in inflation, deterioration in the external account and rising uncertainty about prevailing economic conditions, pushed the yields of up to one-year papers above the long-term bonds from March 2022 onwards. During FY22, SBP increased the policy rate by a cumulative 675 bps, however, the 3M and 6M yields rallied by 739 bps and 716 bps respectively while 10Y and 15Y yields rose by 247 bps and 265 bps respectively.

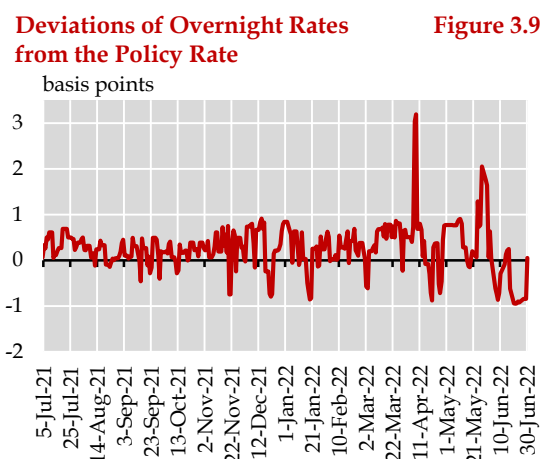


Source: State Bank of Pakistan

Interbank liquidity

During FY22, the liquidity conditions in interbank money market remained relatively strained compared to last year. The average outstanding OMOs soared from Rs 1,289.5 billion in FY21 to Rs 2,479.9 billion during the review period. On quarterly basis, the money market displayed signs of liquidity pressures throughout Q1-FY22. The SBP's money market injections, however, slowed down during Q2-FY22 as deposit mobilization gained momentum and government borrowings from commercial banks remained restrained on the back of availability of IMF SDR allocations for fiscal needs⁷. On the other hand, high private credit offtake and an increase in the cash reserve requirement partly offset these liquidity inflows in the system. The average outstanding OMO injections decreased as a result, falling to Rs 1,875.0 billion in Q2-FY22 from Rs 2,127.2 billion in the preceding quarter.

During H2-FY22, the government borrowing from scheduled banks increased steadily. Additionally, the demand for credit from the private sector and impact of foreign exchange operations of the SBP further tightened the liquidity conditions. With regard to the supply of funds, the deposits of scheduled banks fell in Q3-FY22. Subsequently, in Q4-FY22, the



Source: State Bank of Pakistan

total deposits exhibited a seasonal growth, but its impact on liquidity of the banking system was more than offset by a sizable increase in the government borrowings. All of these factors combined, increased the average outstanding OMO stock to Rs 2,615.2 billion and Rs 3,349.2 billion in Q3-FY22 and Q4-FY22 respectively (**Figure 3.8**)

Meanwhile, the overnight money market remained more volatile during FY22, whereby the average deviation of overnight rates from the policy rate increased to 27 bps compared to 8 bps in FY21. The spread between the policy rate and the overnight rates continued to inch up in each quarter of the fiscal year, displaying signs of higher volatility in the money market. (**Figure 3.9**).

Key drivers of high money market rates were market's expectations of rate hikes in the light of rising inflationary pressures; rising budgetary borrowing needs of the government coupled with greater demand for credit from the private sector. In order to ease out heightened deviation of overnight rates from the policy rate and to further enhance the forward guidance given in December 2021's policy, eight 63-day OMO injections took place during Dec- Jun FY22 and one 77-day OMO injection on June 30, 2022.

⁷ The country received an inflow of US\$ 2.8 billion from the IMF under the global SDR allocations during Q1-FY22. In Q2-FY22, the SBP made an exceptional on-lending of this amount equivalent to Rs 474.9 billion to the government for financing of the vaccine drive and effective management of the Covid crisis.

In December 2021, SBP also introduced a Shariah Compliant Mudarabah Based Open Market Operations (Injections) for Islamic Banking Institutions (IBIs).⁸ SBP has also offered a reverse repo/lending facility to IBIs. First Shariah compliant OMO auction was conducted on April 1, 2022. Subsequently, through regular weekly OMO auctions, the average Islamic OMO stock stood at Rs 467.3 billion in Q4-FY22. These injections will not only help the Islamic banking institutions in effectively managing their liquidity but it will also augment the liquidity of banking system at large. Currently, this mechanism only allows Islamic banks to borrow from the central bank via OMO injections or through the ceiling facility; while OMO mop-ups and floor facility are not available to the market yet.

3.3 Credit to Private Sector

The expansion in economic activity and surge in the cost of production shored up private sector credit growth to 21.1 percent during FY22, compared to 11.2 percent last year (**Figure 3.10**). The increase in working capital loans was mainly responsible for this growth whereas, SBP's concessionary financing schemes (LTFF and TERF) boosted fixed investment during the period. However, in real terms (deflated by WPI), credit to private sector declined by 3.0 percent in FY22, compared to a growth of 1.6 percent last year.

The policy environment was mostly conducive for real economic activity at the start of the fiscal year. Specifically, fiscal policy support in the form of a large increase in development spending, continued tax incentives for industry, export and construction sectors, post pandemic revival in external demand, SBP's targets for housing and construction, capacity expansions under TERF, lagged impact of the accommodative monetary policy stance along with receding intensity of the pandemic were

Factors Driving Credit Demand **Table 3.4**

percent change		
	FY21	FY22
Increased cost of production		
Exchange rate (PKR/USD)	6.7	-23.1
Electricity tariffs	10.8	22.6
Domestic fuel prices	-1.0	37.8
Cotton prices	17.9	69.1
Construction input items	5.8	11.4
International palm oil prices	45.0	49.6
Economic activity expansion		
LSM	11.6	11.9
Power generation	6.9	9.6
Export volume index	6.0	15.0
Ready-made garments	-23.3	44.5
Sales		
<i>Car sales</i>	56.7	54.9
<i>PoL sales</i>	16.3	14.4
<i>FMCGs</i>	22.3	17.4
PSDP	11.2	33.5
Remittances	27.3	6.1

Source: SBP, MoF, PBS, APCMA, PAMA, OCAC, NEPRA, World Bank

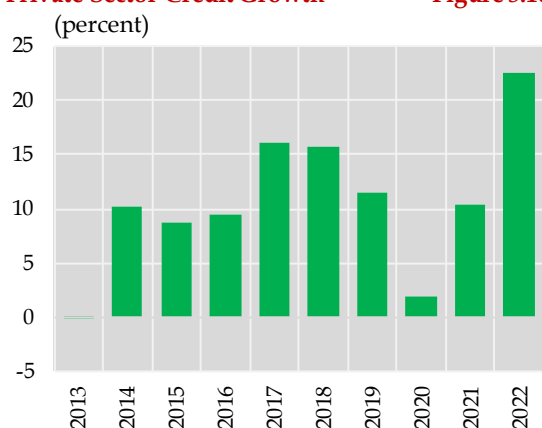
instrumental in driving the growth in LSM and hence private sector credit.

As the year progressed, a confluence of factors inflated domestic cost of production that further augmented credit demand during FY22. First, a sharp increase in global commodity prices that translated into a terms of trade shock for the Pakistan's external account and resulted into 23.1 percent depreciation of PKR parity inflated prices of imported inputs (**Table 3.4**). Second, the government increased power tariffs during FY22, under the Circular Debt Management Plan (CDMP),⁹ which further spurred cost of production and hence short term financing requirements of the firms.

Working capital loans rose by Rs 698.8 billion in FY22, compared to Rs 169.5 billion last year. Bulk of the increase came during Q2-FY22, as

⁸ DMMD Circular No. 25 of 2021, State Bank of Pakistan

⁹ The CDMP envisaged adjustment in power tariffs to ensure cost recovery. IMF (2021). Second, Third, Fourth, And Fifth Reviews Under The Extended Arrangement Under The Extended Fund Facility And Request For Rephasing Of Access – Press Release; Staff Report; Staff Supplement, And Statement By The Executive Director For Pakistan. Washington D.C.: IMF

Private Sector Credit Growth **Figure 3.10**

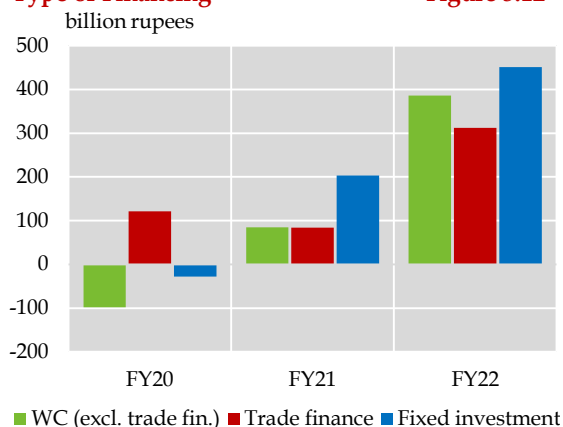
Source: State Bank of Pakistan

the impact of seasonal borrowing was compounded by higher input costs (**Figure 3.11**).

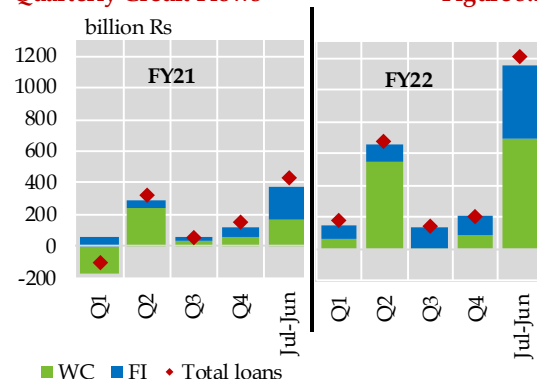
Export-oriented sector drove short-term financing requirements

Financing requirements of export-oriented businesses remained high due to an increase in export-led activity (**Figure 3.12**). This is in line with a rise in the overall export quantum index by 15.0 percent during FY22, compared to an increase of 6.0 percent last year.

Within manufacturing sector, textile dominated the overall borrowing with an offtake of Rs 237.7 billion during FY22, compared to a net retirement of Rs 42.6 billion last year. Most of this increase was concentrated in H1. During Q3-FY22, textile

Type of Financing **Figure 3.12**

Source: State Bank of Pakistan

Quarterly Credit Flows **Figure 3.11**

FI: Fixed Investment; WC: Working Capital

Source: State Bank of Pakistan

firms retired Rs 24.9 billion, compared to a retirement of Rs 18.2 billion in the same period last year. Textile businesses availed short-term financing to scale up exports, as reflected by higher quantum of exports of major textile products during the year. For instance, the export volume of ready-made garments posted a growth of 55.3 percent in FY22, compared to a decline of 23.3 percent last year. A host of support factors including post pandemic recovery of external demand, provision of tax and duty incentives and power tariff subsidy encouraged an increase in textile production during Jul-May FY22 (**Chapter 5**). In addition, a sharp uptrend in the domestic cotton prices further intensified the credit demand.

Pakistan's cotton production at 8.3 million bales during FY22 was not adequate to meet the sector demand, leading to 69.1 percent YoY jump in the cotton prices during the year.¹⁰ To meet the domestic supply-demand gap the country imported around 4.6 million bales of raw cotton during FY22.¹¹ However, a large depreciation of PKR magnified the impact of around 57 percent jump in international cotton prices during FY22, strengthening the credit demand of the sector.

Non-textile sector borrowing remained significant

Sugar sector borrowed heavily

Sugar sector borrowed Rs 49.2 billion during FY22, compared to Rs 16.0 billion last year

¹⁰ Source: The Karachi Cotton Association¹¹ The mill sector consumption stood over 12 million bales on average during FY19-21.

Loans to Private Sector Businesses**Table 3.5**

(flow in billion Rupees)

	Total		Working Capital**		Fixed Investment	
	FY21	FY22	FY21	FY22	FY21	FY22
Private Sector Businesses	441.4	1,215.5	169.5	698.8	203.5	451.4
Manufacturing	258.2	903.0	111.1	610.0	141.5	279.6
Textile	26.3	364.1	-42.6	237.7	66.0	122.2
Sugar	24.1	47.3	16.0	49.2	7.9	-1.9
Basic iron and steel	28.0	44.2	20.4	32.4	7.5	11.8
Rice Processing	28.0	33.1	26.7	27.2	1.3	5.7
Paper & paper products	6.4	40.9	2.3	24.9	4.1	16.0
Motor vehicles	-15.8	29.9	-23.7	18.2	7.9	10.7
Basic pharmaceutical products	18.5	11.0	6.2	9.2	12.3	0.0
Cement, lime & plaster	0.2	42.6	-8.0	7.9	7.8	34.3
Vegetable & animal oils and fats	34.8	6.2	29.2	4.4	5.6	1.5
Refined petroleum	13.7	2.9	13.1	4.4	0.5	-1.5
Fertilizers	37.6	-1.5	41.0	-9.9	-3.4	8.4
Telecommunications	21.8	91.2	9.3	-4.3	12.4	95.4
Power gen, trans & dist.	66.5	58.8	7.2	17.2	59.7	41.7
Agriculture, forestry & fishing	12.1	34.2	17.0	19.2	-5.0	13.9
Mining & quarrying	-15.8	-3.1	-13.4	-8.6	-2.4	5.5
Transportation & storage	-5.9	13.5	-5.9	10.0	-0.1	2.9
Wholesale & retail trade	16.6	69.3	7.5	64.3	8.4	2.7
Real estate activities	1.5	6.2	-1.0	0.7	-2.7	0.7
Construction	24.9	33.9	3.0	-0.4	-16.7	-4.4

*Total loans in FY21 and FY22 include construction financing of Rs 68.4 billion and Rs 65.3 billion, as the data on credit/loans has been revised since June 2020 due to inter-sectoral adjustment in private sector business (see IH&SMEFD Circular Letter No. 28 of 2020). Therefore, in this table, total loans may not be necessarily equal to the sum of working capital and fixed investment loans; ** working capital includes trade financing

Source: State Bank of Pakistan

(Table 3.5). After making loan repayments during the first quarter of FY22, sugar manufacturers significantly increased borrowings in the subsequent quarters, with the start of crushing season. This trend is explained by 9.6 percent increase in sugarcane production in the country to 88.8 million metric tons in FY22, against 81.0 million metric tons last year.

Rice processing loans inched up in line with rising rice production and exports

Rice processing firms borrowed Rs 27.2 billion during FY22, compared to an offtake of Rs 26.7 billion last year. After the usual seasonal loan retirement in Q1-FY22, the entire borrowing of the sector came from the second quarter, when rice-processing firms availed bank financing to scale-up exports. Particularly, 10.7 percent YoY increase in rice production during FY22 facilitated 35 percent YoY growth in rice export volumes during FY22.

Elevated commodity prices and PKR depreciation increased credit demand of sectors with import dependency

Borrowing by paper and products' manufacturing firms increase

The paper and paper products sector borrowed Rs 24.9 billion during FY22, compared to an increase of Rs 2.3 billion last year. Besides the exchange rate depreciation that inflated the prices of imported raw material, the higher borrowings came on the back of 10.6 percent YoY growth in the production of paper products during FY22, compared to 3.4 percent increase in production in the same period last year.

Credit requirement of wholesale and retail trade spikes because of rising petroleum product imports

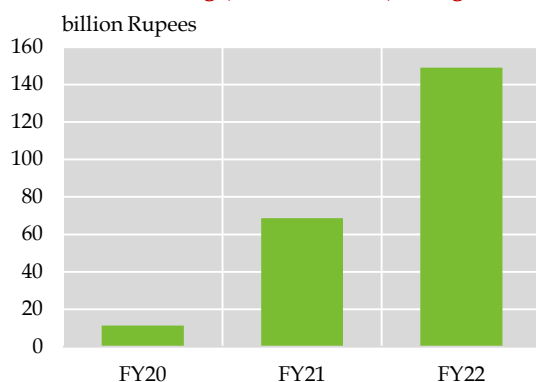
Wholesale and retail trade availed short-term loans of Rs 64.3 billion during FY22, compared to an offtake of Rs 7.5 billion last year. This

mainly reflects borrowings by major oil marketing companies (OMCs) to finance the import of petroleum products. The expansion in economic activity shored up demand for petroleum products in the country, as reflected by 14.4 percent growth in the sales of petroleum products during FY22. A large share of domestic requirements was met through imports, leading to 28.3 percent growth in import volume of petroleum products during FY22. The combination of higher import volume and prices contributed to a sizeable increase in borrowing by OMCs.

Refined petroleum benefited from the uptrend in prices

The petroleum refining sector benefitted from the increase in domestic demand and uptrend in international oil prices as reflected by higher profitability during Jul-Mar FY22 (**Figure 3.13**). The domestic industry is largely dependent on crude petroleum import for refining activity. While the crude petroleum import volume rose by 5.3 percent during FY22, the import unit prices surged by 71.3 percent during this period. A large PKR depreciation further magnified the effect of global price increase, raising the credit requirements of the sector. However, higher borrowings by the refined petroleum sector during H1-FY22 were almost offset by the retirements during H2-FY22, as better profitability and liquidity position helped the sector in retiring its short-term loans during the year.

Petroleum Refining (Profit after tax)* Figure 3.13



*Financial statement analysis of selected non-financial listed companies during Jul-Mar

Source: State Bank of Pakistan

Fixed investment loans remained upbeat

The borrowings under fixed investment loans more than doubled to Rs 451.4 billion in FY22, compared to an offtake of Rs 203.5 billion last year. Private sector businesses availed SBP's concessionary financing schemes (LTFF and TERF) for machinery imports and capacity expansion. Out of the total approved amount of Rs 436 billion under TERF, Rs 340 billion (around 78 percent) were disbursed by end-June 2022 and Rs 201 billion during FY22.

Within the manufacturing sector, textile businesses dominated by borrowing Rs 122.2 billion during FY22, compared to an offtake of Rs 66.0 billion last year. Benefitting from LTFF and TERF, and the improvement in global demand, the textile sector borrowed long-term loans for capacity expansion leading to 29.3 percent YoY growth in the import of textile machinery during FY22.

Besides textile, cement was the second largest user of fixed investment loans in the manufacturing sector. This sector increased borrowings by Rs 34.3 billion during FY22, compared to Rs 7.8 billion last year. Almost the entire increase was concentrated in Q3-FY22, as major cement manufacturers resorted to bank financing for the procurement of machinery and capacity expansion.

Among non-manufacturing entities, the telecommunications sector availed higher fixed investment loans. The sector borrowed Rs 95.4 billion during FY22, compared to an increase of Rs 12.4 billion last year. The increase mainly represents financing facility availed by major cellular firms to finance their license renewal fee and the import of telecom machinery.

Meanwhile, power sector also availed bank financing, albeit lower than last year. The sector borrowed Rs 41.7 billion during FY22, compared to an offtake of 59.7 billion last year. Bulk of the increase came in the first quarter, as a major utility company borrowed in order to partially settle the parent company's loan owing to change of ownership.

Housing and construction finance remained vibrant

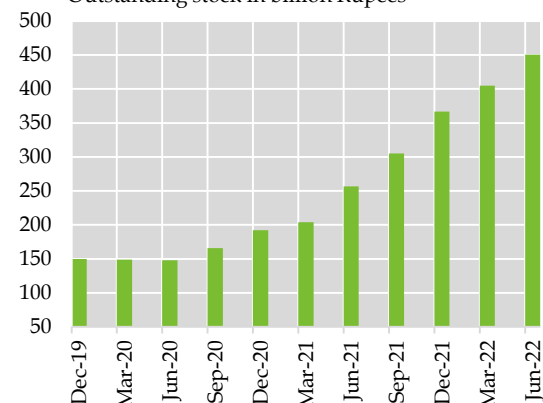
Construction allied industries' credit demand remains strong

The working capital borrowing of iron and steel firms increased by Rs 32.4 billion during FY22, compared to an increase of Rs 20.4 billion last year. This increase reflect buoyant construction activity in the economy as evidenced from 16.3 percent growth in steel manufacturing during FY22 compared to an increase of 4.9 percent last year. In addition to the government's incentive package for the construction sector, sustained increase in workers' remittances was also instrumental in shoring up activity in the construction and allied industries.

The work on public sector projects also remained upbeat, as seen from 33.5 percent growth in PSDP expenditure by the government during FY22, compared to an 11.2 percent increase last year. Aside from the increase in construction, uptick in the cost of building materials was also partly responsible for the hike in credit requirements of the construction sector. With the government and SBP efforts to promote housing and construction finance, the outstanding stock of housing and construction portfolio almost doubled to Rs 450.8 billion in June 2022 from Rs 256.7 billion a year earlier (**Figure 3.14**).¹²

Furthermore, the house building loans under consumer financing posted a sharp increase, which is attributed to the measures taken by government and SBP since FY21 in order to promote housing and construction financing in the country. Under the low-cost housing scheme, banks approved a total financing of Rs

Housing and Construction Finance **Figure 3.14**
Outstanding stock in billion Rupees



Source: State Bank of Pakistan

236.0 billion as of end-June 2022, out of which, Rs 99.8 billion were actually disbursed. With a view to further promote housing and construction finance, SBP announced targets for banks in July 2020 to increase their housing and construction finance portfolio to 5 percent of their domestic private sector advances by end-December 2021.¹³ As of June 30, 2022, around 98 percent of the overall quarterly targets have been met.¹⁴

Consumer financing loses steam

FY22 differed from last year in two aspects. First, the policy environment was less

Consumer Financing **Table 3.6**

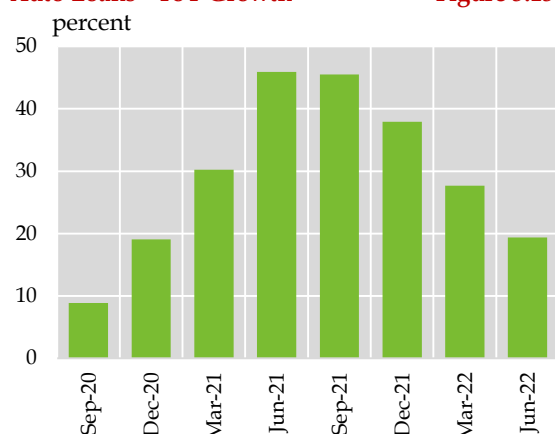
flow in billion Rupees	FY20	FY21	FY22
Total	-7.9	174.0	192.2
House building	-12.8	23.8	97.1
Auto loans	-4.3	97.0	59.7
Credit cards	-1.3	12.0	17.7
Personal loans	9.2	43.0	16.4
Consumers durable	1.3	-1.8	1.2

Source: State Bank of Pakistan

¹² Housing and construction portfolio includes: (i) loans to the private sector for construction financing purpose; (ii) house building loans under consumer financing; (iii) Direct financing to/or investments in bonds/TFCs/Sukuk issued by Real Estate Investment Trusts (REITs) Management Companies; (iv) Investments in units/shares issued by Real Estate Investment Trusts (REITs) subject to compliance with all other applicable regulations; (v) Investment in Sukuk/bonds issued by Pakistan Mortgage Refinance Company (PMRC), however, investment in PMRC's Sukuk/bonds and amount of refinancing availed from PMRC shall be netted off towards counting the mandatory target; and (vi) Financing to MFBs for extending housing finance to eligible borrowers to the extent of actual disbursements by MFBs.

¹³ In December 2021, these targets were further increased to 7 percent of banks' domestic private sector advances, till December 2022.

¹⁴ Source: IH&SMEFD Circular No. 02 of 2022, dated January 21, 2022, available at: www.sbp.org.pk/smeffd/circulars/2022/C2.htm

Auto Loans - YoY Growth **Figure 3.15**

Source: State Bank of Pakistan

accommodative as compared to last year, with the policy rate up by 675 bps to 13.75 percent in June 2022, from 7.0 percent in June 2021. Second, SBP announced macro-prudential measures aiming to moderate the domestic demand in the economy by slowing the overall import growth in general, and automobile imports in particular to support the country's balance of payments position. On a cumulative basis, consumer loans inched up by Rs 192.2 billion during FY22, compared to an increase of Rs 174.0 billion last year (**Table 3.6**).

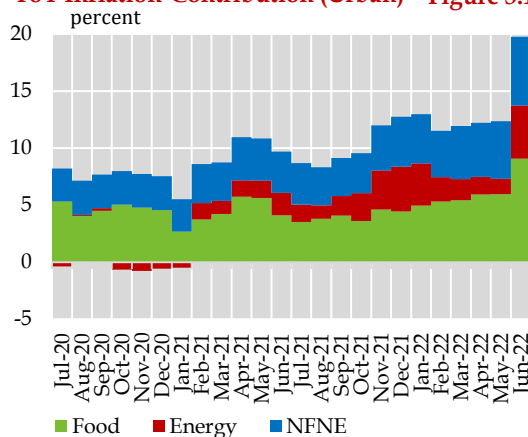
Auto loans decelerated

The auto loans slowed to Rs 59.7 billion in FY22, against Rs 97.0 billion last year. Besides higher interest rates, the slowdown is mainly attributed to two factors. First, the amendment in prudential regulations by SBP led to a gradual decline in the pace of auto financing during FY22. These amendments included: (i) reduction in maximum tenure of the auto finance facility from seven years to five years; (ii) maximum limit of Rs 3 million in aggregate, allowed to be availed by a person from all banks/DFIs; (iii) increase in the minimum down payment for auto financing from 15 percent to 30 percent.¹⁵

¹⁵ Source: SBP press release, dated September 23, 2021.

¹⁶ In January 2022, the FED was raised to 2.5 percent on up to 1300cc cars, 5 percent on 1301-2000cc cars, and 10 percent on greater than 2000cc cars (Source: www.fbr.gov.pk/Categ/Federal-Excise-Act/346)

¹⁷ State Bank of Pakistan projected average annual NCPI inflation to fall within the range of 7-9 percent in FY22, in July 2021. However, because of the realization of upside risks, indicated at the start of the year, actual inflation outturns during the initial months exceeded expectations. Hence, SBP upward revised the range of inflation projection for FY22 in the December 2021 MPC meeting

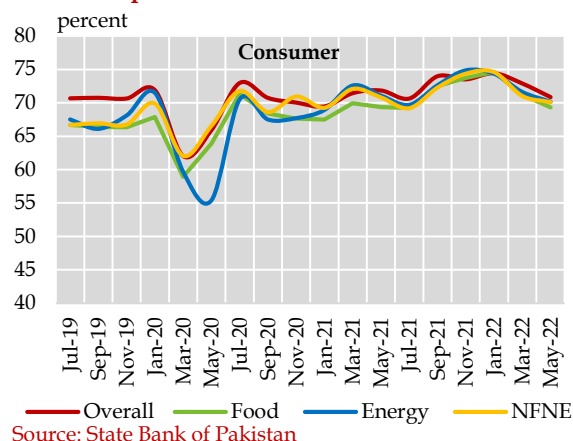
YoY Inflation-Contribution (Urban) **Figure 3.16**

Source: Pakistan Bureau of Statistics

Second, the government increased federal excise duty (FED) on locally manufactured or assembled cars during January 2022.¹⁶ The impact of these regulatory measures was visible on auto financing, as the pace of loans continued to moderate during the review period (**Figure 3.15**). Besides, the automobile manufactures considerably increased car prices from Q2-FY22 onwards to pass on the impact of rising cost of production to consumers, as the exchange rate depreciation and surging freight charges pushed the cost of raw materials for the industry (see inflation)

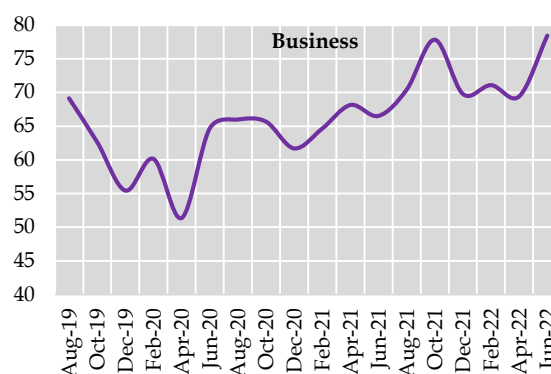
3.4 Inflation

Inflationary pressures continued to strengthen during FY22, with National CPI (NCPI) inflation reaching 12.2 percent compared to 8.9 percent last year, exceeding the SBP's revised projection of 9-11 percent.¹⁷ As the year progressed, price pressures intensified considerably, with NCPI inflation reaching 16.1 percent during Q4-FY22, against 10.6 percent in the same period last year. In particular, both headline and core inflation increased significantly in June 2022 to a 14-year high level (**Figure 3.16**). In terms of dispersion, inflation was broad-based across urban and rural sub-indices.

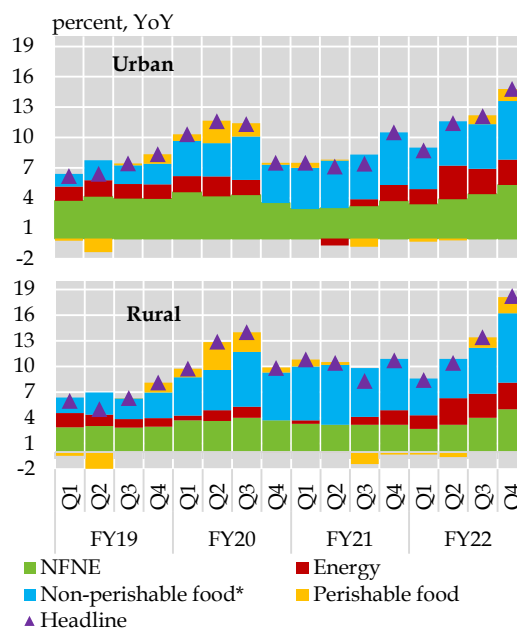
Inflation Expectations

A host of factors were responsible for this upsurge in inflation during FY22. These included: (i) sustained increase in international commodity prices (energy, food and metal group) - on account of various factors such as supply chain disruptions; lingering supply shortages of commodities including edible oil, wheat, and maize; post-pandemic revival in global demand; and Russia-Ukraine conflict; (ii) impact of the unexpected fiscal stimulus in FY22 on domestic demand; (iii) rising income levels amid growth in economic activity; (iv) increase in power tariffs under the CDMF; and (v) a 23.1 percent depreciation in exchange rate during FY22. Reflecting these dynamics, inflation expectations edged up during FY22 as gauged by SBP-IBA Consumer Confidence Survey (CCS) and Business Confidence Survey (BCS) (Figure 3.17).¹⁸

In addition to these key factors, shortages in supplies of some perishable commodities such as tomatoes, fresh fruits and vegetables from Q3-FY22 onwards (Figure 3.18) and an increase in tax rates under the Supplementary Finance Act, also added to the inflationary pressures during the year. To contain the inflationary pressures, SBP reversed its policy stance and increased the policy rate by 675 bps during the year. However, given the lag involved in the transmission of monetary policy signals, inflation continued to remain at an elevated level during the year.

Figure 3.17**Food group was the chief source of inflation**

Food group, particularly the non-perishable category, had around one-third contribution in inflation during FY22 (Table 3.7). Persistent increase in global food prices, alongside the supply-demand gaps in some commodities (in particular, milk and meat), fanned inflationary pressures in this group from Q3-FY22 onwards.¹⁹

Composition of CPI Inflation**Figure 3.18**

Source: Pakistan Bureau of Statistics & SBP calculations

¹⁸ CCS was conducted in July 2021, September 2021, November 2021, January 2022, March 2022 and May 2022, whereas BCS was conducted in October 2021, December 2021, February 2022, April and June 2022.

¹⁹ In Q3-FY22 and Q4-FY22, urban segment food inflation rose to 14.0 and 18.3 percent compared to 10.1 and 11.0 percent in Q1-FY22 and Q2-FY22, respectively.

Average CPI Inflation and Contribution**Table 3.7**

percent

Items	Wt.*	Urban						Rural					
		FY22		FY			Wt.*	FY22		FY			Cont.*
		H1	H2	FY21	FY22	Cont.*		H1	H2	FY21	FY22	Cont.*	
CPI	100.	10.1	13.5	8.1	11.8		100.0	9.4	15.8	10.0	12.6		
Food & non-alcoh. bev.	30.4	10.7	16.6	13.1	13.7	4.3	40.9	8.4	17.9	13.4	13.2	5.6	
Perishable food items	4.5	-6.1	24.4	0.1	7.5	0.3	5.8	-7.2	30.6	-1.2	9.0	0.5	
Non-perishable food	26.0	14.0	15.4	15.7	14.7	4.0	35.1	11.4	16.2	16.1	13.9	5.1	
Wheat	0.6	7.4	14.3	31.2	10.9	0.1	3.5	5.0	13.3	31.6	9.2	0.4	
Wheat flour	3.0	15.8	16.1	17.5	16	0.5	3.4	14.3	17.4	20.6	15.9	0.5	
Cooking oil	1.1	42.9	55.9	15.0	49.9	0.6	0.6	46.3	62.9	19.3	55.4	0.4	
Meat	2.0	16.8	23.9	11.7	20.7	0.5	1.7	17.3	23.8	11.5	21.0	0.4	
Milk fresh	7.1	11.6	13.5	13.9	12.5	0.9	10.4	8.9	12.6	8.6	11.0	1.1	
Veg. ghee	1.0	44.5	55.3	18.9	50.4	0.6	2.4	43.6	60.1	20.2	52.6	1.5	
Pulse masoor	0.2	16.6	47.2	9.3	32.1	0.0	0.2	14.4	47.6	14.3	31.1	0.1	
Tea	0.8	4.7	11.7	1.7	8.2	0.1	1.3	4.0	11.5	2.0	7.7	0.1	
Clothing and ft.wear	8.0	10.4	11.2	9.9	10.8	0.9	9.5	8.9	11.0	10.3	9.9	1.0	
Housing, Elec., Gas	27.0	10.8	8.4	5.7	9.6	2.5	18.5	13.8	13.1	7.5	13.5	2.3	
Electricity charges	4.6	32.1	14.6	10.8	22.6	0.9	3.4	32.1	14.6	10.8	22.6	0.7	
Furnish. & H.H equip.	4.1	9.8	13.9	7.2	11.9	0.5	4.1	10.6	16.7	10.2	13.7	0.5	
Health	2.3	9.2	10.3	8.0	9.7	0.2	3.5	7.8	10.2	8.9	9.0	0.3	
Transport	6.1	15.9	32.5	1.2	24.4	1.5	5.6	13.7	32.8	1.2	23.4	1.3	
Motor fuel	2.9	26.3	48.0	-0.7	37.5	1.2	2.5	25.1	48.5	-0.9	37.1	1.0	
Communication	2.4	3.6	2.8	0.9	3.2	0.1	2.0	0.9	1.0	0.4	1.0	0.0	
Recreation & culture	1.7	6.7	9.8	3.3	8.3	0.1	1.4	7.5	11.1	6.5	9.3	0.1	
Education	4.9	2.2	7.5	1.1	4.9	0.2	2.1	3.8	5.2	2.0	4.5	0.1	
Restaurants and hotels	7.4	9.8	15.5	8.6	12.7	0.2	6.2	8.3	16.2	8.4	12.3	0.8	
Misc. goods & services	4.8	8.9	11.9	10.7	10.4	0.5	5.0	8.3	13.4	12.8	10.9	0.6	
NFNE	53.7	7.0	9.2	6.0	8.1	4.3	42.6	7.2	10.8	7.6	9.0	3.7	

*wt. = weight and Cont.= Contribution for FY22

Source: Pakistan Bureau of Statistics and SBP calculations

Spike in international commodity prices was the key driver of inflationary pressures

Around one-tenth of the CPI inflation in urban areas resulted from the direct impact of rising global food prices because of escalating transportation cost and an increase in cooking oil, ghee and tea prices and also PKR depreciation contributing to it. Emulating the uptrend in global commodity prices, food inflation increased more sharply in the second half of FY22, compared to the first half.

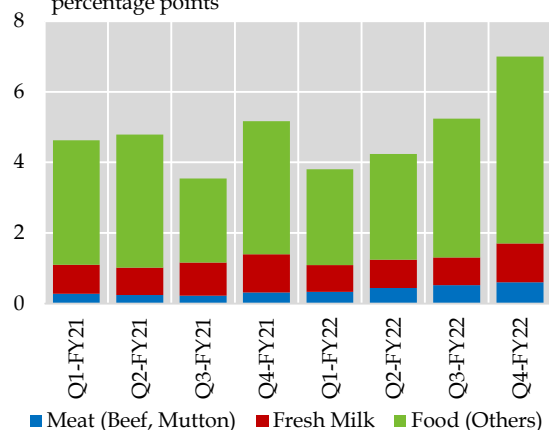
Particularly, edible oil together with vegetable ghee had the largest share in food inflation during the year. Palm oil and soybean prices have been on a steep rising trajectory since June 2020 due to unsupportive weather

patterns in major crop growing areas, along with labor supply shortages amid Covid pandemic.²⁰ During FY22, price pressures reflected concerns over reduction in exports from Indonesia, the world's top palm oil exporter. March 2022 onwards, palm, soy and rapeseed oil prices rose further as sunflower seed oil export supplies went down amid the Russia-Ukraine conflict. Hence edible oil (cooking oil and vegetable ghee combined), lifted the urban CPI by 1.2 percentage points during the year.²¹

Prices of tea, having 2.3 percent share in urban food basket, also remained elevated from Q2-FY22 onwards amid international commodity price pressures. Since Kenya is the largest supplier of tea in the world, the introduction of government-backed minimum reserve price

²⁰ FAO Food Price Index-December 2021²¹ FAO Food Price Index-March 2022

Meat and Milk Contribution **Figure 3.19**
percentage points



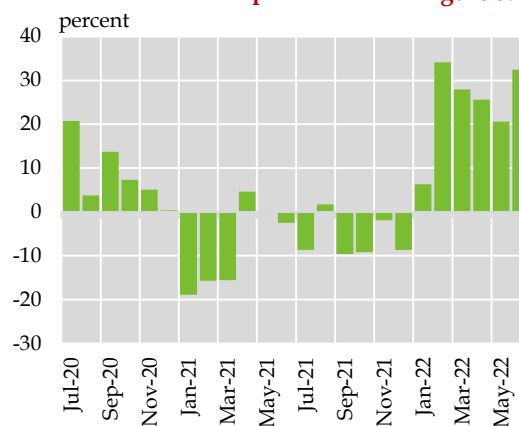
Source: Pakistan Bureau of Statistics & SBP calculations

to safeguard small farmers in Kenya²², further increased the global price pressures for this commodity during the year (Table 3.7). Increase in freight cost also fed into price buildup in various pulses.²³ Particularly, pulse masoor, pulse gram and gram whole registered double-digit inflation.

Role of supply-demand gaps and indirect cost in food inflation

Livestock (beef, mutton and milk) with around 27 percent contribution dominated in both urban and rural food inflation during the year (Table 3.7). Specifically, inflation in meat group is on a consistent rise and has been exceeding overall NCPI inflation for the past three years. This rising trend in prices mirrors supply-demand gaps in this category, because of both a weak domestic supply chain as well as a sizeable increase in export volume of meat over the years at the cost of domestic supplies.²⁴ In addition to these issues, lumpy skin diseases in animals, and a surge in direct and indirect energy cost (fuel and electricity

Perishable Food Group **Figure 3.20**
percent



Source: Pakistan Bureau of Statistics

tariffs), further pushed the food price index upward during FY22 (Figure 3.19).

Inflation in perishable food group remained quite volatile during the year (Figure 3.20). In the first half of the year, sufficient domestic supplies and adequate imports eased inflationary pressures. However, Q3-FY22 onwards, price pressures began to emerge in fresh fruits, tomatoes and vegetables. Supply constraints on account of relatively lower imports of some fruits and normalization of prices compared to low base of last year (such as onions and fresh vegetables) pulled up inflation in this group.²⁵ Aside from that, reliance on relatively expensive Iranian tomatoes to plug seasonal shortages further lifted prices in this group.²⁶

Inflation in ready-made food group swelled to double-digits during FY22. Hike in the prices of inputs, such as wheat, edible oil, chicken, electricity and transportation cost was mainly responsible for this increase.

Inflation in wheat flour remained elevated during FY22, because of rise in the minimum

²² Source: Kenya Tea Development Agency, available at: www.ktdateas.com/wp-content/uploads/2021/08/STATEMENT-ON-INCREASE-IN-FARMERS-PAYMENT-23RD-AUGUST-2021.pdf

²³ Production of pulse mash declined by 11.6 percent in FY22 compared to previous year while production of pulse masoor remained same over last year. Furthermore, the average unit value of import of pulses has increased by 21.5 percent in FY22 on top of 10.5 percent in FY21.

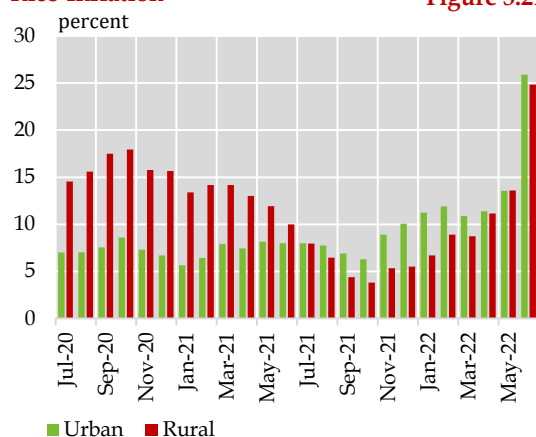
²⁴ S. K. Jafri, S. Z. Hussain, A. Abbasi, (2022), "Analyzing Meat Export Potential in Pakistan", SBP Staff note 3/22.

²⁵ Sufficient local production of various perishable crops along with imports had flushed the market with vegetables during Q3-FY21.

²⁶ Crop shortage was created by the gap amid ending of Baluchistan crop and arrival of Sindh crop.

Rice-Inflation

Figure 3.21



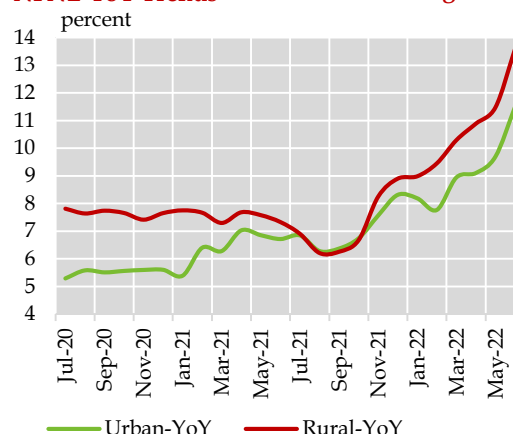
Source: Pakistan Bureau of Statistics

support price (MSP)²⁷ and increase in wheat issue price by procuring agencies.²⁸ On the other hand, relatively better supply situation compared to last year, muted wheat inflation during FY22. Wheat production rose by 8.9 percent during FY21, whereas the country also imported 2.2 million tons during FY22, to meet domestic supply requirements. However, prices started to increase from April 2022 onwards, because of expectation of wheat shortages during the upcoming year.²⁹ In addition, the increase in wheat support price for the new crop also contributed to price rise.³⁰

After registering single digit inflation consecutively for the last 3 years, rice group posted double-digit inflation in FY22. The upswing in rice prices started from December 2021, whereas the prices for different rice varieties witnessed an unusual jump from May 2022 onwards, (Figure 3.21). Rice production witnessed a sizeable 10.7 percent increase during FY22. However, substantial expansion in export volume of the commodity created supply shortages in the domestic market.³¹ The prospects for Pakistan's rice exports improved because of higher prices of

NFNE-YoY Trends

Figure 3.22



Source: Pakistan Bureau of Statistics

Indian rice and depreciation of PKR, making exports more competitive. In this background, hoarding practices by various suppliers, as suggested by the anecdotal evidence, also contributed to rising local prices in the last quarter.

NFNE inflation intensified

The inflationary pressures in the non-food-non-energy (NFNE) group increased during FY22. Specifically, NFNE inflation began to intensify from the start of H2-FY22 compared to H1-FY22 as well as the same period last year, for both urban and rural areas, with double-digit expansion in Q4-FY22 (Figure 3.22). In terms of dispersion, for the year under review, the increase was broad-based (Figure 3.23). Meanwhile, area wise information reveals that rural NFNE remained higher than urban NFNE inflation almost throughout FY22.

Heightened NFNE inflation encompassed both demand and cost-push pressures (Figure 3.24). The impact of expansionary fiscal policy in FY22 supported the momentum of real economic activity and hence domestic demand

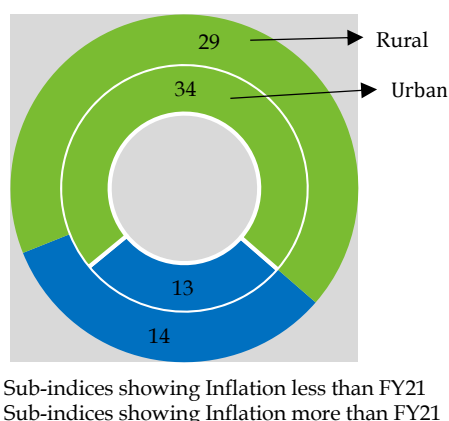
²⁷ The Economic Coordination Committee increased the MSP of wheat crop FY21 to Rs 1,800 per 40 Kg from 1400 per 40 kg previously. Sindh unilaterally increased it to Rs 2,000 per 40 Kg.

²⁸ Minimum release price was raised from Rs 1,475 to Rs 1,950, to withdraw subsidies as per decision made in ECC's meeting held in September 2021.

²⁹ According to provisional estimates, wheat production during FY22 stood at 26.4 million tons, against 27.5 million tons last year and a target of 28.9 million tons. Source: Economic Survey 2021-22

³⁰ The ECC increased the wheat support price at Rs2, 200 per 40 kg for procuring 6.9 million metric tons of wheat in May 2022.

³¹ The growth in volume of rice exports was 35 percent during FY22 as compared to 11.2 percent decline in FY21.

NFNE Inflation Dispersion-FY22 **Figure 3.23**

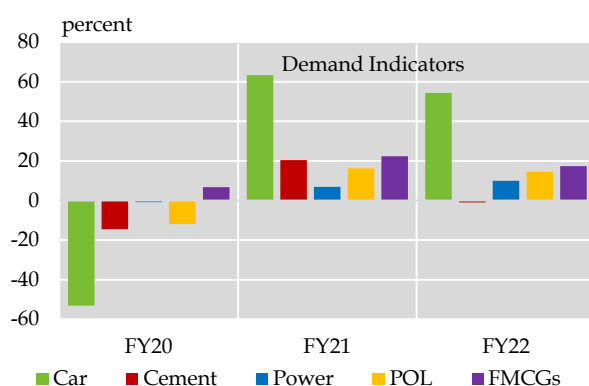
Source: Pakistan Bureau of Statistics

during the year. Similarly, export sector also benefitted from policy support and sustained increase in external demand. The real GDP witnessed a broad based expansion of 6 percent in FY22. The notable growth in industry was also visible in improvement in corporate profitability (**Figure 3.25**). Rural incomes also strengthened during FY22 amid improvement in kharif crop performance. Hence, the sustained increase in economic activity boosted income levels in the economy. In addition, strong inflows of remittances in FY22 also spurred incomes of various households in the economy (**Figure 3.25**).³² On the other hand, a multitude of factors propelled cost of production during the year.

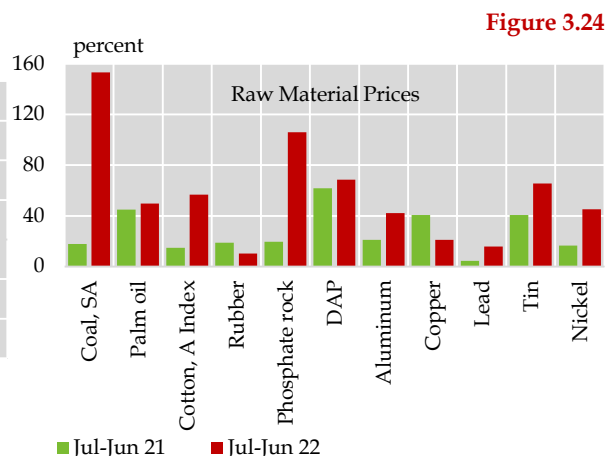
These included rising global commodity prices of palm oil, fuels and raw materials, (**Figure 3.25**) uptick in labor wages, depreciation of PKR, and low domestic cotton production amid elevated international prices of the commodity. In addition to cost-driven factors, NFNE inflation also carried the effect of a low base (revision in some service charges in Budget FY2021-22 for instance school fees and transport fares, after providing Covid-related relief, relatively low demand in services amid Covid pandemic last year) during the period under review.

Within the urban and rural NFNE group, both the services and goods indices moved up in FY22; however, the impact of the latter was more pronounced (**Figure 3.26**). Housing rent index significantly increased during FY22 mainly on account of low base (Covid-related low activity), however, the contribution slightly declined from Q3-FY22 onwards.

Around one-third of NFNE inflation came from the categories of clothing and footwear, plastic products, household equipment, medicines, motor vehicles and textbooks, reflecting rising cost of imported inputs as well as improved demand.³³ For instance, in the case of clothing, cotton being an essential input for textile industry, played an important

Demand & Cost Pressures

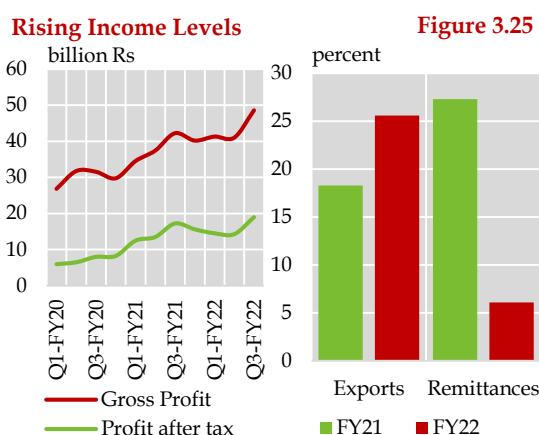
Sources: PAMA, APCMA, OCAC, NEPRA, Corporate reports (various issues)



Source: World Bank

³² The government increased the MSP of wheat crop in FY21 to Rs 1,800 per 40 Kg from 1,400 per 40 kg previously. Sindh unilaterally increased it to Rs 2,000 per 40 Kg. Similarly, the Punjab and Sindh government set the sugarcane support price at Rs 225 and Rs 250 per maund for the FY22 season, compared to Rs 200 and Rs 202 last year respectively.

³³ International cotton, plastic and paper prices are on rising trajectory amid disruption in the global supply chains.

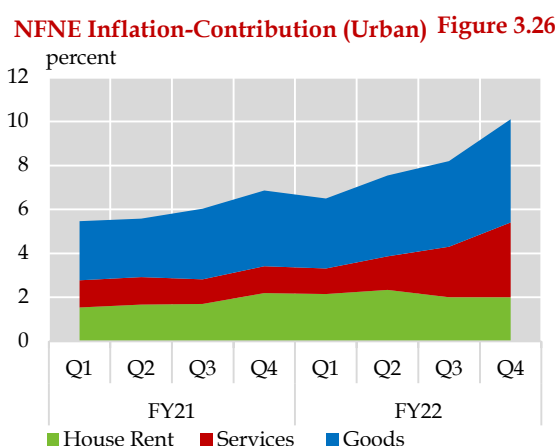


Source: 25 listed companies and State Bank of Pakistan

role in determining the price trend during the year. Price of cotton observed persistent increase during FY22 as lower than target local production gave rise to demand-supply gap. In order to meet the requirements of local textile industry, the country had to rely on imports at a time when international prices of cotton were also peaking. In the same vein, strong demand as gauged from 13 percent YoY increase in sales of textile made-ups during Jul-Mar FY22, further accentuated price pressures.

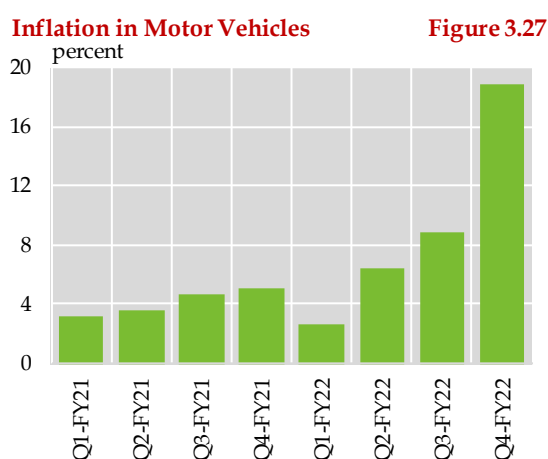
Similarly, reflecting the impact of both rising demand and global prices, construction input index contributed around 10 percent to urban core inflation during FY22. On the demand side, various tax incentives for the construction sector under *Mera Pakistan Mera Ghar* (MPMG), increase in development spending on infrastructure projects, alongside the sustained inflow of remittance and release of pent up demand stoked up price pressures in construction material. The rise in iron bar prices added further impetus to increase in construction input index.³⁴

In the motor vehicles group, reduction in FED announced in budget FY2021-22 eased inflation in Q1-FY22 (**Figure 3.27**).³⁵ However,



Source: Pakistan Bureau of Statistics

automobile manufactures considerably increased prices from Q2-FY22 onwards to pass on the impact of rising cost of production to consumers. Exchange rate depreciation and surging freight charges inflated the cost of raw materials for the industry. In addition, the government also increased FED rates on cars in January 2022 via Finance Supplementary Bill.³⁶ Despite the increase in prices, the sales of cars edged up by around 54 percent during FY22 indicating persistent demand pressures. Drugs and medicines also saw double digit inflation in FY22 compared to FY21. The index started inching up from Q3-FY22 onwards on account of rising cost of production including



Source: Pakistan Bureau of Statistics

³⁴ IMF index of base metals rose by 14.8 percent in FY22 over and above 40.3 percent growth observed in FY21.

³⁵ FED was eliminated on up to 1000cc cars, whereas sales tax was reduced from 17 percent to 12.5 percent for up to 1000cc cars.

³⁶ In Finance Supplementary Bill (2022) passed in January 2022, application of reduced rate of sales tax of 12.5 percent on locally manufactured and assembled cars of cylinder capacity was applicable up to 850cc. FED was increased from 2.5 percent to 5.0 percent from 1000cc above car variants.

Heat Map-Urban Services

Figure 3.28

	Wt.	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
Services	16.3	4.5	3.6	3.4	3.3	5.6	6.3	6.3	6.8	9.7	10.0	10.9	13.5
Tailoring	1.1	8.3	8.2	7.9	7.8	8.4	9.0	9.1	8.9	9.1	11.0	11.9	13.2
Cleaning & laundring	0.1	12.9	8.0	4.6	4.5	21.2	20.4	22.0	22.9	23.6	23.6	27.4	30.3
Const. wage rates	0.2	5.5	4.1	3.6	7.4	8.0	7.9	8.0	7.8	7.8	9.3	10.1	11.7
Water supply	0.5	10.5	6.6	4.1	4.0	3.9	3.3	3.6	3.6	4.1	4.3	5.2	5.0
Garbage collection	0.1	4.4	3.8	4.7	4.7	5.1	4.9	4.8	5.4	5.2	5.3	12.9	13.8
Household servant	0.8	2.2	2.4	2.5	2.3	3.0	3.0	4.0	9.4	9.4	9.8	11.8	12.3
Doc. clinic fee	0.4	11.9	11.3	8.9	6.3	7.7	8.7	8.9	8.8	9.1	10.2	10.2	11.0
Dental services	0.0	8.5	7.1	6.3	6.1	6.4	7.2	4.9	6.6	5.7	5.7	6.3	7.0
Medical tests	0.2	6.4	5.1	3.5	3.8	4.1	5.0	5.0	7.5	7.2	9.1	8.9	11.0
Hospitals services	0.6	8.2	7.9	9.0	8.2	8.1	8.8	9.1	10.1	8.8	8.5	8.5	7.5
Mechanical services	0.4	5.3	5.6	5.1	4.9	9.8	8.8	9.9	12.6	13.2	14.1	15.0	16.2
Motor vehicle tax	0.0	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Transport services	1.7	8.5	-0.8	-0.3	0.8	12.2	12.7	11.6	9.3	19.1	20.3	22.4	34.8
Postal services	0.0	11.1	11.1	11.1	10.9	10.9	10.9	8.4	2.1	2.1	1.4	1.4	13.6
Comm. Services	1.9	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	0.3	0.3	0.3
Recreation & culture	0.6	3.7	3.5	3.2	3.3	3.4	4.7	4.6	4.2	4.2	4.2	5.0	8.3
Education	4.9	1.5	2.5	2.2	1.9	2.2	2.6	3.0	3.2	9.0	9.2	10.4	10.4
Marriage Hall	1.8	3.4	2.5	2.6	2.2	9.2	12.6	12.8	13.5	13.3	13.2	13.2	21.5
Accommodation	0.1	0.8	0.5	4.4	4.0	4.4	4.9	4.9	4.9	8.4	8.4	8.5	8.4
Personal Grooming	0.8	7.8	6.4	6.4	6.5	7.1	7.7	6.0	10.7	10.6	10.7	10.9	14.2

Red: Highest; Yellow: Lowest

Source: Pakistan Bureau of Statistics

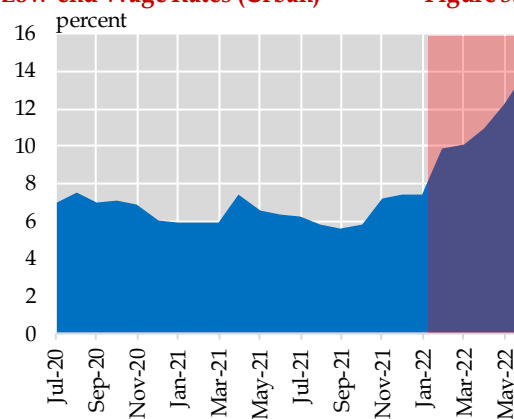
labor, electricity, raw material and PKR depreciation. Particularly, in February 2022, Drug Regulatory Authority of Pakistan (DRAP) increased the maximum retail price (MRP) of paracetamol used in various medicines due to growing cost of raw material from China.³⁷ Disaggregated health CPI data reveals that price spikes were observed across both nutraceuticals as well as lifesaving drugs following the rise in the price of basic salt.

In the services group, surge in inflation is partly reflected by the base effect, as prices are higher compared to the levels prevailing last year, amid Covid-related relief provided by the government in the FY21 budget (Figure 3.28).³⁸ In transport services, inflation increased amid higher fuel prices during FY22. Similarly, communication services such as courier charges also depicted rise in transportation costs. The impact of the strengthening economic activities, and rising fuel prices, on YoY basis, was also visible in recreation and cultural services, as inflation increased in the group. Also, low-end wage

pressures (construction wage rates, tailoring, cleaning and laundering, personal grooming, garbage collection, household servant and mechanical services), having 3.5 weight in the urban CPI basket, remained elevated on YoY basis from Q2-FY22 onwards, owing to lower base effect. This also partially reflects the effect of overall inflationary pressures in the economy, which have started to appear in the incomes of the low-income households (Figure 3.29).

Low-end Wage Rates (Urban)

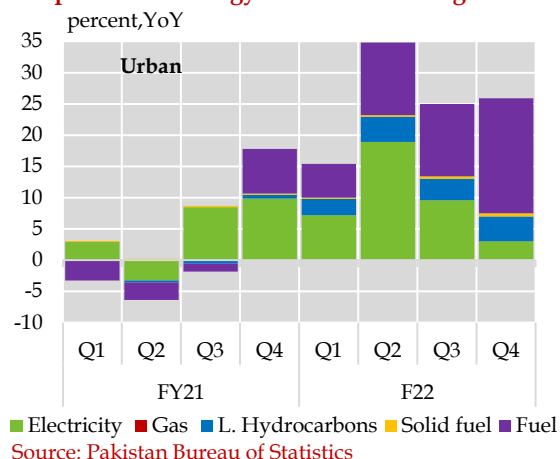
Figure 3.29



Source: Pakistan Bureau of Statistics

³⁷ Press release of Standing Committee on National Health Services, Regulations and Coordination, February 09, 2022. (www.na.gov.pk/en/pressrelease_detail.php?id=4732)

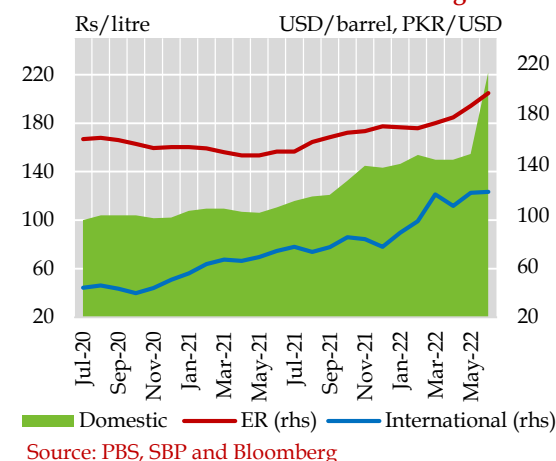
³⁸ For instance, tax on motor vehicles and charges of postal services were raised in FY22 budget.

Composition of Energy Inflation **Figure 3.30**

Energy inflation surged significantly

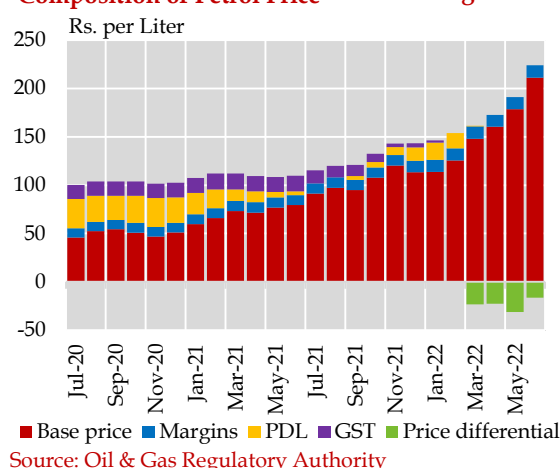
Unabated increase in international commodity prices and hike in electricity tariffs under the CDMP were the primary drivers of energy inflation during FY22 (**Figure 3.30**). A large 23.1 percent depreciation of PKR further fueled inflationary pressures during the year. In overall terms, energy inflation index jumped by 25.3 percent and 24.8 percent in urban and rural areas, respectively, in FY22 against an increase of 4.1 percent and 6.6 percent last year.

The motor fuel index inflated by around 37 percent during FY22 both in urban and rural areas, lifting headline inflation over 1.0 percentage points during the year. To provide relief to domestic consumers against the uptrend in global commodity prices (**Figure 3.31**),³⁹ the government had reduced GST and PDL on fuel for most part of the year (**Figure 3.32**). In March 2022, the government reduced the prices of petroleum products and electricity to save consumers from the fallout of Ukraine crisis. Despite these relief measures, the urban fuel price index rose by 30.2 percent during Jul-Mar FY22. Particularly, fuel prices came under pressure from Q3-FY22 onwards with the highest direct impact of 1.0 percentage points to total

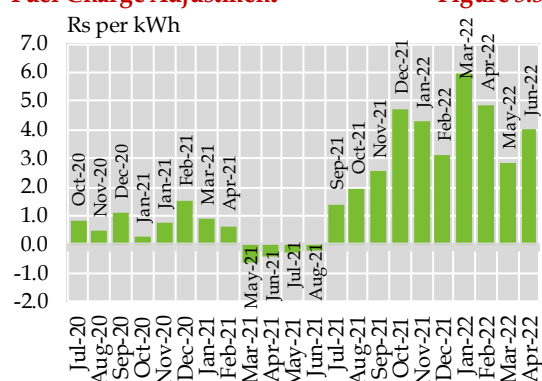
Fuel Prices **Figure 3.31**

inflation in Q3-FY22 (on YoY basis). However, the government had to gradually roll back the relief package from May 27, 2022 in the face of rising vulnerabilities in external account and financing difficulties. With the phase out of subsidy, fuel inflation index further rose by 58.5 percent, contributing 1.8 percentage points to the headline inflation (14.8 percent) during Q4-FY22.

Similarly, elevated commodity prices, necessitated revision in Fuel Cost Adjustment (FCA) in the electricity charges under the CDMP. With this revision, electricity tariffs index edged up by 22.6 percent in FY22, both

Composition of Petrol Price **Figure 3.32**

³⁹ International fuel prices have been on rising trajectory amid post Covid demand revival and production constraints by US on account of hurricane related supply disruptions. Oil production and refining activity in the US was impacted by Hurricane Ida which made landfall near Port Fourchon, Louisiana by end-August 2021. According to the estimates by the U.S. Department of Interior's Bureau of Safety and Environmental Enforcement, around 96 percent of crude oil production in the U.S. federally administered areas of the Gulf of Mexico was disturbed.

Fuel Charge Adjustment**Figure 3.33**

Note: x-axis indicate months for which fuel charge adjustment was charged

Source: National Electric Power Regulatory Authority

in urban and rural segments, which translated into 1 percentage point contribution to headline inflation for the year. With major revision in FCA, inflation in this group rose significantly in Q2-FY22 amid low base effect (**Figure 3.33**). However, the impact remained slightly limited in Q4-FY22 on account of government's incentive package where the

base tariff was reduced by Rs 5. Commercial consumers having sanctioned load less than 5 kW and domestic non-Time of Use (TOU) consumers having monthly consumption up-to 700 units (except lifeline consumes) were eligible for PM Relief Package announced in February 2022.⁴⁰ The impact of this respite persisted till June 2022, before the relief was withdrawn.

In addition, the category of Liquefied Hydrocarbons (LPG) was another major contributor to energy inflation. LPG index rose by 67.1 percent and 54.1 percent in urban and rural areas, respectively, during FY22, compared to 1.8 percent and 2.9 percent decline in FY21. Following the rising trend in international prices, domestic LPG prices are under pressure since July 2021. The post pandemic recovery in global demand that was not matched by a corresponding increase in supplies as well as the Ukraine-Russia conflict drove the international LPG prices to record high levels in FY22.

⁴⁰ Source: www.nepra.org.pk

Chapter 4

Fiscal Policy

Following two years of fiscal consolidation during Covid, FY22 saw an unbudgeted and large fiscal expansion. The increase in overall expenditures masked an otherwise substantial growth in tax revenues and widened the fiscal deficit to 7.9 percent of GDP in FY22, compared to 6.1 percent last year. The deterioration was also witnessed in primary balance and revenue balance reflecting a rise in current and non-interest expenditures relative to overall revenues. Quarterly analysis indicates that fiscal indicators deteriorated as the fiscal year progressed. Particularly, current expenditures increased sharply during the last quarter amid higher grants, circular debt settlement under CDMP and POL subsidies. Meanwhile, higher interest spending due to rising interest rate amid increasing share of floating rate debt and recommencement of deferred payments under Debt Service Suspension Initiative (DSSI) to bilateral creditors further added to the worsening of fiscal balance. The entire increase in revenues was attributed to tax revenues, which effectively compensated the decline in non-tax revenues. The upward revised tax target of FBR was successfully achieved on the back of robust economic activity, fiscal measures and continued administrative efforts. However, non-tax revenues on the other hand declined during FY22. First, the change in timing of profit transfer led to partial transfer of SBP profits. Second, withdrawal of petroleum development levy in Q4-FY22 led to lower revenue collection. Provinces on the other hand continued with their fiscal consolidation efforts and delivered a combined surplus of 0.5 percent of GDP in FY22. The provincial surplus helped contain the overall consolidated fiscal deficit.

4 Fiscal Policy

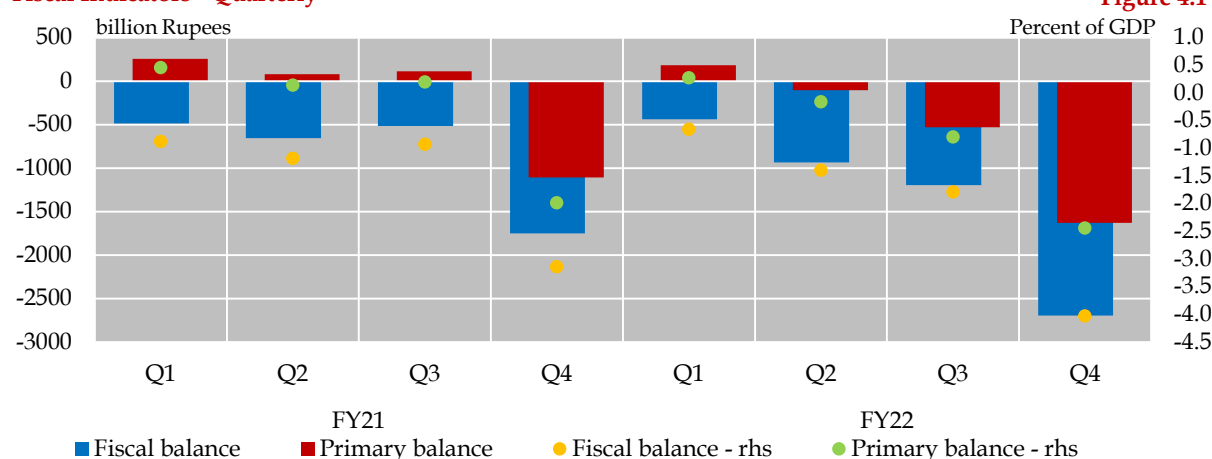
4.1 Fiscal Trends and Policy Review

Fiscal performance deteriorated during FY22 compared to a notable improvement in the previous year. Fiscal deficit as percent of GDP increased to 7.9 percent during FY22 compared to deficit of 6.1 percent realized last year (**Table 4.1**). The primary deficit more than doubled to 3.1 percent of GDP against a deficit of 1.2 percent during FY21, reflecting higher growth in non-interest expenditures vis-à-vis revenues. After two years of consolidation, this represented a large and unplanned fiscal stimulus at a time when the economy was already recovering very strongly from Covid. The budgeted overall and primary deficits were 6.3 and 0.7 percent of GDP, respectively. The revenue deficit also widened from 3.9 percent in FY21 to 5.2 percent of GDP in FY22. The deterioration in fiscal indicators is attributed to a sharp rise in expenditures, which more than offset a substantial growth in revenues. Provinces, on the other hand posted a combined surplus of

0.5 percent of GDP in FY22 compared to 0.6 percent last year.¹

Total expenditures surged by 29.0 percent on YoY basis compared to a muted growth of 6.8 percent a year earlier.² Both current and development expenditures contributed to this growth. The rise in current expenditures was due to rising interest payments, social protection grants and subsidies. The disbursements made under Circular Debt Management Plan (CDMP), unplanned POL subsidies under the PM's relief package and industrial support package explain higher than targeted increase in overall subsidies.³ Specific to interest expenditures, significant part of debt servicing payments came from the rise in domestic interest rates amid rising debt stock. The overall development expenditures also recorded a YoY growth of 26 percent in FY22 compared to 9.3 percent in FY21.⁴ The impetus largely came from provincial spending, as federal government cut the development expenditures.

Fiscal Indicators - Quarterly



¹ The provincial surplus recorded at Rs 351 billion in FY22 compared to Rs 263.3 billion last year. While the budgeted target for FY22 was Rs 570 billion.

² In absolute term, total expenditures recorded at Rs 13.3 trillion in FY22 against the target of Rs 8.5 trillion and actual expenditure of Rs 10.3 trillion in FY21

³ The government disbursed Rs 564 billion in terms of CDMP, Rs 241.4 billion under PM's relief package, and Rs 132.3 billion for industrial support (including provision of subsidized LNG to industrial sector); together these subsidies added up to 1.4 percent of GDP.

⁴ In absolute term, development expenditures recorded at Rs 1,657.4 billion in FY22 against Rs 1,315.7 billion in FY21.

Consolidated Fiscal Indicators

billion Rupees, growth in percent

Table 4.1

	Q4		Jul-Jun		YoY growth (Q4)		YoY growth	
	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22
1. Total Revenue (a+b)	1,910.8	2,161.2	6,903.4	8,035.4	20.8	13.1	10.1	16.4
(a) Tax Revenue	1,507.7	1,933.3	5,272.7	6,755.2	44.1	28.2	19.5	28.1
Federal	1,369.4	1,759.2	4,764.3	6,142.8	43.6	28.5	19.2	28.9
Provincial	138.3	174.1	508.4	612.4	49.7	25.9	22.9	20.5
(b) Non-Tax	403.1	228.0	1,630.7	1,280.2	-24.8	-43.4	-12.4	-21.5
Federal	335.0	193.4	1,480.4	1,151.9	-34.8	-42.3	-15.8	-22.2
Provincial	68.1	34.6	150.3	128.3	199.1	-49.3	46.8	-14.6
2. Total Expenditure (a+b+c)	3,662.1	4,855.5	10,306.7	13,295.3	11.9	32.6	6.8	29.0
(a) Current Expenditure	2,998.6	4,143.3	9,084.0	11,521.4	2.7	38.2	6.5	26.8
Of which : Mark-up	645.9	1,064.0	2,749.7	3,182.4	-12.7	64.7	5.0	15.7
Defence	532.5	529.8	1,316.4	1,411.6	29.6	-0.5	8.5	7.2
Non-markup	2,352.7	3,079.4	6,334.3	8,338.9	7.9	30.9	7.1	31.6
(b) Development Expenditure & net lending	592.7	606.3	1,315.7	1,657.4	40.3	2.3	9.3	26.0
(c) Statistical Discrepancy	70.8	105.8	-93.0	116.5	-200.5	49.5	6.6	--
3. Overall Budget Balance	-1,751.3	-2,694.3	-3,403.3	-5,259.9	3.6	53.8	0.8	54.6
percent of GDP	-3.1	-4.0	-6.1	-7.9				
4. Primary Balance	-1,105.4	-1,630.3	-653.6	-2,077.5	16.3	47.5	-13.6	217.9
percent of GDP	-2.0	-2.4	-1.2	-3.1				
5. Revenue balance	-1,087.8	-1,982.1	-2,180.6	-3,486.0	-18.7	82.2	-3.5	59.9
percent of GDP	-1.9	-3.0	-3.9	-5.2				
6. Financing (a+b)	1,751.3	2,694.3	3,403.3	5,259.9	3.6	53.8	0.8	54.6
(a) External (Net)	775.9	197.0	1,338.1	1,178.4	264.0	-74.6	49.4	-11.9
(b) Domestic (Net)	975.3	2,497.3	2,065.2	4,081.5	-34.0	156.0	-16.8	97.6
Non-Bank	-95.9	448.1	196.2	980.6	-169.4	-567.0	-63.7	399.8
Bank	1,071.3	2,049.2	1,869.0	3,100.9	-20.0	91.3	-3.7	65.9

Source: Ministry of Finance

The overall revenues recorded a growth of 16.4 percent in FY22 compared to 10.1 percent last year. The entire increase in revenues emanated from tax revenues which more than compensated the decline in collection through non-tax revenues. Tax revenues remained higher than last year both at federal and provincial levels. In fact, FBR taxes registered a six-year high growth of 29.1 percent in FY22, compared to 18.7 percent last year. An uptick in economic activity, fiscal measures such as removal of exemptions and imposition of new taxes in the Finance Supplementary Act introduced in January 2022 and continuous administrative efforts played an instrumental role in ensuring high tax collection. The breakup of tax revenues shows that more than two-thirds of FBR tax collection emanated from import-related taxes. Higher domestic demand and depreciation of PKR against the US dollar kept the rupee value of imports at elevated levels. Non-tax revenues on the other hand, recorded a decline owing to partial

transfer of SBP profits due to a change in the timing of the transfer amended in SBP Act, and reduced collection from petroleum levy on account of withdrawal of PDL levy in the last quarter of the fiscal year.

The quarterly analysis revealed that most of the fiscal slippage started to emerge from Q2-FY22 onwards (**Figure 4.1**). This was in contrast to the reduced fiscal spending and robust revenue growth achieved in Q1-FY22. Fiscal deficit widened at the end of Q2-FY22, whereas the primary surplus recorded during Q1-FY22 turned into a deficit during Q2-FY22. These fiscal slippages continued to persist in the subsequent quarters of FY22, and both fiscal and primary deficits experienced sharp worsening. This deterioration was attributed to a large increase in both interest and non-interest expenditures especially due to the fuel subsidies announced under PM's relief package in February 2022 that persisted for

Consolidated Revenue Collection**Table 4.2**

billion Rupees, growth in percent

	Collection						Growth					
	H1		H2		Jul-Jun		H1		H2		Jul-Jun	
	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22
Total Revenue (1+2)	3351.2	3956.0	3552.2	4079.4	6903.4	8035.4	3.7	18.0	16.8	14.8	10.1	16.4
1. Tax Revenue (a+b)	2455.9	3191.0	2816.8	3564.1	5272.7	6755.2	6.4	29.9	23.4	26.5	11.1	28.1
(a) Federal	2210.0	2919.8	2554.3	3223.0	4764.3	6142.8	5.6	32.1	22.6	26.2	9.9	28.9
(b) Provincial	245.9	271.2	262.5	341.1	508.4	612.4	14.7	10.3	31.8	29.9	22.9	20.5
2. Non Tax	895.3	764.9	735.4	515.3	1630.7	1280.2	-3.1	-14.6	-2.9	-29.9	7.0	-21.5

Source: Ministry of Finance

much of the fiscal year. Moreover a slowdown in revenues was witnessed primarily on account of lower collections from petroleum products

The expansionary fiscal policy stance followed in FY22 marked a divergence from the fiscal consolidation witnessed during last two years. The resultant increase in the fiscal deficit and hence borrowing requirements further augmented the burden of debt servicing. There is a need to address structural challenges by expediting reforms in PSEs. Particularly, power sector reforms ought to be made a priority to avoid further accumulation of circular debt. Similarly, there is also a need to widen the fiscal space by ensuring a sustained increase in tax collection through broadening the tax base. This can be achieved through the elimination of exemptions, improvement in tax design and reducing the over-reliance on indirect taxes.

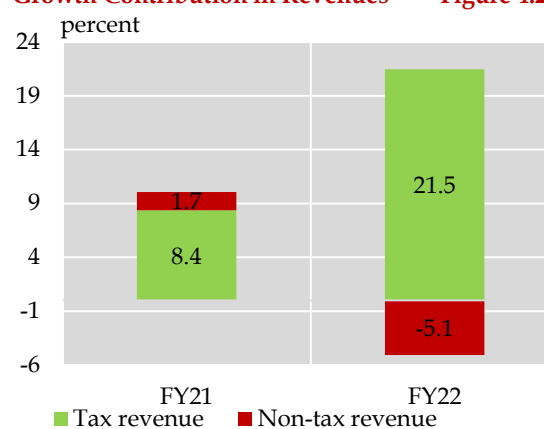
4.2 Revenues

The overall revenues grew by 16.4 percent in FY22 compared to 10.1 percent last year (Table 4.2). The entire contribution came from tax revenues as non-tax revenues witnessed a decline during the period under review (Figure 4.2). Tax revenues remained higher than last year both at federal and provincial levels. A confluence of factors such as robust economic activity, higher imports, higher inflation, removal of tax exemptions, imposition of new taxes in the Finance (Supplementary) Act 2021⁵ and continuous administrative efforts were instrumental in ensuring high tax collection.

Within tax revenues, almost two-thirds of FBR tax collection emanated from import-related activity. Higher domestic demand, elevated global commodity prices and depreciation of PKR against the US dollar kept the rupee value of imports at elevated levels, which in turn resulted in higher revenues. Collection through domestic sales tax, however, declined as the government withdrew sales tax on POL products during the H2-FY22. Receipts from direct taxes also remained higher than last year due to fiscal measures announced in the Supplementary Finance Bill.

FBR Taxes

FBR taxes registered a six-year' high growth of 29.1 percent in FY22, exceeding its previous year's growth of 18.7 percent. Moreover, the annual target was surpassed despite an upward revision (Figure 4.3). The tax collection target was set at Rs 5,800 billion initially, which was revised upwards to Rs

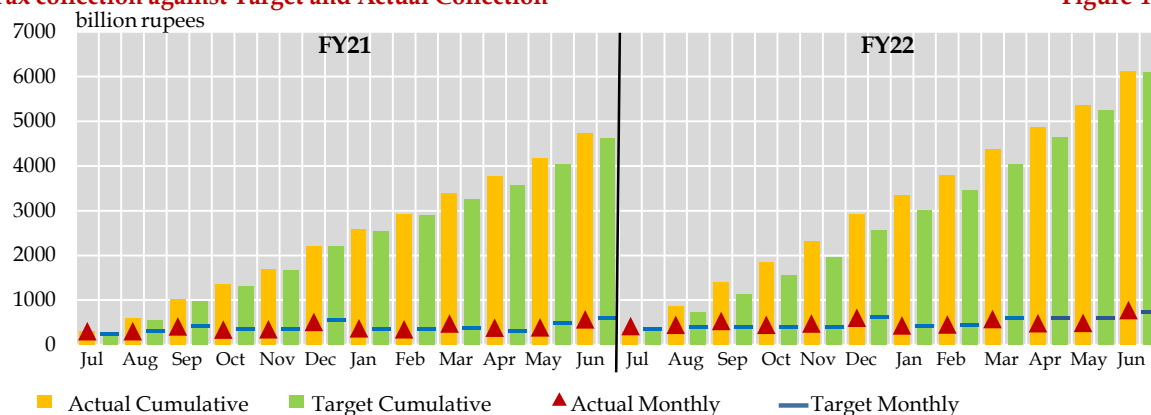
Growth Contribution in Revenues Figure 4.2

Source: Ministry of Finance & SBP calculations

⁵ Finance (Supplementary) Act 2021 was enacted on January 15th, 2022.

Tax collection against Target and Actual Collection

Figure 4.3



Source: Federal Board of Revenue

6,100 billion, the actual collection stood at Rs 6,126.1 billion during FY22.

The growth of FBR taxes was more pronounced during H1-FY22 - an average monthly YoY growth of 33.4 percent compared to 26 percent during H2-FY22 (Table 4.3). The increase in FBR taxes during H1 FY22 was driven by a continuous uptick in economic activity as reflected by LSM growth, domestic demand indicators and higher growth in imports (Table 4.4). In addition, FBR's continuous efforts to strengthen tax administration, higher global commodity prices and depreciation of PKR that translated into higher domestic inflation played their part in high collection. Lastly, removal of exemptions and fiscal measures enacted in the Finance Supplementary Bill also helped

achieve the collection target during FY22. It is important to highlight that higher collection was recorded despite the large refunds to POL, fertilizers, pesticides and pharmaceuticals compared to last year.⁶ In terms of composition, the expansion in FBR taxes mainly came from import-related taxes (20.6 percentage points) during FY22 (Figure 4.4). This was attributed to a surge in imports volume reflecting high domestic demand, higher commodity prices and depreciation of PKR against the US dollar.⁷

FBR administrative efforts had an important role

Tax authorities continued reforms related to tax administration throughout FY22 with an

FBR Tax Collection

Table 4.3

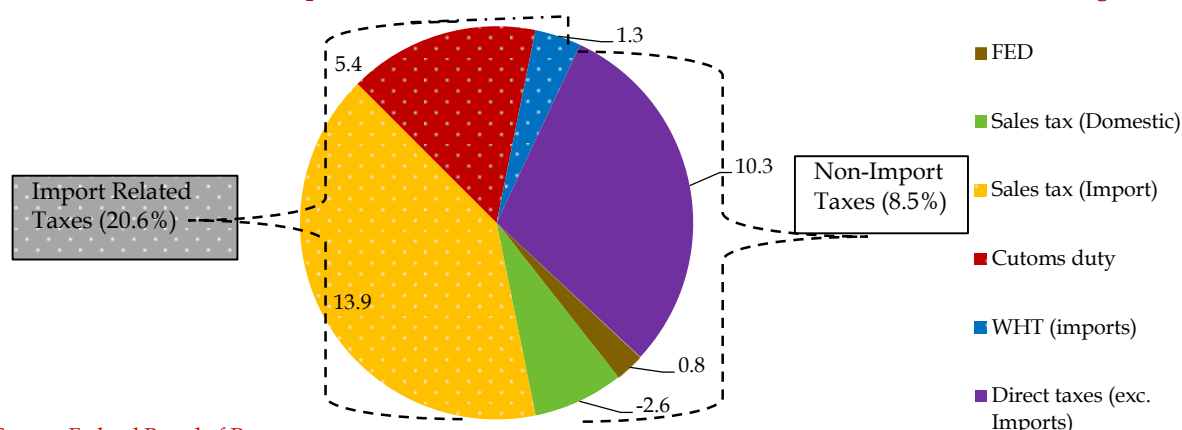
billion Rupees, growth in percent

	Collection						Growth					
	H1		H2		Jul-Jun		H1		H2		Jul-Jun	
	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22
FBR Taxes (a+b)	2,210.0	2,919.8	2,534.1	3,206.3	4,744.2	6,126.1	5.6	32.1	33.1	26.5	18.7	29.1
(a) Direct Taxes	830.8	1,019.5	900.3	1,260.6	1,731.1	2,280.1	5.9	22.7	21.8	40.0	13.6	31.7
(b) Indirect Taxes	1,379.2	1,900.3	1,633.9	1,945.7	3,013.1	3,846.0	5.4	37.8	40.3	19.1	21.8	27.6
Custom Duties	337.9	480.3	409.1	521.5	747.0	1,001.8	3.0	42.2	37.1	27.5	19.2	34.1
Sales Tax	918.1	1,274.5	1,064.3	1,248.0	1,982.5	2,522.4	6.9	38.8	44.2	17.3	24.1	27.2
Imports	508.6	892.3	647.3	924.9	1,155.9	1,817.2	13.8	75.4	50.7	42.9	31.9	57.2
Domestic	408.1	383.7	418.4	321.5	826.6	705.2	-0.7	-6.0	35.2	-23.2	14.7	-14.7
Federal Excise	123.2	145.5	160.4	176.2	283.6	321.7	0.8	18.1	25.1	9.9	13.2	13.4

Source: Federal Board of Revenue

⁶ The amount of refunds issued during FY22 increased by 34.0 percent to Rs 336.9 billion compared to Rs 251.5 billion last year

⁷ With an increase of 59.0 percent in rupee value of imports in FY22 compared to 27.8 percent growth last year, the share of collection from import related taxes significantly increased.

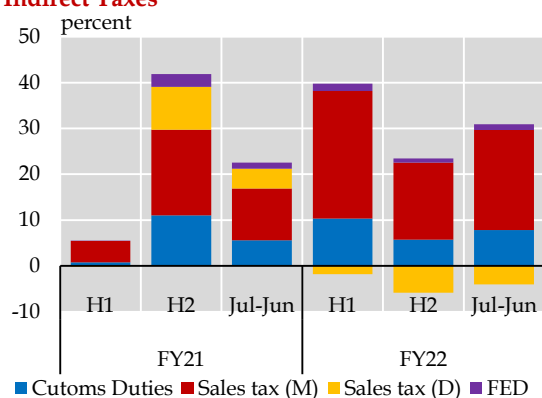
Growth Contribution of Import Related Taxes in Overall FBR Tax Collection**Figure 4.4**

Source: Federal Board of Revenue

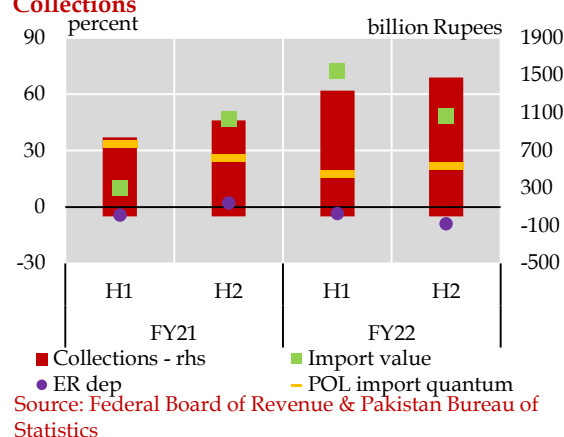
objective to enhance administrative efficiency, limit tax evasion and ensure ease of doing business. The introduction of Track and Trace System for tobacco and sugar sectors facilitated documentation of the economy and reduced tax evasion in these sectors^{8 9}. Similarly, in continuation of previous year's introduction of POS invoicing system by integrating tier 1 retailers, it was further extended to large retailers. Since its introduction, a total of 4,563 retailers were integrated into this system with the installation of 10,611 POS machines till the end of FY22.¹⁰

In continuation of these ongoing efforts, FBR targeted to integrate the largest 500 retailers in

this system in FY22. FBR also introduced a single sales tax portal in collaboration with the provincial revenue authorities. This initiative reduced the cost of doing business by containing the time and expense of tax compliance. This portal allowed taxpayers to file single monthly sales tax returns instead of six returns on provincial revenue portals, previously. Another initiative of FBR was the introduction of the Pakistan Single Window (PSW) in order to reduce clearance times for legitimate trade. Lastly, the mechanism of e-hearing was formulated to provide contactless tax administration resulting in reduced compliance time.

Growth Contribution in Indirect Taxes**Figure 4.5**

Source: Federal Board of Revenue

Main Drivers of Import Related Collections**Figure 4.6**

Source: Federal Board of Revenue & Pakistan Bureau of Statistics

⁸ TTS on tobacco and sugar was introduced in October and November 2021 respectively.

⁹ With the implementation of TTS for sugar industry, the sales tax collection from this sector posted a 31 percent growth in FY22.

¹⁰ FBR press release dated: 30 June 2022

Direct Taxes**Table 4.4**

billion rupees, percent

	FY21	FY22	Growth	
			FY21	FY22
Collection on Demand	80.1	101.1	31.8	26.1
Voluntary Payment	467.8	676.4	15.6	44.6
Advance tax	413.7	597.9	–	44.5
Withholding Taxes	1237.3	1534.0	13.3	24.0
Imports	218.5	280.6	9.4	28.4
Salaries	151.8	197.3	17.3	29.9
Dividends	63.8	83.3	15.8	30.6
Bank Interest & Securities	135.0	154.9	5.2	14.7
Contracts	272.0	341.0	14.6	25.4
Export	42.2	64.9	9.7	53.7
Cash Withdrawal	15.1	0.3	-0.4	-98.2
Electric bills	51.3	71.4	12.9	39.3
Telephone	63.2	67.9	15.7	7.5
Total direct taxes	1,731.3	2,280.1	13.6	31.7

Source: Federal Board of Revenue

Collection from Indirect taxes surged amid rising imports

Indirect taxes witnessed a broad-based growth of 26.9 percent in FY22, compared to 22.5 percent last year.

Import related taxes (sales tax on imports and custom duty) contributed the most in the indirect taxes during FY22 (**Figure 4.5**). The uptick in domestic demand as evident by the acceleration in economic activity translated into higher imports of POL, iron & steel, vehicles, edible oil and machinery, which augmented revenue collection. The increase in global commodity prices and depreciation of PKR also contributed in higher collections.

In particular, the rising automobiles' demand in the domestic market and the ensuing increase in import of Completely Knocked Down (CKD) and Completely Built-Up (CBU) vehicles also bolstered import related taxes during FY22. Similarly, further impetus in tax collection came from food imports, which was mainly driven by price hikes; higher prices of food items in global markets boosted import values and helped increase collection (**Figure 4.6 & Chapter 5**).

On the other hand, collection through domestic sales tax decelerated compared to last year. This slowdown is attributed to lower tax collection on POL products as the government withdrew sales tax on these products during H2-FY22. Lower sales volume of POL along with government's relief package (cut in fuel prices) explain lower revenue collection particularly in Q3-FY22. Meanwhile, relief measures, such as, subsidy on POL, fertilizers, vehicles, ghee have dented revenue collection by approximately Rs 188 billion during the months of March - May, 2022 alone.¹¹ Nonetheless, collection from non-POL products remained robust.

Collection from direct taxes increased further

Direct taxes also posted a significant increase of 31.7 percent in FY22 compared to 13.6 percent last year (**Table 4.4**). This growth mainly came from withholding taxes. Fiscal measures such as removal of exemptions and imposition of advance taxes helped in higher revenue collection. Both voluntary payments and collection on demand (CoD) contributed positively as the contest time was extended from 90 to 180 days.

Within withholding taxes (WHT), higher volume of imports, increase in salaries by the federal and provincial governments, higher interest rate environment and revival in economic and construction activity were the main contributors in higher collection from WHT. The continuously increasing usage of telecom services due to online educational activities and virtual meetings during the pandemic, helped increase the collections from telecom services. This increase is evident from the higher number of cellular subscribers as well as the higher broadband data usage during the period (**Figure 4.7**).

4.3 Non-Tax Revenue

The overall non-tax revenues declined for the second consecutive year (**Table 4.5**). Transfer of SBP profits to the government remained lower than last year due to change in the

¹¹ FBR press releases for the month of March, April and May 2022.

Non-tax Revenues during (consolidated)**Table 4.5**

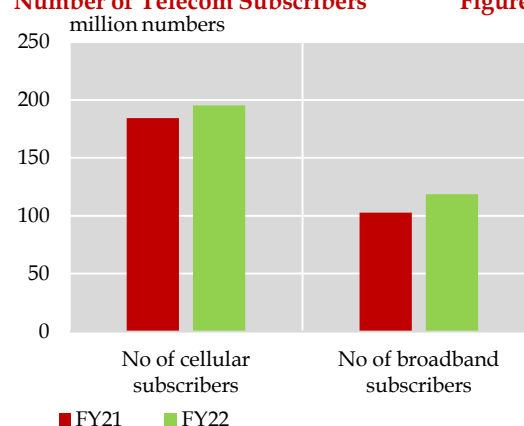
billion Rupees, growth in percent

	Collection				Growth	
	H1		Jul-Jun		H1	Jul-Jun
	FY21	FY22	FY21	FY22	FY22	FY22
SBP profits	372.5	380.0	650.5	473.6	2.0	-27.2
Petroleum Levy	275.3	70.0	424.7	127.5	-74.6	-70.0
PTA profits	18.6	38.9	39.1	103.4	108.9	164.8
Mark-up (PSEs & others)	44.0	32.6	76.2	87.8	-25.9	15.2
Royalties on gas & oil	35.1	39.1	70.9	90.8	11.2	28.1
Dividends	11.9	26.0	43.9	42.9	118.8	-2.2
Passport & other fees	7.0	10.4	13.0	21.6	49.2	65.7
Defense	6.5	7.7	14.9	17.3	18.6	16.2
Total	895.3	764.9	1630.7	1280.2	-14.6	-21.5

Source: Ministry of Finance

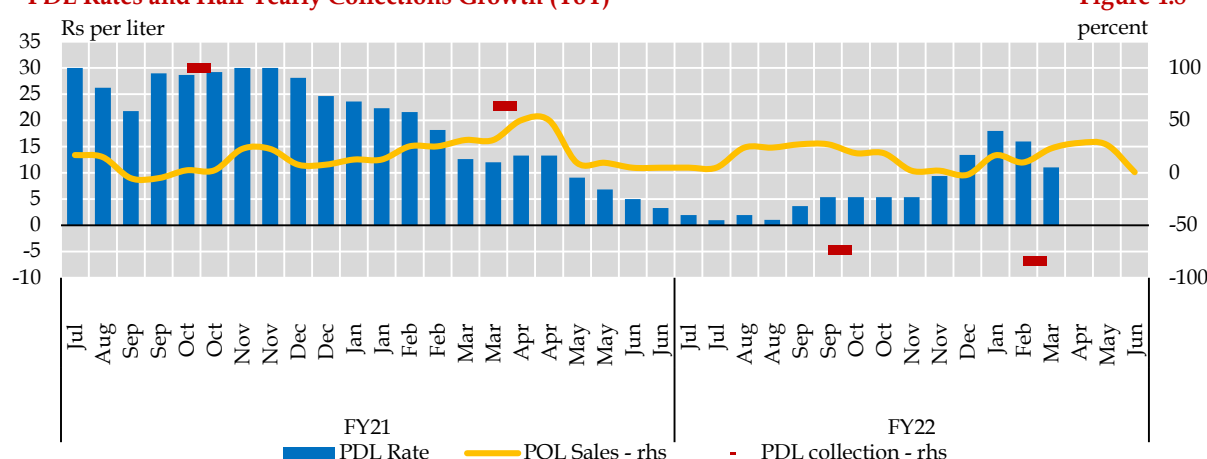
transfer mechanism. Previously, SBP profits were transferred to the government at the end of each quarter. However, with the amendments in the SBP Act, now the SBP profits are transferred to the government after finalizations of annual financial statement at the end of each fiscal year, implying some lag in the transfer beyond the fiscal year. This change in mechanism become effective from Q3-FY22.

Collection through PDL also declined in FY22 as the government removed the levy from April 2022 onwards (Figure 4.8). Even the PDL rate before April 2022 was lower than last year.¹² On the other hand, PTA profits rose

Number of Telecom Subscribers**Figure 4.7**

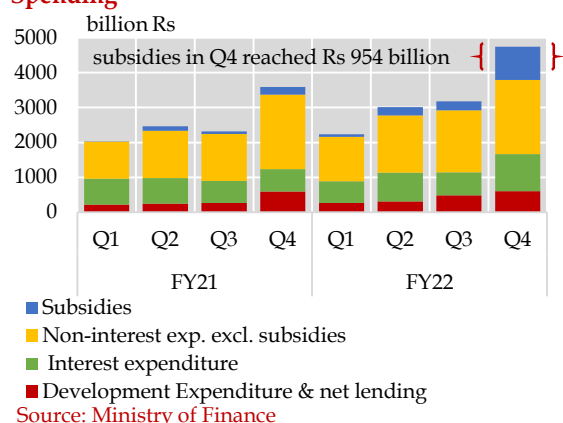
Source: Pakistan Telecommunication Authority

amid issuance of spectrum licenses to two cellular companies.

PDL Rates and Half Yearly Collections Growth (YoY)**Figure 4.8**

Source: Ministry of Finance

¹² The PDL rates was dropped to Rs 2 at the start of FY 22, which was gradually increased to Rs 18 till the month of March 2022. These rates were dropped to zero in order to minimize the impact of rising POL prices on end consumers in Q4-FY22.

Quarterly Flows in Current Federal Spending **Figure 4.9**

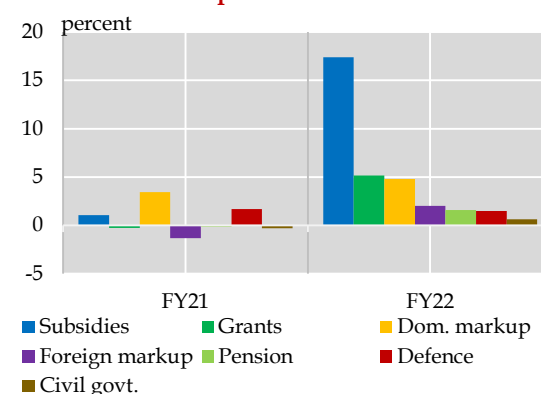
Source: Ministry of Finance

4.4 Federal Expenditures¹³

During FY22, federal expenditures witnessed a relatively higher growth of 28.2 percent compared to an increase of 4.7 percent last year. The major push came from current expenditures as both interest and non-interest payments including subsidies rose sharply, especially during H2-FY22 (**Figure 4.9**). Besides, increase in pension, running of civil government, and grants also contributed in this expansion in federal current expenditures. In contrast, development expenditures reduced by 19.6 percent in FY22 compared to a marginal rise of 1.0 percent observed during the last fiscal year (**Table 4.6**).

Federal Current Expenditures

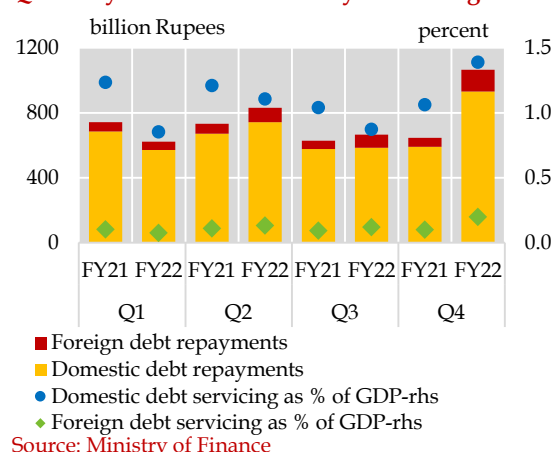
After witnessing a marginal increase in FY21, the current spending posted significant growth in FY22. The expansion mostly emanated from subsidies which crossed the mark of Rs 1.5 trillion in FY22 almost 3.6 times higher than FY21. The tariff differentials payments to IPPs under the circular debt management plan (CDMP) along with POL subsidies partly explain the hefty disbursement under the subsidy account. Meanwhile, the grants to provinces, domestic and foreign markup payments, pensions and running of civil government also increased significantly during FY22 (**Figure 4.10**).

Growth Contribution in the Federal Current Expenditures **Figure 4.10**

Source: Ministry of Finance

Higher trajectory of growth in interest expenses

The interest payments that remained largely muted until Q3-FY22¹⁴, could not sustained this trend in the following months. During Q4-FY22, domestic and foreign mark-up payments accelerated the overall interest expenditures which crossed Rs 1 trillion mark in absolute term and 1.6 as percent GDP. The higher mark-up payments were attributed to the rising trend in domestic interest rates amid increasing share of floating rate debt and recommencement of deferred payments under Debt Service Suspension Initiative (DSSI) to bilateral creditors (**Figure 4.11**).¹⁵

Quarterly Trend in Interest Payments **Figure 4.11**

Source: Ministry of Finance

¹³ The discussion in this section is based on expenditures excluding statistical discrepancy.

¹⁴ The overall interest payment experienced a marginal growth of 0.7 percent during Jul-Mar FY22, relative to 11.9 percent during same period of FY21

¹⁵ For details, see Chapter 5 on "Domestic and External Debt."

State of Federal Expenditures

Table 4.6

billion Rupees, growth in percent

	FY21	FY22	YoY growth		As percent of total expenditures		As percent of GDP	
			FY21	FY22	FY21	FY22	FY21	FY22
Total expenditures* (a+b)	7137.7	9152.7	4.7	28.2	100.0	100.0	12.8	13.7
(a) Current expenditure	6348.7	8451.6	4.2	33.1	88.9	92.3	11.4	12.6
Mark-up payments	2749.7	3182.4	5.0	15.7	38.5	34.8	4.9	4.8
Domestic	2523.8	2828.6	9.1	12.1	35.4	30.9	4.5	4.2
Foreign	225.9	353.9	-26.3	56.6	3.2	3.9	0.4	0.5
Defence affairs and services	1316.4	1411.6	8.5	7.2	18.4	15.4	2.4	2.1
Pension	440.1	541.9	-1.6	23.1	6.2	5.9	0.79	0.81
Running of civil govt.	505.8	546.7	-3.5	8.1	7.1	6.0	0.9	0.8
Subsidies	425.0	1529.6	18.1	259.9	6.0	16.7	0.8	2.3
Grants to provinces and others	911.6	1239.3	-1.8	36.0	12.8	13.5	1.6	1.9
Grants to provinces	83.8	97.5	9.8	16.2	1.2	1.1	0.2	0.1
Grants to others	827.7	1141.8	-2.8	37.9	11.6	12.5	1.5	1.7
(b) Development expenditure and net lending	789.1	701.1	8.6	-11.1	11.1	7.7	1.4	1.0
Total development expenditure	694.6	558.1	1.0	-19.6	9.7	6.1	1.2	0.8
PSDP	667.3	558.1	7.2	-16.4	9.3	6.1	1.2	0.8
o/w Development grants to provinces	226.1	157.7	46.3	-30.3	3.2	1.7	0.4	0.2
Other development expenditure	27.3	0.0	-58.3	-0	0.4	0.0	0.0	0.0
Net lending	94.5	143.0	144.7	51.4	1.3	1.6	0.2	0.2
Provinces	17.5	102.6	-276.7	485.2	0.2	1.1	0.0	0.2
Others	76.9	40.4	58.5	-47.5	1.1	0.4	0.1	0.1

* Excluding statistical discrepancy

Source: Ministry of Finance

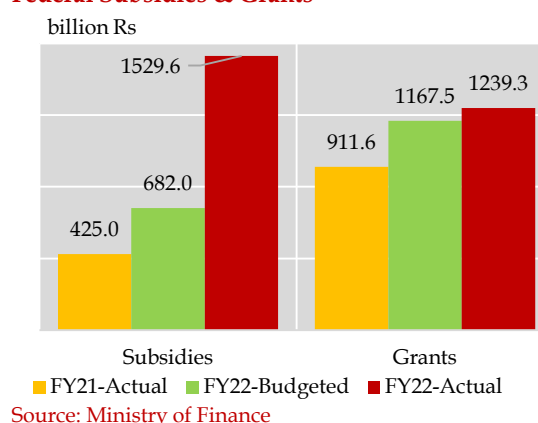
Substantial increase in subsidies and grants

Subsidies and grants grew markedly during FY22 compared to FY21, and surpassed the budgeted amount by a wide margin (Figure 4.12).

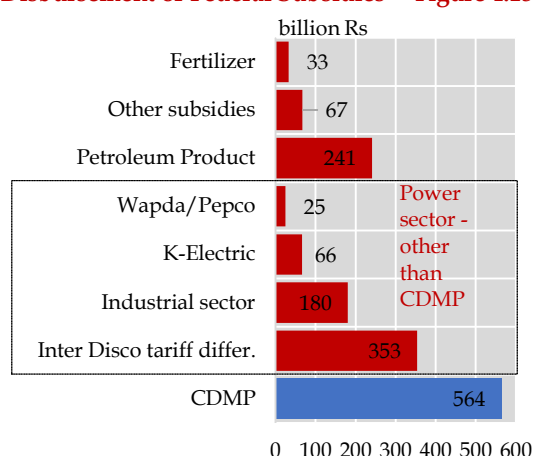
Subsidies: The volume of overall subsidies reached Rs 1529.6 billion in FY22 compared to Rs 425.0 billion last year. While, in terms of GDP it increased to 2.3 percent in FY22 from 0.8 percent in FY21.¹⁶ Within subsidies, most of the disbursement comprised of power sector related payments which included tariff differentials and receivables to DISCOs, PHPL, K-electric and WAPDA/PEPCO (Figure 4.13). A part of these expenditures was disbursed to IPPs under the revised CDMP. The revised

plan was approved in February 2022 by the Cabinet Committee on Energy (CCoE) to

Targets Versus Actual Estimates of Federal Subsidies & Grants Figure 4.12



¹⁶ The target for overall subsidies was set at Rs 682 billion, from which Rs 596 billion were allocated to power sector including circular debt payments. Against this allocation, power sector received Rs 1026.3 billion during FY22, the large deviation from target disbursement was mainly due to higher accumulation of circular debt and payments made under fiscal package.

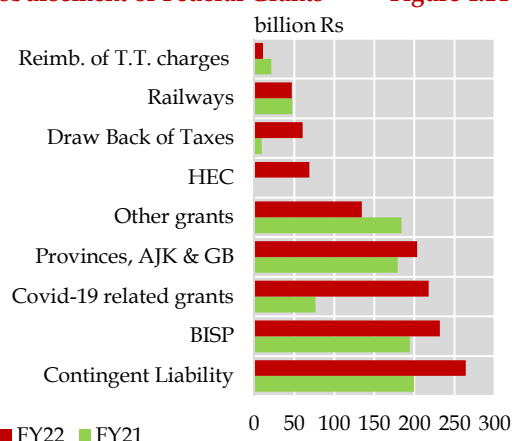
Disbursement of Federal Subsidies Figure 4.13

Source: Ministry of Finance

contain the flow of circular debt, which surpassed Rs 2.2 trillion at end-June 2022.¹⁷

The added growth in subsidies during FY22 came from price differential claims on petroleum products specifically motor spirit and diesel announced under PM's relief package introduced in February 2022, which persisted for much of the rest of the fiscal year. The aim of this package was to insulate domestic consumers from the impact of rising petroleum prices in international markets. Initially, the package was expected to continue till June 2022, however, due to rising subsidy cost and revival of the IMF program, it was rolled back in May 2022. The package cost Rs 241.4 billion to the national exchequer in terms of fuel subsidies (Figure 4.13).¹⁸

The subsidies to industrial sector also recorded a marked increase of Rs 219.7 billion during FY22 compared to Rs 37 billion in FY21 and the target of Rs 73 billion. The notable increase in subsidies to industrial sector falls under different categories, for instance; 1)

Disbursement of Federal Grants Figure 4.14

Source: Ministry of Finance

provision of LNG to industry at subsidized rates; 2) supply of electricity at lower rates to zero-rated export sector and; 3) extension of industrial support package (ISP).¹⁹

Grants: The total disbursements under grants reached Rs 1,239.3 billion in FY22 compared to Rs 911.6 billion disbursed in FY21 (Figure 4.14). The contingent liabilities remained a major recipient of federal grants, followed by Benazir Income Support Program (BISP) and Covid-19 related grants.

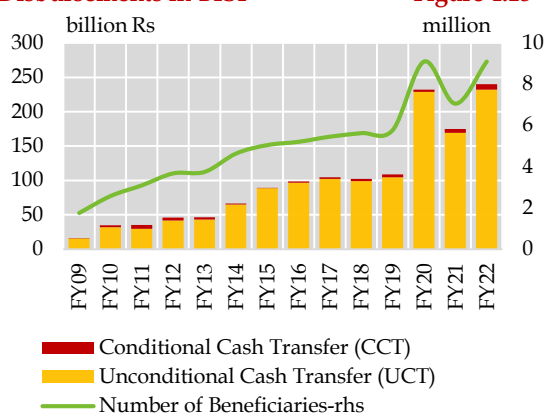
Specific to social protection, the BISP program was the major beneficiary of federal grants of Rs 232 billion, however, it missed the budgeted target of Rs 246 billion. The program included different protection schemes covered under non-conditional and conditional cash transfer programs. The major recipients of BISP grants were unconditional cash transfer (UCT) programs including Ehsaas Kafaalat, Ehsaas Cash Assistance and specific relief assistance provided to LOC AJK, Hernai and Tirah valley.²⁰ In terms of

¹⁷ IMF (2022), Country Report No. 22/288

¹⁸ The PM's relief package was announced on 28th February 2022 and implemented from March 2022 onwards, hence the disbursement of subsidies started in April 2022. Government disbursed Rs 66.8 billion under POL price differential claims in April 2022, followed by Rs 89.2 and Rs 85.4 billion in May and June 2022 respectively.

¹⁹ To generate the demand for ample available electricity and boost the industrial activity, the government had announced ISP scheme in November 2020. Under this scheme the peak and off-peak tariff structure for industrial consumers was abolished initially for the period from November 2020 till end April 2020. However, due to higher energy demand, the package was first extended till June 2022 and then till October 2023. (Source: NEPRA (2021), State of Industry Report)

²⁰ Pakistan Economic Survey (2021-22), Finance Division.

Disbursements in BISP**Figure 4.15**

Source: Benazir Income Support Programme

coverage, the growing size of BISP not only reflects the higher budgetary allocations but also mirrors the larger inclusion of households (Figure 4.15).²¹

Meanwhile, different Covid-related programs also witnessed notable expansion during FY22. For instance, the National Disaster Management Fund (COVID-19) received Rs 102 billion. Similarly, the government issued different disbursements to the Ministry of National Health Services Regulation and Coordination (NHSR&C) including; 1) COVID 19 Vaccine Support Project under the Asia Pacific Vaccine program received Rs 81 billion²²; 2) Pandemic Response Effectiveness in Pakistan (PREP) raised Rs 23 billion²³; and 3) Rs 11.9 billion under 'IVAC Covid-19 Vaccine support for Pakistan'²⁴.

Increase in salaries and pensions

In contrast to a decline in FY21, pensions as well as running of the civil government expenditures saw considerable rise in FY22. More specifically, under the austerity drive in FY21, the government had kept the annual

increase in salaries of government employees and pensions on hold. However, the government introduced some relief measures for federal employees and pensioners in Budget 2021-22 which included; 1) ad-hoc relief allowance of 10 percent to all federal employees and employees of autonomous/semi-autonomous bodies and corporations given that they have adopted the federal government's Basic Pay Scales Scheme; 2) annual increment in pensions by 10 percent; 3) rise in orderly allowance from current Rs 14,000 to Rs 17,500; 4) increase in integrated allowance²⁵ from current level of Rs 450 to Rs 950 per month for employees placed in BPS grade 1-5; and 5) increase in minimum monthly wage from Rs 17,000 to Rs 20,000.²⁶

Moreover, the disparity reduction allowance of 15 percent was announced on 23rd Feb 2022 which was admissible to all federal employees on their basic pay scale of 2017. Similarly, on 14th April 2022, pension rate was also revised upward by 10 percent, the announced rate was effective from 1st April 2022.²⁷

As a result of these measures, the overall expenditures incurred on running of civil government (mainly comprised salaries) and pension crossed Rs 1 trillion mark in FY22, compared to Rs 946 billion in FY21.²⁸

Federal Development Expenditures

The federal development expenditures fell by 19.6 percent in FY22, compared to marginal growth of 1.0 percent in FY21, mainly reflecting the subdued disbursement under federal PSDP. Since last few years, the share of federal PSDP has been continuously declining

²¹ The last NSER was conducted in 2010-11 that identified 27 million beneficiaries, the coverage increased to around 33 million in 2021.

²² COVID-19 Vaccine Support Project under the Asia Pacific Vaccine Access Facility was funded by Asian Development Bank.

²³ This program was initiated with the support of World Bank

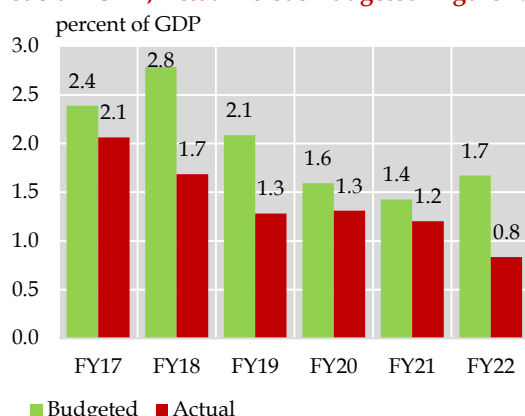
²⁴ This funding was committed by Islamic Development Bank (IDB) Source: Finance Division

²⁵ Integrated allowance is offered to Naib Qasids, Qasids and Daftaries.

²⁶ Budget speech 2021-22, Finance Division

²⁷ Finance Division

²⁸ Furthermore, in Budget 2022-23 government once again announced an increment of 15 percent in pension, with effect from Jul 2022.

Federal PSDP, Actual versus Budgeted Figure 4.16

Source: Ministry of Finance

in overall GDP, both at budgeted and at execution stage. Specifically, during the last two years covid-led expenditures, reduced the fiscal space. In addition, Public Financial reforms²⁹ also partly explain the slowdown in PSDP release. For FY22, government had envisaged a target for PSDP (1.7 percent of

GDP) higher than the last two years (Figure 4.16). In the first half of FY22, the quarterly releases of federal PSDP remained on track; however, the releases were put on hold in H2-FY22 mainly to contain the rising fiscal imbalance. In overall terms, the federal PSDP stood at Rs 558 billion against the budgeted amount of Rs 900 billion, this spending cut had squeezed the number of development projects that were initially expected to be completed by end-June 2022 from 371 to 170.³⁰

The ministry-wise allocation suggests that more than 60 percent of federal development funds were allocated to five main divisions and corporations including NHA, finance, water resource, cabinet and power divisions. Under these ministries, the funds were allocated to major infrastructure and hydropower projects such as Dasu hydropower, Diamer Basha Dam, K4-greater water supply scheme and Neelum Jhelum

PSDP Targets vs. Disbursements

billion Rupees, percent

Table 4.7

Main Projects	Allocation (2021-2022)*	Revised estimates**	Execution as percent of allocation**
NHA	113.8	86.7	76.2
Of which. Improvement of Jaglot - Skardu Road	10	5.9	59.0
Khyber Pass Economic Corridor Project	8.5	0.075	0.9
Motorway- Burhan - Hakla on M-I to Dera Ismail Khan	8	10.8	135.0
Finance Division	123.1	45.8	37.2
Of which. Merged Districts of Khyber Pakhtunkhwa 10 Years Development Plan	54	44.3	82.0
Land Acquisition Swat Motorway	10	5	50.0
Water Resource Division	103.5	90.6	87.5
Of which. Dasu Hydro Power Project	56.5	na	na
Diamer Basha Dam Project (Dam Part)	15.5	7.5	48.4
K-IV Greater Water Supply Scheme	15.1	15.1	100.0
Neelum Jhelum Hydro Power Project	14.2	na	na
Cabinet Division	46.2	64	138.7
Of which. Sustainable Development Goals Achievement Program	46	64	139.1
Power Division (through PSDP)	69.5	46.5	66.9
Of which. Interconnection of Isolated Makran Network	5.0	3.0	60.0
Secondary Transmission Lines & Grid Stations -SEPCO	6.6	0.0	0.0
Secondary Transmission Lines & Grid Stations- HESCO	5.2	0.0	0.0

Sources: *Public Sector Development Programme 2021-22, Planning Commission Ministry of Planning, Development & Special Initiatives, **Details of Demands for Grants and Appropriations Volume IV, Development Expenditure, Ministry of Finance

²⁹ The PFM reforms comprised of; (i) budget management; (ii) development projects, maintenance and use of public assets; (iii) control of public finance consolidated fund and public account; (iv) treasury management; (v) special purpose funds; (vi) accounting and reporting; (vii) public entities; (viii) non tax revenue and; (ix) removal of difficulty and power to make rules.

³⁰ Planning Commission of Pakistan

Provincial Fiscal Operations**Table 4.8**

billion Rupees, growth in percent

	Cumulative Flows		YoY growth	
	FY21	FY22	FY21	FY22
A. Total revenue (a+b+c)	3,728.0	4,687.5	15.0	25.7
a. Provincial share in federal revenue	2,741.9	3,589.0	9.5	30.9
b. Federal loans and transfers	327.5	357.8	48.2	9.3
c. Provincial own revenue	658.6	740.7	27.6	12.5
Taxes	508.3	612.4	22.9	20.5
Non-taxes	150.3	128.3	46.8	-14.6
B. Total expenditures (a+b+c)	3,414.4	4,336.5	7.9	27.0
a. Current	2,844.2	3,200.8	11.9	12.5
b. Development	770.3	1,216.6	23.8	57.9
c. Statistical discrepancy	-69.1	-80.9		17.1
Overall balance (A-B)	263.3	351.0	241.7	33.3

Source: Ministry of Finance

hydro power projects. The 10-year development plan for merged districts of Khyber Pakhtunkhwa and sustainable development goal achievement program remained as major non-infrastructure programs being allocated to Finance division and Cabinet divisions, respectively (Table 4.7).

4.5 Provincial Fiscal Operations

On a consolidated basis, the provincial financial account posted a surplus of Rs 351 billion during FY22, which while staying higher than FY21 was far behind the annual target of Rs 570 billion (Table 4.8). The provincial surplus was mainly due to higher

increase in revenues which more than offset the upsurge seen in provincial expenditure. From the provincial accounts, the positive contribution came from surplus recorded by Punjab and Sindh; whereas, Khyber Pakhtunkhwa and Balochistan recorded deficit during FY22. (Figure 4.17).

Provincial Revenues

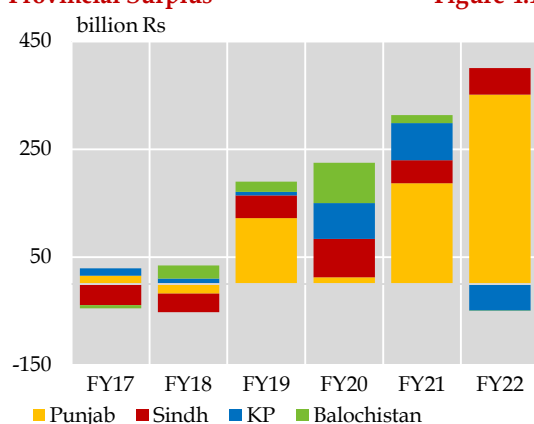
The provincial revenue mobilization remained robust during FY22 mainly on account of increased share in federal divisible pool. Further impetus came from higher allocation of federal loans and transfers and increase in provincial tax and non-tax revenues (Figure 4.17 and 4.18).

Sales tax contributed the most in own-source revenues

On consolidated basis, the own-source revenues collection grew by 12.5 percent in FY22, compared to 27.6 percent in FY21. The lower receipts under non-tax revenues mostly explains the deceleration in growth. The tax revenues went up by 20.5 percent, driven by sales tax on services.

Within tax revenues, sales tax on services recorded significant collections in all provinces, whereas collection under stamp duties also remained higher than FY21. The province-wise segregation suggests that on YoY basis major impetus to growth in tax collection came from Punjab, followed by Khyber Pakhtunkhwa and Sindh (Figure 4.19). Punjab not only achieved highest growth in overall tax collection, its revenues also surpassed the target set for FY22.

For FY22, the provinces announced different tax relief measures in their respective budgets. Specific to Punjab, the provincial authorities continued with the tax relief measures initially introduced in FY20 including; 1) Zero percent rate of sales tax on health insurance and services provided by doctors and hospitals; 2) reduced rate of service tax of 5 percent for 32 sectors and; 3) reduction of stamp duty from 5 percent to 1 percent in urban areas.³¹ Fiscal

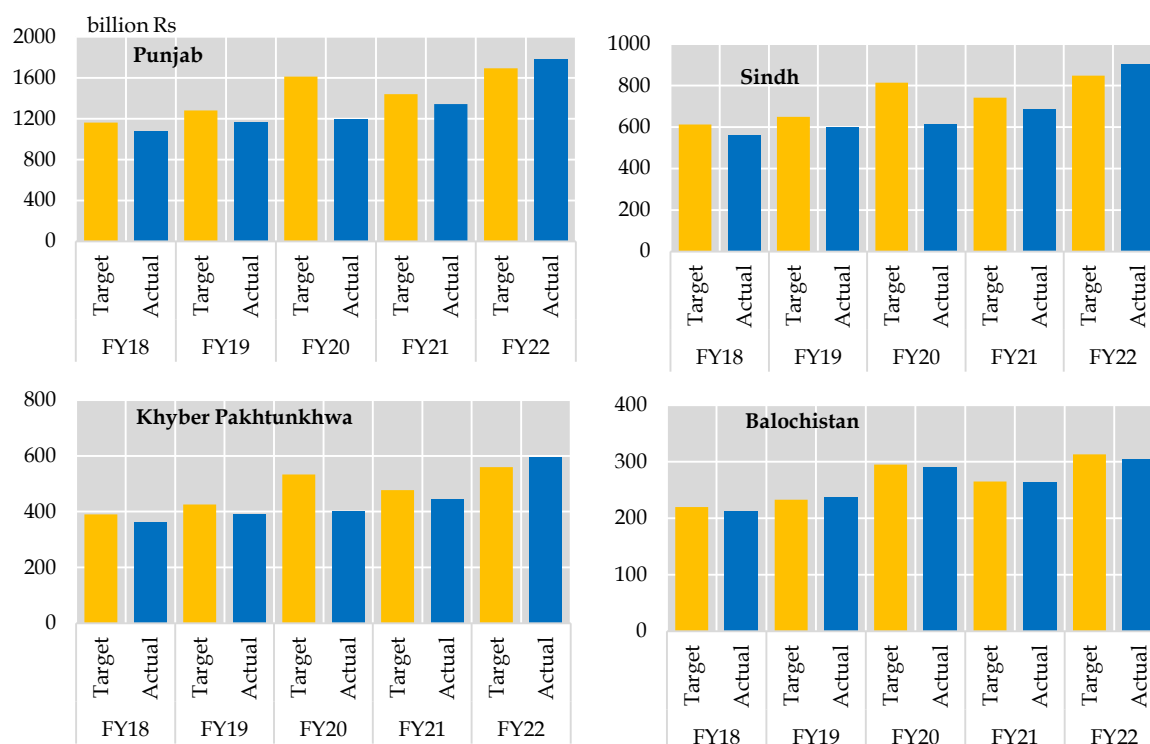
Provincial Surplus**Figure 4.17**

Source: Ministry of Finance

³¹ White Paper Budget FY22-23, Finance Department, Government of Punjab.

Share in Fed. Div. Pool Transfers-Target vs. Actual Disbursements

Figure 4.18



Source: Ministry of Finance

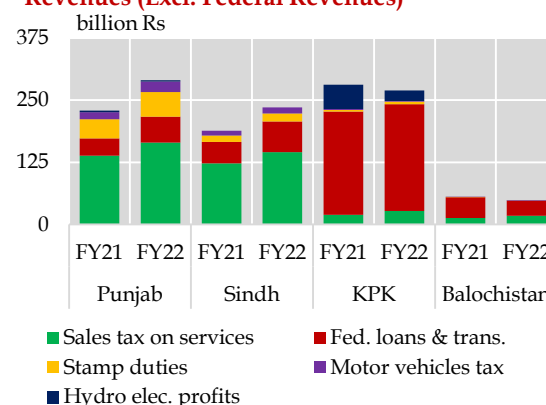
authorities in Sindh also introduced tax relief measures in the form of exemption of sales tax on services on health insurance policies and reduction on stamp duty from 2 percent to 1 percent on conveyance and other instruments.³² In Khyber Pakhtunkhwa, different tax relief measures were announced in budget 2021-22 to encourage economic activity including; 1) introduction of reduced rate of sales tax on services on twelve different categories, and extension of reduced rates on 17 categories; 2) exemption of tax on profession, land and agriculture; 3) reduction of motor vehicle registration fee to Rs 1 and free of cost re-registration of vehicles; 4) lower property tax for regular tax payers.³³

The different tax relief measures in place, the improvements in tax collection mainly reflects the pick-up in domestic activity. Besides, it also shows the effectiveness of measures commenced by provincial tax authorities in terms of broadening the tax base. For instance,

Punjab Revenue Authority conducted a number of workshops for private sector withholding agents, which were attended by more than one thousand representatives of organizations in Punjab, the authority also arranged workshops, seminars and tax clinics for specific sectors such as travel agents and architects.³⁴ Sindh Revenue Board (SRB) notified SRB POS, the real time invoicing

Major Sources of Provincial Revenues (Excl. Federal Revenues)

Figure 4.19



Source: Ministry of Finance

³² Budget 2021-22, Finance Department, Government of Sindh.

³³ Budget 2021-22, Finance Department, Government of Khyber Pakhtunkhwa.

³⁴ Punjab Revenue Authority

system in February 2022 to optimize sales tax collection.³⁵

The non-tax provincial revenues fell by 14.6 percent in FY22, this was mainly attributed to lower proceeds in hydroelectricity profit disbursed to Khyber Pakhtunkhwa. The province received Rs 21 billion including 9.1 billion of current year profit along with Rs 11.9 billion as reconciled arrears.³⁶ In other non-tax revenues, the largest contribution came from Punjab³⁷ followed by Khyber Pakhtunkhwa and Sindh.

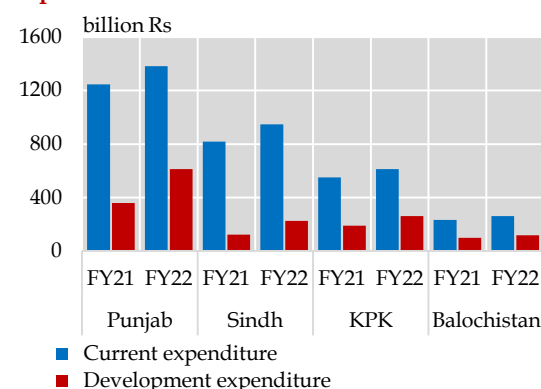
For federal loans and grants, Khyber Pakhtunkhwa remained the major recipient³⁸ and received Rs 214.6 billion during FY22, most of these grants and loans were issued to finance ongoing development expenditures in merged districts of Khyber Pakhtunkhwa.³⁹

Provincial Expenditures

The provincial expenditures grew by 27.0 percent in FY22 compared to 7.9 percent in FY21, both current and development expenditures have shown significant increase.

Segregation of Provincial Expenditures

Figure 4.20



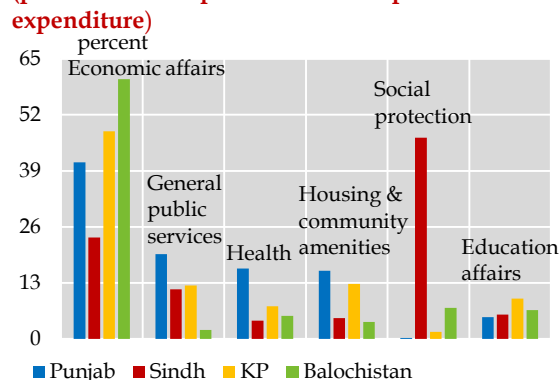
Source: Ministry of Finance

The current spending increased by 12.5 percent during FY22, against 11.9 percent in FY21. The budgeted increase in pension and salaries of government employees in all provinces accelerated the current spending. Besides, other major areas of spending were *general public services* comprising of executive & legislative organizations, financial & fiscal affairs and transfers, *public order and safety affairs* including police and law courts, *health* consists of hospital and public health services and *economic affairs* pertaining to sectors such as agriculture, food, irrigation and industrial sector.

The development expenditures rose substantially during FY22, all four provinces witnessed double-digit growth in their development spending (**Figure 4.20**). The surge was mainly explained by social sector spending and expenditures on infrastructure projects including construction of roads and transport services in Sindh, Punjab and Khyber Pakhtunkhwa. In Sindh, the major ongoing infrastructure projects include Malir Expressway Project M9-N5 Link Road Project, and Ghotki-Kandhkot Bridge.⁴⁰ Punjab continued to focus on local government and

Priorities in Development Spending (percent share in provincial development expenditure)

Figure 4.21



Source: Ministry of Finance

³⁵ SRB Press Release, 28th April 2022.

³⁶ In FY21, Khyber Pakhtunkhwa received net hydel profit of Rs 49.25, including reconciliation arrears of Rs 36.8 billion.

³⁷ In Punjab, within other non-tax revenues, the only traceable account was the *receipts under the mines & oil-fields & mineral development* which showed receipts of Rs 11.2 billion.

³⁸ Khyber Pakhtunkhwa received 60 percent of overall grants and loans issued to provinces during FY22.

³⁹ In May 2018, the Federally Administered Tribal Areas (FATA) were merged into Khyber Pakhtunkhwa.

⁴⁰ Sindh Budget Speech 2022-23

community development schemes such as District Development Package having 752 schemes for basic infrastructure and Punjab Rural Sustainable Water Supply and Sanitation Project.⁴¹

Within social services, health and education received renewed interest of different provincial governments. For instance, Sindh

had prioritized grants and funds to number of hospitals, health institutions, NGOs, and trusts and also introduced Rescue 1122 services to provide immediate medical aid and shifting in case of emergencies. Similarly Punjab spent Rs 100.2 billion on provision of health services in the province, out of which Rs 65.3 billion were allocated to insurance and preventive health services alone (**Figure 4.21**).

⁴¹ Source: White Paper (2022-23), Finance Department, Government of Punjab.

Chapter 5

Domestic and External Debt

Pakistan's pace of public debt accumulation, in terms of rupees, accelerated during FY22 primarily due to a large fiscal deficit. In terms of GDP, public debt reached 73.5 percent in FY22, up from 71.5 percent in FY21. Composition of public debt indicates that around one-half of the rise in public debt was raised through domestic sources. Within domestic sources, the government mainly relied on commercial banks. In terms of maturity, the government was able to lengthen the maturity profile as the funds were mobilized through floating rate PIBs and also Shariah compliant Ijara Sukuk. The government adhered to its commitment of zero fresh borrowing from SBP in line with the SBP Act. On the other hand, the pace of external debt accumulation, in terms of US Dollars, decelerated due to debt repayment and appreciation of the US Dollar against other international currencies. From the perspective of debt management, while the maturity profile of public debt was lengthened, debt sustainability indicators deteriorated on the back of increasing cost of debt servicing. Nonetheless, repayment capacity witnessed improvement in FY22 amidst higher export proceeds, compared to FY21, and debt rescheduling under DSSI. However, with the expiry of the DSSI in December 2021, pressures from external debt repayments have increased.

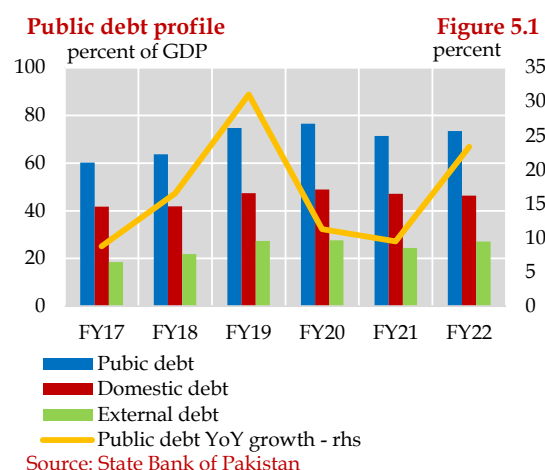
5 Domestic and External Debt

5.1 Public Debt

The pace of debt accumulation accelerated to 23.4 percent during FY22, compared to 9.5 percent during FY21. In terms of GDP, public debt edged up from 71.5 percent in FY21 to 73.5 percent in FY22 (Table 5.1 & Figure 5.1). The increase in public debt burden emanated from higher fiscal and current account deficits.

In terms of composition, both domestic and external debt contributed in the expansion of public debt. Within domestic debt, the government continued to rely mainly on commercial banks to meet the financing needs in FY22.¹ Moreover, the funds mobilized through non-banks² also increased from Rs 177.3 billion in FY21 to 971.8 billion in FY22.³

Quarterly composition indicates that external debt constituted a major part of public debt accumulation in the first two quarters (Figure



5.2). Nonetheless, with a large expansion in fiscal deficit, and inadequate availability of external financing along with large external debt repayments, domestic debt witnessed a sharp increase in the third and fourth quarter of FY22.

Summary of Pakistan's Debt and Liabilities

billion rupees

Table 5.1

	Stock			Flows		Percent of GDP	
	FY20	FY21	FY22	FY21	FY22	FY21	FY22
A. Total debt and liabilities (sum I to IX)	44,591.5	47,844.0	59,696.8	3,252.5	11,852.8	85.7	89.2
B. Gross public debt (sum I to III)	36,398.6	39,866.0	49,192.3	3,467.5	9,326.3	71.5	73.5
C. Total debt of the government (I+II+III-X)*	33,235.3	35,668.5	44,330.8	2,433.2	8,662.3	63.9	66.2
I. Government domestic debt	23,282.5	26,265.4	31,036.2	2,982.9	4,770.8	47.1	46.4
II. Government external debt	11,824.5	12,439.0	16,746.5	614.5	4,307.5	22.3	25.0
III. Debt from IMF	1,291.5	1,161.5	1,409.6	-129.9	248.0	2.1	2.1
IV. External liabilities	1,663.3	1,378.4	2,275.6	-284.8	897.2	2.5	3.4
V. Private sector external debt	2,628.2	2,543.5	3,596.0	-84.8	1,052.6	4.6	5.4
VI. PSEs external debt	869.5	1,064.6	1,675.7	195.1	611.0	1.9	2.5
VII. PSEs domestic debt	1,490.5	1,436.7	1,393.4	-53.8	-43.3	2.6	2.1
VIII. Commodity operations	813.4	904.0	1,133.7	90.6	229.7	1.6	1.7
IX. Intercompany external debt	727.9	650.7	905.1	-77.2	254.4	1.2	1.4
X. Deposits with banking system	3,163.3	4,197.5	4,861.5	1,034.2	664.0	7.5	7.3

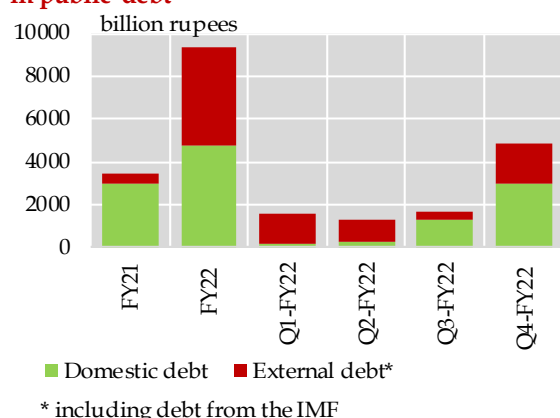
*As per FRDLA definition

Source: State Bank of Pakistan

¹ As per the ammended SBP Act, "The Bank shall not extend any direct credits to or guarantee any obligations of the Government, or any government-owned entity or any other public entity."

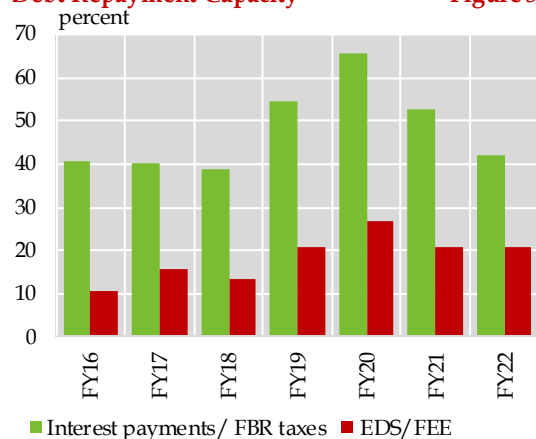
² Non-bank institutions include insurance companies, venture capitalists, exchange companies, etc. that does not have full banking license and cannot accept deposits from the public. However, they do facilitate alternative financial services such as investment, risk pooling, financial consulting, brokering, money transmission and check cashing.

³ Most of the non-bank investments were in T-Bills, PIBs and Ijara Sukuks.

Composition-wise change in public debt**Figure 5.2**

Source: State Bank of Pakistan

The maturity profile of the public debt lengthened as almost the entire increase in public debt in FY22 was sourced through long-term instruments. The improvement in maturity profile, which considerably reduced rollover risk, was achieved through increased reliance on long-term debt securities such as Pakistan Investment Bonds (PIBs), Euro bonds, Ijara Sukuks and Naya Pakistan Certificates (NPCs). Pakistan also issued long-term Eurobonds worth US\$ 2.0 billion in the international market in FY22.⁴

Debt Repayment Capacity**Figure 5.3**

Source: Ministry of Finance

The repayment capacity of the country as measured by interest payments to FBR tax revenues improved to 51.8 percent in FY22 from 57.5 percent, a year earlier, on the account of robust growth in tax revenues during FY22 (**Figure 5.3**). Nonetheless, it is important to highlight that most of the tax revenues came from import related taxes. To consistently improve the repayment capacity of the country it is important to diversify the tax base and continue with the process of administrative efforts. On the same lines, it is equally important to create a balance between lengthening of the maturity profile and the borrowing cost of debt.

Risks pertaining to domestic debt

The recent economic situation has exposed Pakistan's domestic debt to multiple risks; first, with higher debt mobilization through flexible mark-up based long-term instruments⁵, the government's repricing risk has increased. Second, mobilization of funds through floating PIBs added burden on debt servicing, specifically, in an increasing interest rate environment which has led to higher financing needs. Consequently, there was more likelihood of spending on debt servicing than on public sector development. Moreover, the continuous net outflows in prize bonds and NSS along with increased reliance on commercial banks⁶ may leave less space for the government to bargain on the cost of borrowing.

5.2 Domestic Debt

The stock of domestic debt reached Rs 31.0 trillion by end June-2022, with an accumulation of Rs 4.8 trillion during FY22 against Rs. 3.0 trillion in FY21. Similar to FY21, most of the rise in domestic debt came from long-term instruments; including PIBs and GoP Ijara Sukuks; more reliance on PIBs and Shariah compliant bonds, emanated from (1) persistent deficit financing requirements, (2)

⁴ There was a net increase of US\$ 1 billion in FY22, as repayment of US\$ 1 billion is also made.

⁵ Almost 60.8 percent of the rise in PIBs during FY22 was mobilized through floater PIBs nearly same percent was mobilized in FY21. However, in FY22, interest rates were higher.

⁶ Around 76.0 percent of the deficit financing through domestic sources came from banks in FY22. Source: Ministry of Finance, Fiscal operations.

continuous net outflows from prize bonds and NSS, and (3) GoP's commitment to generate funds through long-term and Islamic instruments.

Although, a large number of T-bills were mobilized by the government in the last quarter of FY22, their overall contribution in domestic debt remained low due to accumulative retirement of around Rs 1.7 trillion in Q2 and Q3 of FY22. Moreover, the stock of unfunded debt which includes national saving schemes (net of prize bonds) also reduced in FY22.

Ownership of domestic debt

Institution-wise data shows that the commercial banks remained the main financing source of the government in FY22 as well. Their share in outstanding debt stock increased from 48.6 percent in FY21 to 53.4 percent in FY22 (**Figure 5.4**). Moreover, the government received the PKR equivalent of IMF SDRs for Covid related expenditures. The government did not borrow from the SBP in line with the amended SBP Act.

Permanent debt⁷

Similar to FY21, the share of the PIBs and Islamic financing instruments remained elevated, whereas, prize bonds recorded net outflows in FY22.

Overall, the stock of permanent debt in outstanding domestic debt increased to 67.2 percent in FY22 from 60.6 percent in FY21. This increase is largely due to higher mobilization of funds through the PIBs and Ijara Sukuks. In FY22, Ijara Sukuks were 7.3 percent of the outstanding debt against 2.5 percent in FY21. Whereas, PIBs constituted 57.0 percent of the domestic debt compared to 52.6 percent in FY21.

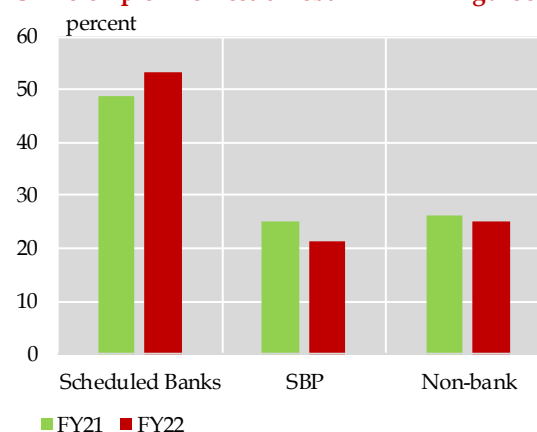
PIBs

Regarding the PIBs, the government mobilized funds worth Rs 3.1 trillion (net of maturity) during FY22, compared to Rs 1.7 trillion in FY21. This sharp increase in PIBs for the third consecutive year originated largely from floating-rate PIBs (PFLs)⁸ (**Figure 5.5 b**). However, the share of fixed PIBs increased in the second half of FY22. (**Figure 5.5 a**)

From investor's perspective, the quarterly coupon payments and resets that are linked with 3-month T-bill rates make it an attractive investment.⁹ Whereas, for the government, their long term nature reduces the rollover risk. This is evident from the pre-auction target of the government¹⁰ and amount offered by the investors - which was almost doubled than the targeted one in FY22¹¹.

Nonetheless, it is important to highlight that although the PIBs lengthened the maturity profile of the domestic debt, they also increased the cost of borrowing due to large concentration in floating rate category in a rising interest rate environment.

Ownership of Domestic Debt **Figure 5.4**



Source: State Bank of Pakistan

⁷ Permanent Debt, also known as long-term debt, comprises instruments which has a maturity of more than one year. It mainly consists of the PIBs, GoP Ijara Sukuks and prize bonds. (Source: Statistics & DWH Department, State Bank of Pakistan.)

⁸ Launched in FY20

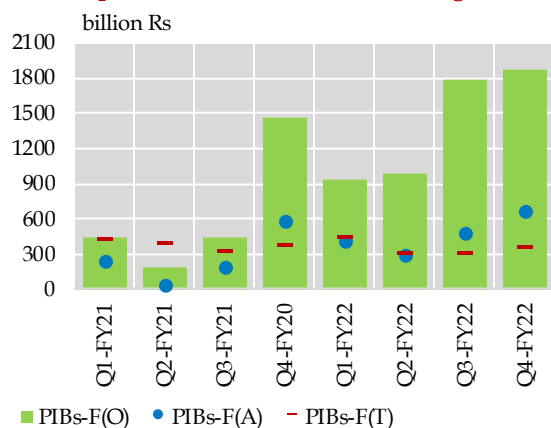
⁹ Specifically, 3-year, 5-year and 10-year PFLs remained attractive investments for investors in FY22.

¹⁰ The government allocated around 63.9 percent to the PFLs in FY22.

¹¹ For more details see Chapter 3.

Auction profile fixed PIBs

Figure 5.5a



Source: State Bank of Pakistan

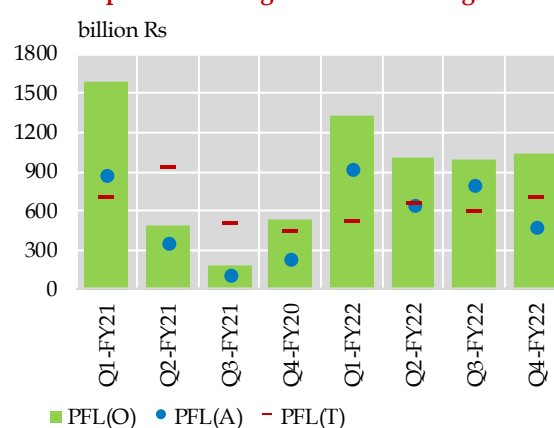
GOP Ijara Sukuk

The GoP mobilized funds through Shariah compliant Sukuk worth Rs 1.6 trillion during FY22, compared to Rs. 467 billion in FY21. On the supply side, Islamic banks had ample liquidity making them a potent source of government borrowing.

Similar to the PIBs, a large part of the Ijara Sukuks was mobilized through variable rental rate (VRR) instruments, particularly in Q2 and Q4 of FY22, as a result of expected hike in interest rates. Moreover, unlike Fixed Rental Rate (FRR) instruments, the offered and accepted amount for VRR Sukuks remained

Auction profile floating PIBs

Figure 5.5b



higher than targeted amount. However, in Q3-FY22 more funds were generated through FRR Sukuks due to steeper yield curve (**Chapter 3**) (**Figure 5.6 a & b**)

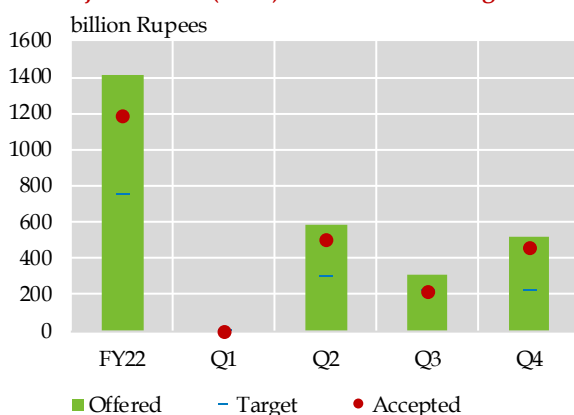
Prize Bonds

Prize bonds recorded net outflows for the third consecutive year as a result of discontinuation of higher denomination bearer bonds by the government to improve documentation of the economy.¹²

In this regard, the bond holders were presented with the following options (1) convert them to premium prize bonds; (2) replace them with special savings

GoP Ijara Sukuk (VRR)

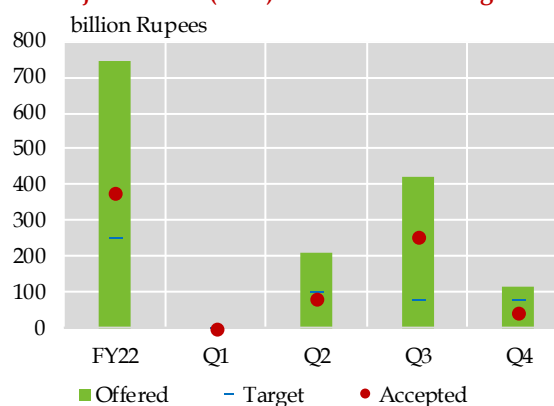
Figure 5.6a



Source: State Bank of Pakistan

GoP Ijara Sukuk (FRR)

Figure 5.6b



¹² Government has discontinued bearer Prize bonds of 7,500, 15,000, 25,000 and 40,000 in FY21. It is important to highlight that the government discontinued bearer bonds of 25000 and 40000, and introduced non-bearer (premium bonds against these denominations).

Domestic Debt**Table 5.2**

Billion Rupees

	Stock		Absolute Change					
	Jun-21	Jun-22	FY21	FY22	Q1	Q2	Q3	Q4
I. Permanent Debt (1+2)	15,904.1	20,843.7	1,880.6	4,939.6	(67.2)	1,615.3	1,728.9	1,662.5
1. Federal Government Bonds	15,457.5	19,991.3	2,171.0	4,533.7	(8.6)	1,153.5	1,727.5	1,661.4
of which								
GOP Ijara Sukuk 3 Years	665.3	2,279.8	467.0	1,614.6	-	632.5	478.6	503.5
Bai-Muajjal of Sukuk	201.0	23.2	-	(177.8)	-	(72.6)	(105.3)	-
Pakistan Investment Bonds (PIBs)	14,590.0	17,687.0	1,704.0	3,097.0	(8.6)	593.5	1,354.2	1,157.9
2. Prize Bonds	443.7	374.6	(290.4)	(69.1)	(58.6)	(13.1)	1.4	1.2
3. SBP loan to GOP against SDRs allocation	-	474.9	-	474.9	-	474.9	-	-
II. Floating Debt	6,680.4	6,802.9	1,102.1	122.5	250.8	(1,287.6)	(401.9)	1,561.3
of which								
Market Treasury Bills	6,676.9	6,752.4	1,101.4	75.4	250.8	(1,335.5)	(401.5)	1,561.7
MTBs for Replenishment of Cash	3.5	50.6	0.7	47.1	-	47.9	(0.4)	(0.4)
III. Unfunded Debt	3,645.9	3,335.9	(27.7)	(310.0)	(14.0)	(27.9)	4.5	(272.6)
of which								
Saving Schemes (Net of Prize Bonds)	3,497.9	3,208.2	(25.6)	(289.7)	(13.5)	(19.2)	16.5	(273.6)
GP Fund	100.8	80.5	(0.7)	(20.3)	(0.6)	(8.7)	(12.0)	1.0
IV. Foreign Currency Instruments	6.7	8.7	(0.4)	2.0	0.5	0.3	0.2	0.9
of which								
Special US Dollar Bonds	6.5	8.4	(0.4)	1.9	0.5	0.3	0.2	0.9
V. Naya Pakistan Certificates	28.3	45.0	28.3	16.8	8.4	2.5	(1.9)	7.8
Government Domestic Debt (I+II+III+IV+V)	26,265.4	31,036.2	2,982.9	4,770.8	178.5	302.5	1,329.8	2,959.9

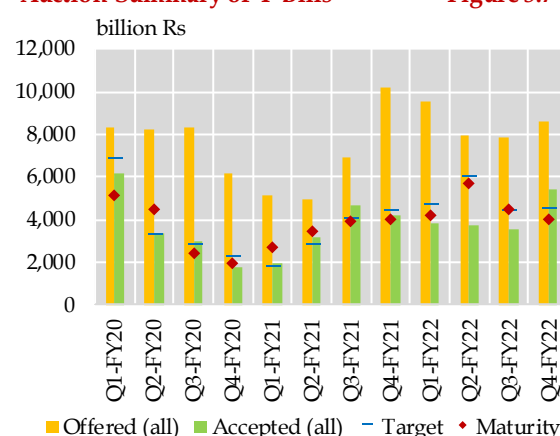
Source: State Bank of Pakistan

certificate/defense savings certificates; or (3) encash them at face value (through transfer of proceeds to the bond-holders bank account). However, the data suggests that most of the investors decided to withdraw at the face value. Resultantly, in FY22, despite net inflows in lower denomination bonds and registered premium prize bonds of 25,000 and 40,000¹³, there was overall net outflow of Rs 69.1 billion in prize bonds (Table 5.2).

Floating debt¹⁴

Floating debt (short term-with maturity of less than one-year) showed a marginal increase of Rs. 122.5 billion in FY22 compared to a rise of Rs 1.1 trillion during FY21. The main reason behind this deceleration was significant retirement in T-bills. In the first three quarters of FY22 (Figure 5.7), the government accepted less than the targeted amounts due to high

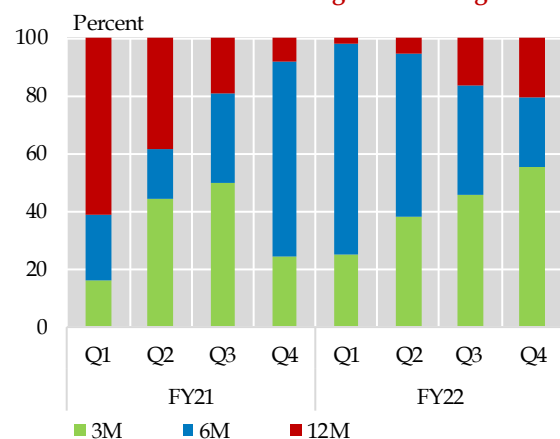
bidding interest rates (Chapter 3). However, in Q4-FY22, as a result of high financing requirements, the government accepted more than the targeted amount. In Q4-FY22, T-bills worth Rs 5.7 trillion were auctioned; out of

Auction Summary of T-Bills**Figure 5.7**

Source: State Bank of Pakistan

¹³ These bonds are bearer bonds. They are different from the bonds that were discontinued by the government. (see Footnote 12)

¹⁴ Floating debt comprises instruments which has a maturity of less than one year. It majorly comprises T-bills of 3-months, 6-months and 12-months. Source: Core Statistics Department, State Bank of Pakistan

Share of T-bills in outstanding Stock Figure 5.8

Source: State Bank of Pakistan

which Rs 3.4 trillion was raised in June 2022. Around 77.1 percent of T-bills in Q4-FY22 were 3m instruments. Consequently, the 3m T-bills in the outstanding debt grew rapidly by Rs 2.3 trillion in Q4-FY22 (Figure 5.8).

Unfunded debt¹⁵

Unfunded debt recorded net outflows of Rs. 310.0 billion in FY22 (Table 5.2). Most of the outflows were in national saving schemes. In particular, net outflows were recorded in the category of special savings account. However, marginal net inflows were documented in Pensioner's Benefit Account, Behbood Saving Certificates (BSC) and Saving Accounts.

Although profits rates have increased during FY22 in line with the increase in the policy rate, restriction on institutional investments from NSS products might led to subsequent withdrawals.

Naya Pakistan Certificates (held by residents only)¹⁶

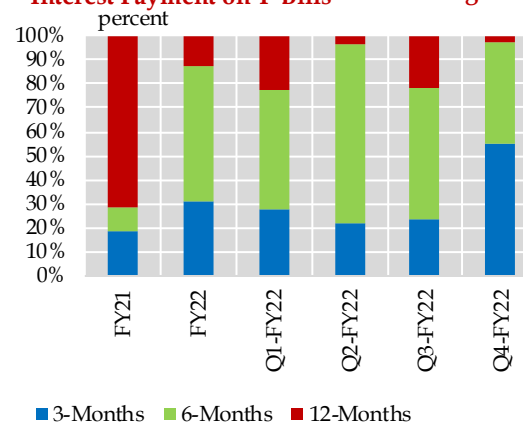
The outstanding stock of NPCs (held by residents only) rose by Rs 16.8 billion during FY22. Most of the increase was seen during

H1-FY22, whereas during Q3-FY22 the NPCs stock witnessed a decline (Table 5.2).

Interest payments on domestic debt remain at an elevated level

The domestic debt servicing grew by 13.4 percent in FY22 compared to 9.1 percent in FY21. In absolute terms, interest payments of Rs 2.8 trillion were made during FY22 compared to Rs 2.5 trillion in FY21.

Although, the rising debt stock was the main factor contributing to the consistent rise in interest payments on domestic debt, the increase in the policy rate from Q2-FY22 onwards inflated the borrowing cost as well. The cut off rates of the T-bills and coupon rates of the PIBs increased by almost 500-800 bps during FY22. Instrument-wise analysis shows that interest payments on the PIBs increased significantly. With the rising share of floating rate PIBs in the outstanding debt stock, interest payments on these instruments increased particularly in an increasing interest rate environment. Interest payments on T-bills also increased during FY22, particularly of 3-month and 6-month T-bills, as the government relied on short-tenor instruments during FY22 due to inadequate external financing (Figure 5.9).

Interest Payment on T-Bills Figure 5.9

Source: State Bank of Pakistan

¹⁵ Unfunded debt comprises instruments such as National Saving Schemes (NSS) which is funded directly by the people. (Source: Statistics & DWH Department, State Bank of Pakistan)

¹⁶ NPCs has two parts; (1) NPCs held by residents and (2) NPCs held by non-residents. NPCs (held by residents) is part of domestic debt and NPCs held by non-residents is part of external debt.

Public External Debt

million US Dollar

Table 5.3

	Stock(end-June)		Quarter wise inflows			
	FY21	FY22	Q1-FY22	Q2-FY22	Q3-FY22	Q4-FY22
Public external debt (1&2)	86,456.9	88,835.7	1,623.5	2,475.8	-1,695.9	-24.6
1. Government external debt	79,073.1	81,938.9	1,934.3	2,816.3	-2,434.2	549.4
of which						
i) Long term (>1 year)	78,215.0	80,589.8	1,503.1	2,828.5	-2,588.0	631.2
Paris club	10,725.9	9,231.8	-381.6	-198.3	-437.6	-476.6
Multilateral	33,836.1	34,022.8	364.1	434.2	-120.9	-490.6
Other bilateral	14,821.5	18,053.3	65.5	3,041.8	-777.8	902.3
Euro Sukuk global bonds	7,800.0	8,800.0	1,000.0	-1,000.0	1,000.0	0.0
Commercial loans/credits	9,695.6	9,481.2	140.4	382.1	-2,008.5	1,271.6
Naya Pakistan Certificates	808.7	950.9	369.4	159.6	85.1	-471.8
ii) Short term (<1 year)	858.1	1,349.1	431.2	-12.2	153.8	-81.7
Multilateral	505.8	1,327.1	472.7	88.5	233.7	26.4
Local currency securities	352.3	22.0	-41.6	-100.7	-79.9	-108.1
Commercial loans/credits	0.0	0.0	0.0	0.0	0.0	0.0
2. From IMF	7,383.7	6,896.8	-310.8	-340.5	738.3	-574.0
Foreign exch. liabilities	8,762.6	11,134.3	2,882.0	-3.0	-109.7	-397.5
Central bank deposits	2,700.0	2,700.0	0.0	0.0	0.0	0.0
Allocation of SDR	1,410.1	3,897.3	2,725.2	13.8	-91.5	-160.3

Source: State Bank of Pakistan

5.3 Public External Debt & Liabilities

The pace of public external debt accumulation decelerated in FY22. It reached US\$ 88.8 billion by end-June 2022 against US\$ 86.5 billion by the end-June 2021, registering a growth of 2.7 percent compared to 10.8 percent in FY21 (**Table 5.3**). The deceleration in external debt in terms of US Dollar is attributed to two main factors; first, external debt repayments in FY22; second, there was a slowdown in net external inflows in the wake of uncertainty in the country along with delayed disbursements of an expected tranche of the IMF EFF program.

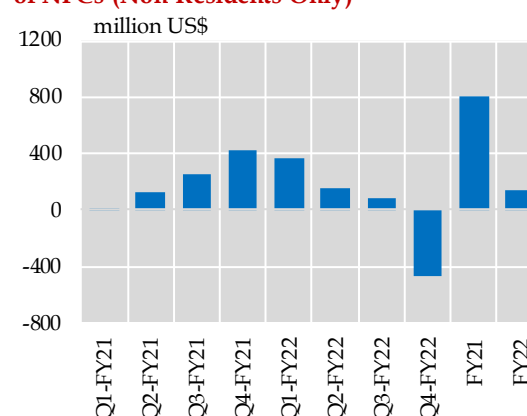
Foreign Investments

Foreign investment in local government securities declined, registering net outflows in PIBs and T-bills. Similarly, while NPCs (held by non-residents only) remained an attractive source of investment until Q3-FY22, the outstanding stock of NPCs (held by non-residents) declined, by US\$ 471.8 million in Q4-FY22 (**Figure 5.10**). Delays in the resumption of the IMF program, political instability in Pakistan, Russia-Ukraine conflict and severe monetary tightening by the Fed

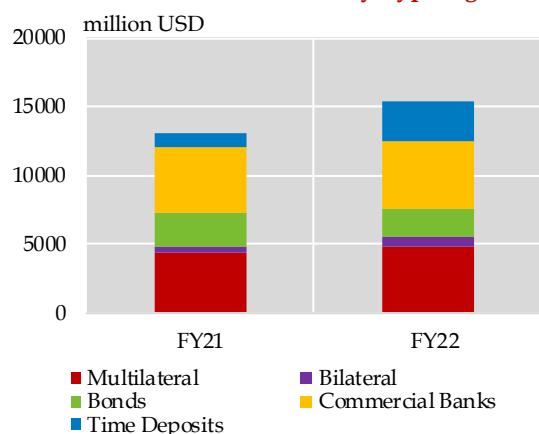
were the key factors that led to decline in these investments.

Gross External Disbursements

Gross external disbursements (public grants and loans, excluding guarantees) rose to US\$ 15.4 billion in FY22 against commitments of US\$ 14.1 billion which was higher than both the FY21 Budget estimates and disbursements. This was due to higher financing requirements arising from increasing CAD.

Changes in Outstanding Stock of NPCs (Non-Residents Only) **Figure 5.10**

Source: State Bank of Pakistan

Gross External Disbursements by Type Figure 5.11

Source: Economic Affairs Division

Bifurcation of disbursements show that around one-third of the financing was sourced through commercial banks, while another one-third came from multilateral sources. The government also entered the international bond market twice and raised US\$ 2.0 billion during FY22 (**Figure 5.11**).

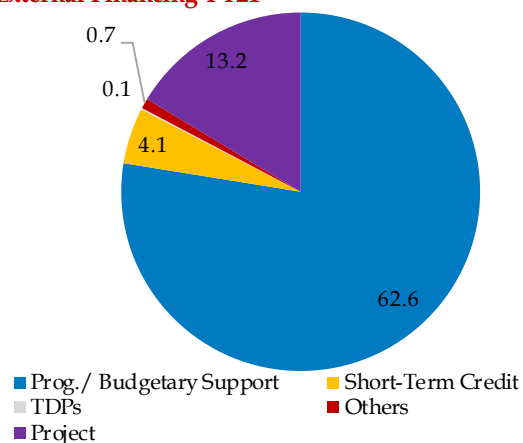
Similar to the previous year, non-project aid constituted a larger part of the total disbursements in FY22, around 85.6 percent, with budgetary support having the largest share in it (**Figure 5.12**).

Disaggregated analysis of the disbursements show that within multilateral sources, most of the disbursements came from ADB (US\$ 1.6 billion); World Bank (US\$ 1.5 billion) and IDB-short-term (US\$ 1.3 billion).¹⁷

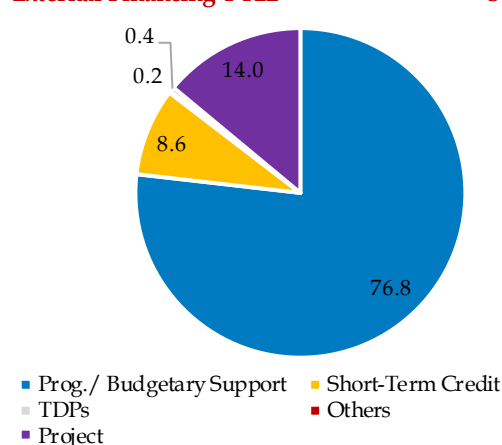
Further analysis depicts that financing from the ADB was mostly project aid, amounting US\$ 924.6 million. Whereas, most of the World Bank's financing was for budgetary support.¹⁸ The amount disbursed by the IDB was short term loan which was utilized for the import of oil and LNG.

Like previous year, these donors helped Pakistan in financing nearly one-third of all its financing needs¹⁹. That being said, the share of multilateral donor decreased from 33.5 percent in FY21 to 31.2 percent during FY22 (**Figure 5.13**). Despite the reduction in share of multilateral donors, in absolute terms, it had increased from US\$ 4.4 billion to US\$ 4.8 billion.

On one hand, one-third of the financing through commercial banks helped Pakistan fulfil its short-term needs however, it also increased refinancing and interest rate risk

External Financing FY21

Source: Economic Affairs Division

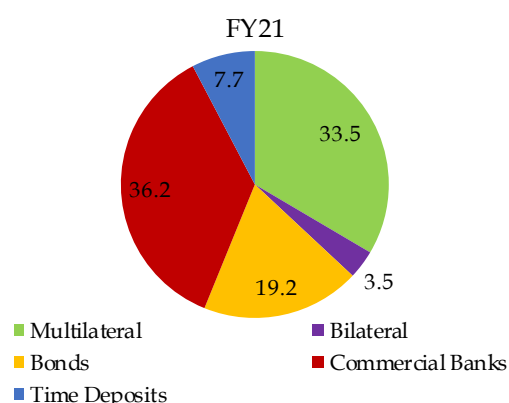
External Financing FY22**Figure 5.12**

¹⁷ ADB, around 33.6 percent, World Bank (IDA), around 32.8 percent and IDB (short-term loans), around 27.5 percent

¹⁸ Around 55.7 percent of the World Bank's financing was for budgetary support.

¹⁹ Out the total inflows in FY22 around 27.7 percent were from ABD, IDB (short term) and World Bank combine. In FY21 the inflows from these donors were 26.8 percent of total disbursed amount.

Share in Gross External Disbursement



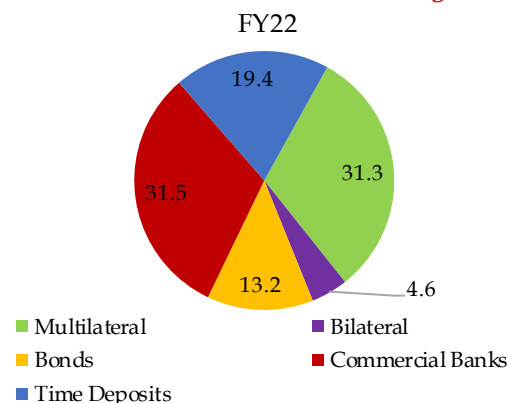
Source: Economic Affairs Division

due to relatively short-term nature²⁰ and increasing LIBOR rates.²¹

External Debt Servicing

Pakistan repaid worth US\$ 13.0 billion sovereign debt²² (including short-term) during FY22 compared to last year's US\$ 8.4 billion. (Table 5.4). Whereas a marginal amount of US\$ 330 million was paid during FY22 on foreign exchange liabilities, against US\$ 3.2 billion in FY21.

Figure 5.13



The overall higher amount of debt servicing compared to previous year can be explained by; first, less debt repayments in FY21 due to debt relief of worth US\$ 2.3 billion under the DSSI; second, more principal repayments in FY22 compared to FY21; and third, escalated interest payments on long-term instruments in FY22 compared to FY21.

DSSI Debt Relief

Pakistan benefited from the debt relief provided under the G-20 Debt Service Suspension Initiative (DSSI) in the first half of

Pakistan's External Debt Servicing -Principal & Interest

Table 5.4

million US\$

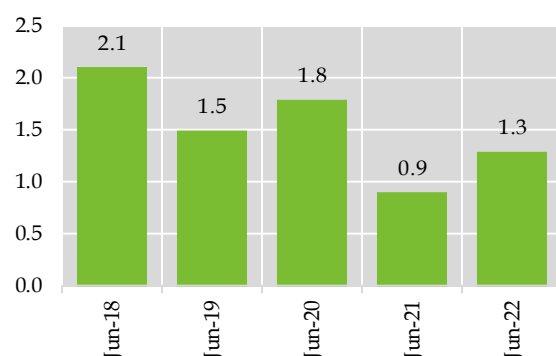
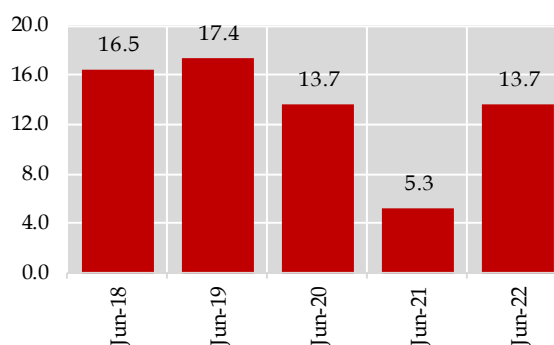
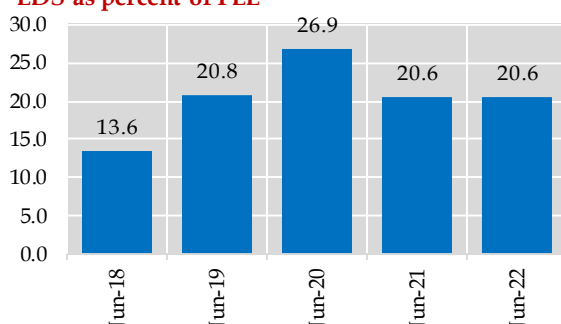
	FY21	FY22	FY22			
			Q1	Q2	Q3	Q4
1. Public debt (a+b+c)	8,430	13,018	1,372	3,683	4,406	3,557
a. Government debt	6,376	11,303	1,111	3,079	3,974	3,140
of which						
Paris Club	10	599	-	6	41	552
Multilateral	2,003	2,088	602	457	571	458
Other Bilateral	205	776	47	24	609	97
Euro/Sukuk global bonds	362	1,587	32	1,275	32	247
Commercial loans /credits	3,753	5,508	427	1,305	2,710	1,066
NPC	-	-	-	-	-	718
b. To the IMF	1,229	1,154	259	326	249	320
c. Short-term government debt	825	566	3	278	183	96
2. Foreign exchange liabilities	3,225	330	18	155	114	43

Source: State Bank of Pakistan

²⁰ Most of the commercial loans are for a year or two.

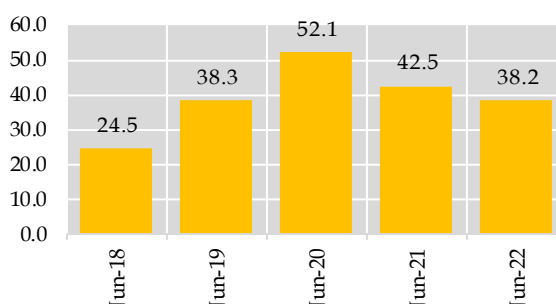
²¹ The commercial loans are linked with benchmark LIBOR. Increasing LIBOR rate therefore, increases the borrowing cost for the government.

²² Includes principal and interest payments.

ST Debt as percent of Total Debt**ST debt as percent of SBP Reserves****Figure: 5.14****EDS as percent of FEE**

* EDS external debt servicing; FEE foreign exchange earnings

Source: State Bank of Pakistan

EDS as percent of Export

* EDS external debt servicing;

FY22²³. This relief provided fiscal space of US\$ 1.0 billion (principal US\$ 0.7 billion and interest payments US\$ 0.2 billion) to the government in FY22. Moreover, it improved the debt repaying capacity indicators in FY22.

It may be recalled that the World Bank and IMF had urged G20 countries to establish the Debt Service Suspension Initiative (DSSI) in April 2020 with the objective of helping the developing countries to manage the adverse impact of the Covid-19. Overall, 73 countries were eligible for a temporary suspension of debt-service payments owed to their official

bilateral creditors. The suspension period, originally set to end on December 31, 2020, was extended till December 2021.²⁴ Under this initiative, the debt repayments were postponed for the short-term, instead of the actual cancellation of debt obligations. The repayment period for the restructured principal and interest payments is 4-6 years.

5.4 External Debt Sustainability ²⁵

Unlike FY21, the external debt sustainability indicators remained unfavorable in FY22 despite improvement in the GDP and FEE. For

²³ Overall, the DSSI provided a temporary relief of US\$ 3.7 billion to Pakistan from May 2020 to December 2021 through debt suspension and debt rescheduling. It was divided in three tenures. The last tenure was from July-December 2021(H1-FY22).

²⁴ Source: www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative

²⁵ A country's external debt sustainability is evaluated through solvency and liquidity indicators. The Solvency gauges the country's ability to service its external payments on an ongoing basis. These indicators include external debt-to-GDP, external debt-to-Foreign Exchange Earnings (FEE) and External Debt Servicing (EDS)-to-FEE; whereas, liquidity indicators measure the country's ability to service its short-term liabilities. These include: short term debt-to-reserves; both total reserves and SBP reserves along with STPED -to -total external debt.

instance, the Total External Debt & Liabilities (TDL)²⁶ reached 39.7 percent of GDP compared to 34.5 percent in FY21.

Consequently, this rise in external debt along with decline in reserves resulted in the deterioration of debt sustainability ratio such as total reserves- to- total external debt and SBP reserves- to- total external debt.

However, as discussed, repayment capacity improved in terms of EDS-to-export earning as a result of debt relief and rise in the FEE.

Furthermore, liquidity indicators weakened due to surge in short-term borrowing during FY22. This, along with declining reserves, led to the deterioration of Short-Term Public External Debt (STPED)-to- reserves ratios.

(Figure 5.14).

²⁶ The Total External Debt & Liabilities (TDL) is different from Public External Debt that we have discussed before. TDL includes Public External debt & liabilities and external debt of (1) Public sector enterprises (PSEs), (2) Banks, (3) Private Sector and (5) Intercompany loans

Chapter 6

External Sector

Pakistan's external account came under considerable stress during FY22. The current account deficit rose to four-year high of 4.6 percent of GDP. Rising global commodity prices primarily drove this increase, which elevated the import bill by 32.9 percent during the year. In addition, the expansion in economic activity and import of Covid vaccines further intensified imports. Exports continued the growth momentum of last year and marked a 26.6 percent broad-based increase. Rising global prices, gains from depreciation, and expansion in global demand explain this increase. In particular, textile exports gained from the rising global prices of cotton, which contributed around three quarters to the overall expansion in sector exports. Non-textile exports showed an encouraging performance with some broadening of the export base. The inflows from export of services and workers' remittances also rose considerably. However, the increase could not compensate for the surge in imports during the year. Furthermore, the expiry of G-20's Debt Service Suspension Initiative and increase in global interest rates added further pressure to the current account deficit, as external borrowing became very expensive. The country received higher net inflows of external debt and liabilities during FY22, which rose to US\$ 12.1 billion – compared to US\$ 5.7 billion in FY21. However, FDI showed a sluggish increase; whereas equity securities witnessed net outflow of portfolio investment. In overall terms, net financial inflows were not adequate to meet the financing requirements of the current account deficit during FY22. Hence SBP's liquid forex reserves declined by US\$ 7.5 billion during the year. The impact of external account pressures was exacerbated by uncertainty surrounding the resumption of IMF program, domestic policy uncertainty and political instability leading to a 23.1 percent depreciation in PKR during FY22.

6 External Sector

6.1 Global Economic Review

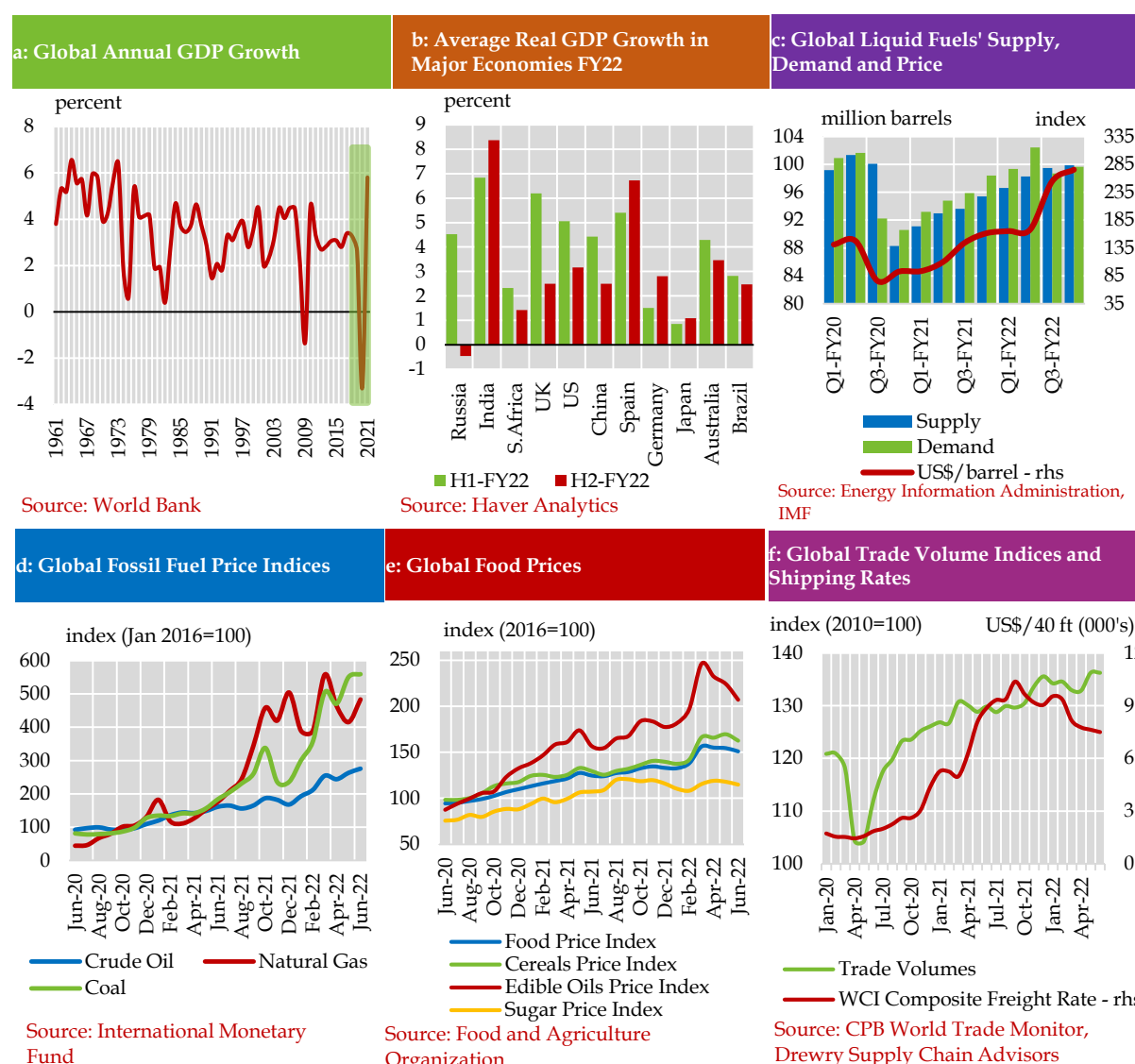
CY21 saw a continuation of the post-pandemic recovery of the global economy. The global economy rebounded, with the world real GDP growth at around five decades' highest level in 2021 (**Figure 6.1a**). The pace of economic growth was uneven with advanced economies that were able to provide substantially higher policy support and inoculation to their population, outpacing emerging economies. The expansion in consumer spending and investment also

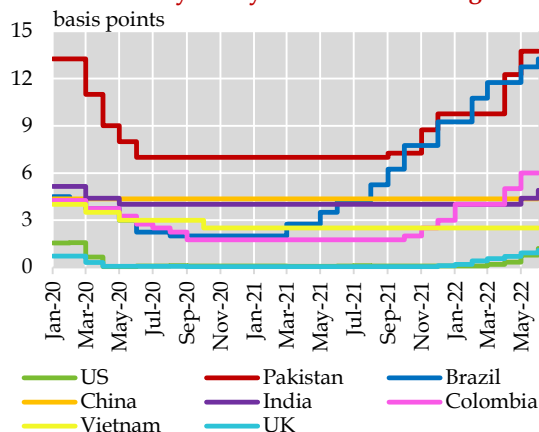
pushed the volume of global trade in goods above pre-pandemic levels during the year. However, the momentum of economic activity began to taper off with strengthening inflationary pressures, supply chain bottlenecks, and emergence of new Covid variants (including Omicron and Delta) that necessitated re-imposition of lockdowns in some countries, towards the end of 2021.

As the year progressed, the uptrend in prices intensified, as supplies of primary commodities could not adequately meet the

Global Macroeconomic Indicators

Figure 6.1

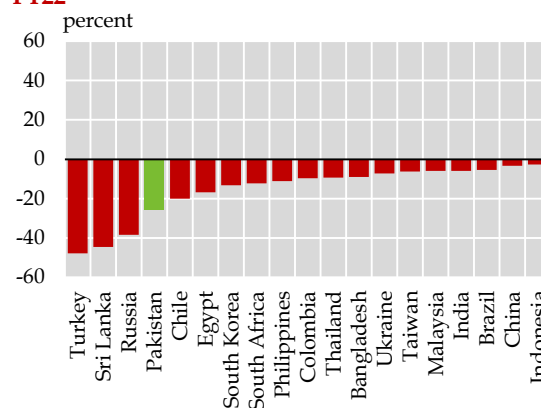


Global Monetary Policy Rates **Figure 6.2**

Source: Haver Analytics

rising demand. In particular, the global fuel supplies showed a sluggish increase as OPEC+ member countries adhered to the output quotas, whereas supplies by non-OPEC+ members also remained lackluster, giving rise to a supply-demand gap for crude (Figure 6.1c). Some emerging and developing economies were also hit by higher food prices because of poor harvests (Figure 6.1d and 6.1e). Alongside the rigidities in commodity supplies, the spread of Omicron also contributed to price volatilities and aggravated supply chain bottlenecks. Similarly, robust increase in global trade volumes pushed freight costs amid rising strains on global distribution networks because of port congestions, shipping delays and worker quarantine requirements (Figure 6.1f).

In response to the exacerbating price increases, central banks across emerging and advanced economies resorted to unwinding the post-Covid policy stimulus to stem the expansion in demand. Moreover, some emerging economies such as Brazil, Argentina, Ukraine and Turkey had begun to raise their policy rates before H1-FY22 (Figure 6.2). Similarly, hawkish statements from the US Federal Reserve from November 2021, followed by its first post-Covid rate hike in March 2022 and expectations of multiple rate increases in the remainder of 2022, contributed to the US Dollar's appreciation against a wide range of

Change in EM Currencies during FY22 **Figure 6.3**

Source: Haver Analytics

emerging market (EM) and advanced economy currencies (Figure 6.3). The resulting currency depreciations amplified inflationary pressures in emerging economies, leading to further rate hikes.

The global economy was only beginning to recover from the impact of the pandemic, when the Russia-Ukraine conflict broke out in February 2022, triggering a serious supply shock.¹ Russia and Ukraine particularly faced considerable GDP contractions in H2-FY22. The effects of the Russia-Ukraine crisis dispersed to other economies through trade, financial linkages and commodity markets. Russia is a crucial supplier of oil, gas and metal; Russia, along with Ukraine, is a primary supplier of corn and wheat as well. Advanced economies placed substantial financial sanctions on Russia, which further spurred inflationary pressures globally. The increase in commodity prices had a material imprint on the pace of economic activity across countries during H2-FY22 (Figure 6.1b).

Additionally, China faced a considerable slowdown in economic growth during H2-FY22, largely due to continuing lockdowns to prevent the spread of Omicron in the region, thus worsening global supply bottlenecks. Before the Russia-Ukraine crisis, emerging economies had begun to raise policy rates during H1-FY22, which increased volatility in financial markets. With the Russia-Ukraine

¹ World Investment Report, 2022, UNCTAD

crisis, global financial conditions tightened even further with a lowering of risk appetites and capital flight to quality assets. In addition, monetary tightening in advanced economies resulted in rising sovereign bond yields in these economies. Weak currencies amidst tightened financial conditions drove up costs of external borrowing in emerging economies. On the fiscal side, Covid-related spending eroded policy space in several countries, drawing up debt levels, leaving little to no fiscal space to shield households and firms from the impact of rising inflation.²

The Russia-Ukraine crisis also impacted the global trade by strengthening commodity prices. Trade in goods was well above the level in 2019, for major economies during Q3-FY22, with the exceptions of South Korea and China. With the increase in commodity prices,

exports grew strongly in commodity-exporting regions, bolstered by increasing demand and increased fuel prices. However, the growth in global trade slowed down during Q4-FY22. (Figure 6.1f)

The intensification of the Russia-Ukraine conflict has increased downside risks to global growth. The global growth projections were revised down to 3.2 percent in CY22, from the earlier projections of 6.1 percent in CY21.³ In advanced economies, the US is particularly facing reduced purchasing power of households and monetary policy tightening. Europe is facing significant spillovers of the Russia-Ukraine crisis and monetary tightening. For emerging market economies, downward revisions in economic growth are largely due to the Chinese economic slowdown and a moderating growth in India.

Pakistan's Balance of Payments during Jul-Jun

Table 6.1

million US\$

	FY21	FY22	Change
Current account balance	-2,820	-17,405	-14,585
Merchandise trade balance	-28,634	-39,681	-11,047
Exports	25,639	32,471	6,832
Imports	54,273	72,152	17,879
o/w Energy imports	9,747	18,743	8,996
Non-energy imports	44,526	53,409	8,883
Services balance	-2,516	-5,019	-2,503
Primary income balance	-4,400	-5,296	-896
o/w interest payments	2,176	3,240	1,064
Secondary income balance	32,730	32,591	-139
o/w Workers' remittances	29,450	31,279	1,829
Financial account balance[^]	-8,768	-11,149	-2,381
Direct investment inflow	1,819	1,869	50
Portfolio investment inflow	2,762	-78	-2,840
o/w Eurobonds/Sukuk	-	1,000	1,000
Build-up in FX assets abroad	1,345	2,490	1,145
FX loans & liabilities (net)	5,691	12,057	6,366
o/w General government	5,738	6,073	335
SBP	-1,468	-1	1,467
Banks	499	879	380
SDR allocation	-	2,773	2,773
SBP's liquid reserves (end-period)*	17,299	9,816	-7,483
SBP's forward liabilities (end-period)*	-4,870	-3,998	872
PKR app(+)/dep(-) in percent*	6.7	-23.1	-

*Change in reserves, forward liabilities and PKR exchange rate during the period (Jul-Jun). [^]Negative sign with financial account balance means net FX inflow into Pakistan and vice versa. Positive sign with change in financial acct. balance means higher net FX inflow into Pakistan on YoY basis and vice versa.

Source: State Bank of Pakistan

² World Investment Report, 2022, UNCTAD

³ World Economic Outlook, July 2022, IMF

6.2 Pakistan's Balance of Payments

Pakistan's external account deteriorated significantly in FY22 (**Table 6.1**). The CAD rose to US\$ 17.4 billion in FY22 from US\$ 2.8 billion in FY21. Although the country received higher inflows of external loans and liabilities during the year over the previous year, these were not sufficient to meet the financing requirements, leading to US\$ 7.5 billion drawdown of SBP's liquid FX reserves during FY22. With the rising pressures in external account, along with appreciation of USD against other currencies, the PKR depreciated against the US dollar by 23.1 percent YoY in FY22.

The upsurge in global commodity prices was mainly responsible for the deterioration of the country's external account. Imports of goods surged by 32.9 percent YoY during FY22, where about half of the increase solely came from rising prices of crude (**Figure 6.4a**). In addition, the need to import Covid vaccine and expansion in domestic economic activity also spurred the demand for imports. Hence, despite a sizeable 26.6 percent expansion in exports, the merchandise trade deficit rose to US\$ 39.7 billion during FY22, from US\$ 28.6 billion in FY21.

Exports also benefited from the rising global prices, particularly cotton, whereas volumes also remained strong (**Figure 6.4b**). Major textile export products included apparel (knitwear and readymade garments), and

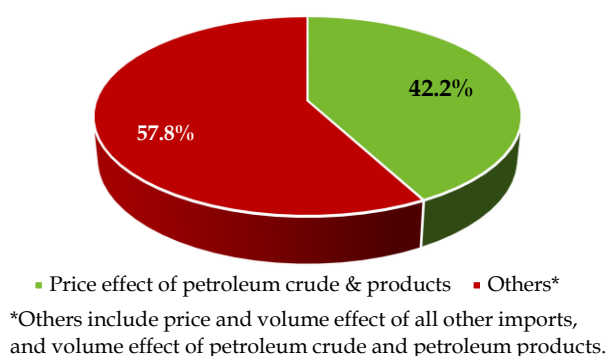
home textiles. Non-textile exports showed an upbeat performance, as rising volumes contributed around one-tenth in the total increase in exports during the year. In addition to some traditional commodities such as rice, the country also witnessed expansion in some non-traditional categories such as sesame seeds; maize (corn); and refined copper.

Country's foreign exchange earnings from the export of services and workers' remittances also posted a notable expansion during FY22. Most of the increase in remittances came from the advanced economies (especially the US and the UK), that compensated for stagnant inflows from the key Middle Eastern corridors. However, the upsurge in imports overshadowed the gains from these inflows. Also with the expiry of Debt Servicing Suspension Initiative (DSSI) in December 2021, increasing stock of external debt, amid rising global interest rates, interest payments on external debt further widened the CAD during the year.

Net inflow of forex loans and liabilities rose to US\$ 12.1 billion in FY22. Key sources of loans in FY22 were bilateral; specifically time deposits of US\$ 3 billion from Saudi Arabia in Q2-FY22, and a commercial loan of US\$ 2.3 billion from China. Other sources included organizations like the ADB, the AIIB, and the World Bank for capital market development programs, energy sector reforms and Covid support. The IMF also released a tranche of

Rising Energy Prices Drove the Increase in Imports during FY22

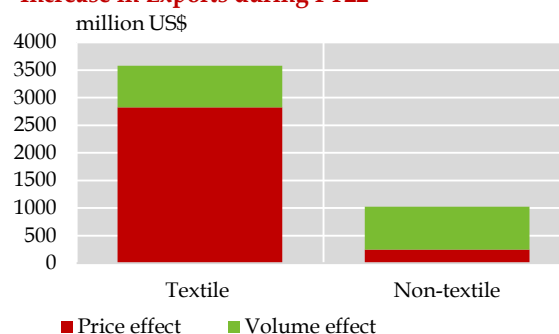
Figure 6.4a



Source: Pakistan Bureau of Statistics

Rising Prices and Volumes Aided Increase in Exports during FY22*

Figure 6.4b



*This analysis covers 77 percent exports for which price and volume data is available for FY22

Source: Pakistan Bureau of Statistics

US\$ 1.1 billion in February 2022 after the completion of the 6th Extended Fund Facility (EFF) review. Also, the government raised US\$ 1.0 billion through sovereign bonds in net terms during the year.

Most of these inflows were received prior to the increase in the country's risk premium in Q3-FY22, following the intensification of the global commodity prices surge and increasing domestic policy uncertainty.⁴ The third quarter of FY22 particularly proved to be a challenging one as the country had to make considerable debt and liability repayments.

To address the rising uncertainties in the external account, the government and the SBP undertook several measures to curtail the demand-side pressures on imports. These included (i) increasing fuel prices; (ii) raising the policy rate by a cumulative 675 basis points; (iii) tightening the prudential regulations for auto and consumer financing;⁵ (iv) increasing the cash reserve requirement (CRR) for commercial banks; (v) imposition of 100 percent cash margin requirements on additional import items;⁶ and (vi) imposition of ban on import of over 500 luxury and non-essential items.

Current Account

The current account deficit rose to US\$ 17.4 billion during FY22, from US\$ 2.8 billion last year. The country's FX earnings from exports of goods and services and workers' remittances recorded sizeable increase over the last year, amidst favorable global demand dynamics and continuation of domestic policy incentives (for exporters and remittance-processors, including banks). Textile exports also benefited from higher global cotton prices with volumes of major products positively impacting export receipts. However, the broad-based surge in global commodity prices – especially oil and other energy products, edible oil, and steel – pushed up import

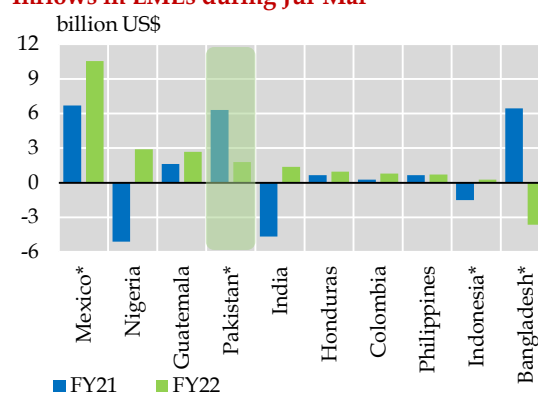
payments. Furthermore, higher interest payments on external debt increased the primary income deficit. As a result, the current account deficit widened significantly over last year's level.

Workers' Remittances

The workers' remittances grew by 6.2 percent YoY, reaching a record US\$ 31.3 billion in FY22. A number of emerging and developing economies witnessed higher receipts, while some other (e.g., Bangladesh) also saw a decline in inflows in FY22 (**Figure 6.5**). Workers' remittance flows differ across developing countries and regions due to country-specific factors, destination countries' policy stance, international environment, and the economic activity in the host countries.

Specifically, Latin American countries, as well as some Asian economies like India, Pakistan and the Philippines, recorded growth in receipts from advanced economies.⁷ Economic stimulus packages announced in the wake of Covid shock in the US and in some European countries had a positive impact on job creation, benefitting foreign workers in general and Hispanics and Latinos in particular.

Changes in Workers' Remittances Inflows in EMEs during Jul-Mar **Figure 6.5**



Source: Haver Analytics & State Bank of Pakistan

⁴ CDS spreads on 5-year Pakistan sovereign FX bonds rose by 2,245.4 basis points in Q4-FY22 from Q1-FY22.

⁵ BPRD Circular Letter No.29 of 2021 (September 23, 2021), SBP

⁶ BPRD Circular Letter No.09 of 2022 (April 7, 2022) and BPRD Circular Letter No.30 of 2021 (September 30, 2022), SBP

⁷ Migration and Development Brief 36 (Source: World Bank)

Remittance Inflows to Pakistan from Major Corridors**Table 6.2**

million US\$

	FY19	FY20	FY21	FY22	Absolute Change	
					FY21	FY22
GCC	11,739	15,135	17,223	17,225	2,087	2
Saudi Arabia	5,003	6,613	7,726	7,754	1,112	28
UAE	4,617	5,612	6,165	5,846	553	-319
Others	2,119	2,910	3,332	3,625	421	293
UK	3,412	2,569	4,091	4,493	1,522	402
North America	3,522	2,056	3,195	3,795	1,139	601
US	3,309	1,743	2,600	3,087	857	487
Canada	213	313	595	708	282	113
EU Countries	609	1,778	2,729	3,362	950	633
Germany	124	392	432	509	40	77
France	61	240	423	488	183	65
Italy	111	361	607	856	246	249
Spain	151	330	402	513	72	111
Australia	246	340	598	753	258	155
Other countries	2,211	1,253	1,615	1,608	362	-7
Total remittances	21,739	23,132	29,450	31,279	6,318	1,829

Source: State Bank of Pakistan

In the case of Pakistan, North America, Europe including the UK, and Australia, contributed most of the increase. However, inflows from Gulf Cooperation Council (GCC) countries, particularly Saudi Arabia, stagnated around the last year's levels, whereas receipts from the UAE declined during the year (Table 6.2).

This is despite 61 percent and 103 percent increase in the number of workers emigrating to the KSA and the UAE in FY22. Multiple factors are responsible for this lackluster trend. First, the resumption of cross-border air travel may have led to a shifting of some inflows to informal channels. This factor is cited by the World Bank as a potential risk not just for Pakistan, but also for other major recipients in South Asia (such as India and Bangladesh)⁸, as most of the skilled and semi-skilled workers in blue-collar jobs depend largely on the personal networking to send remittances back home. Second, the GoP withdrew the incentive (20 Riyal rebate as a remittances fee) to banks on the remittances originating from KSA. Under this incentive, the government pays the remittance fee (or TT charges) to banks on a

minimum remittance above US\$ 100.

Withdrawal of this incentive may have diverted some of these inflows to the informal channels. However, given the large stock of Pakistani workers employed in the region, the inflows from the GCC countries contributed more than 50 percent of the total remittances inflows in Pakistan in FY22.

The inflows from the advanced economies had slightly different dynamics. The Pakistani remitters in these countries are generally a settled diaspora and many of them are employed in white-collar jobs, or own businesses. Strong GDP and wage growth in these economies, as well as compensations from the Covid-related fiscal stimuli (in the form of cash transfers, deferred rent and utility payments) had a significant impact on their earnings, which may have contributed to increased flows from the advanced economies.⁹

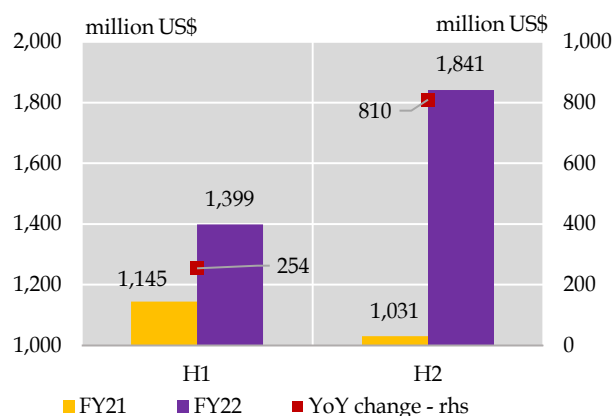
Moreover, Pakistani assets may have become more lucrative, specifically real estate, for

⁸ Migration and Development Brief 36, May 2022 (Source: World Bank)

⁹ Migration and Development Brief 36, May 2022 (Source: World Bank)

Half Yearly Interest Payments

Figure 6.6a



Source: State Bank of Pakistan

swift capital gain as a result of persistent depreciation of the PKR against the US dollar.

Primary Income Account

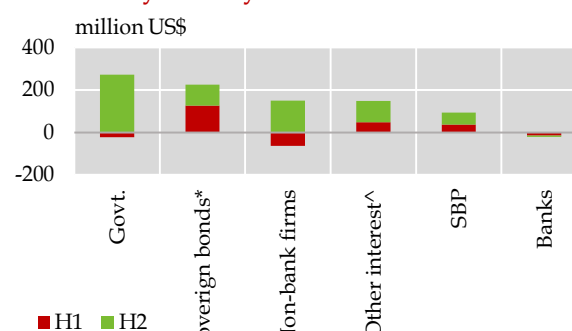
The primary income deficit rose to US\$ 5.3 billion in FY22, up 20.4 percent from last year's US\$ 4.4 billion. This increase is partly attributable to low base effect of FY21, when the deficit had contracted by 15.5 percent to a six-year low.

Elevated debt servicing was mainly responsible for expansion in the primary income deficit in FY22. Between May-2020 and December-2021, the country benefitted from the Debt Service Suspension Initiative (DSSI), with the suspension of external debt payments (both principal and interest) worth US\$ 3.7 billion. With its expiry, interest payments on government loans increased considerably during H2-FY22 (**Figure 6.6a and 6.6b**), lifting the overall servicing of interest payments to US\$ 3.2 billion during FY22, which were – up US\$ 1.1 billion YoY. In addition, the payments on Eurobonds/Sukuk also rose by 62.2 percent during FY22, following the issuance of new Eurobonds worth US\$ 2.5 billion last year. Finally, the rising global interest rate environment also contributed to the rise in Pakistan's external debt servicing.

Furthermore, a slight increase in repatriation of profit and dividends on foreign investment also contributed to the increase in primary

Breakdown of YoY Change in Total Interest Payments by Source in FY22

Figure 6.6b



*Eurobonds & Sukuks; ^other portfolio interest

Note: This breakdown is given based on unadjusted data.

Source: State Bank of Pakistan

income deficit in FY22. There was moderate growth in the profit and dividend repatriation in the first nine months of FY22 as the companies attracting FDI and FPI made higher profits.¹⁰ However, a decline was witnessed in the last quarter of the year, which could be explained by greater PKR depreciation in this quarter.

Services Account

After declining consecutively for the last three years, the services account deficit more than doubled from US\$ 2.5 billion in FY21 to US\$ 5.0 billion in FY22. This deterioration came on the back of a large spike in services imports, which overshadowed a notable rise in export of services (**Table 6.3**).

Services imports clocked in at US\$ 12 billion, up 41.5 percent from last year, with higher sea and air freight having the largest contribution in this increase. The surge in merchandize imports and soaring global freight costs inflated the sea and air freight payments to US\$ 5.6 billion during FY22, from US\$ 2.6 billion last year (**Figures 6.7a and 6.7b**).

Furthermore, due to reopening of global air travel in FY22, imports of aerial transport and travel-related services bounced back from the lows of 2020, when Covid had disrupted these services across the globe (**Figure 6.8**). For similar reasons, payments for education-related expenses as well as religious

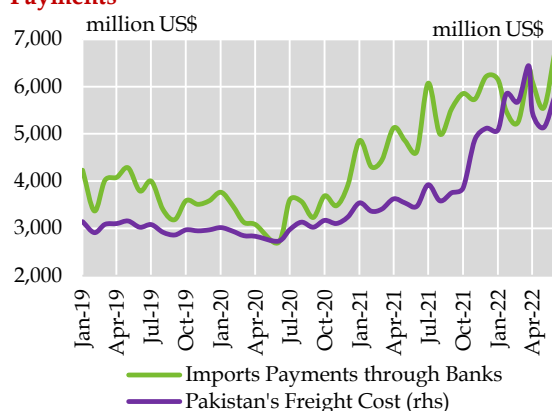
¹⁰ Source: Quarterly Financial Statements Analysis of Select Listed Non-Financial Companies (March 31, 2022)

Breakdown of Services Trade Account**Table 6.3**

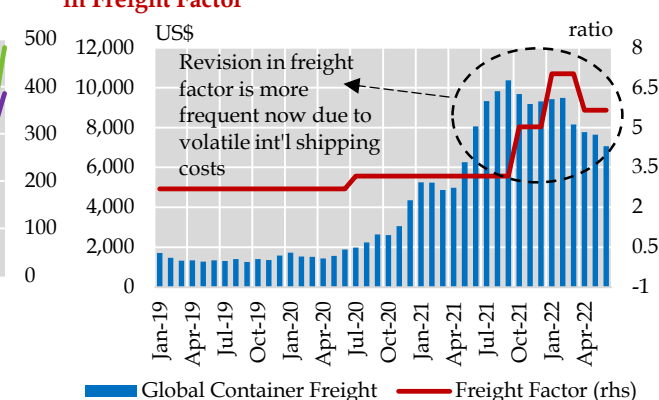
million US\$

	Import (M)		Export (X)		Balance (X-M)	
	FY22	YoY Change	FY22	YoY Change	FY22	YoY Change
a) Transport	6,787.2	3,508.3	821.1	277.1	-5,966.1	-3,231.2
Sea freight	5,377.4	2,918.3	94.0	59.8	-5,283.4	-2,858.5
Air passengers	691.9	485.1	429.3	143.3	-262.6	-341.8
Air freight	255.5	91.9	31.4	2.3	-224.1	-89.7
b) Travel	1,355.9	603.9	541.1	40.1	-814.8	-563.8
Education exp.	265.1	116.6	10.8	-1.8	-254.3	-118.5
Other (personal)	1,075.6	490.3	523.9	39.7	-551.6	-450.6
c) ICT Services	612.0	82.0	2,617.9	510.1	2,005.9	428.1
Software consultancy services	214.1	45.0	795.5	240.9	581.4	195.9
Other Computer services	71.8	5.4	743.8	50.8	672.1	45.5
Export of Computer software	241.7	26.4	564.6	147.1	322.9	120.7
Call centers	0.2	0.1	215.5	61.0	215.3	60.8
Subtotal (a+b+c)	8,755.1	4,194.2	3,980.1	827.3	-4,775.0	-3,366.9
Total services	11,969.7	3,508.4	6,950.4	1,004.9	-5,019.3	-2,503.5

Source: State Bank of Pakistan

Merchandise Import and Freight Payments

Source: State Bank of Pakistan

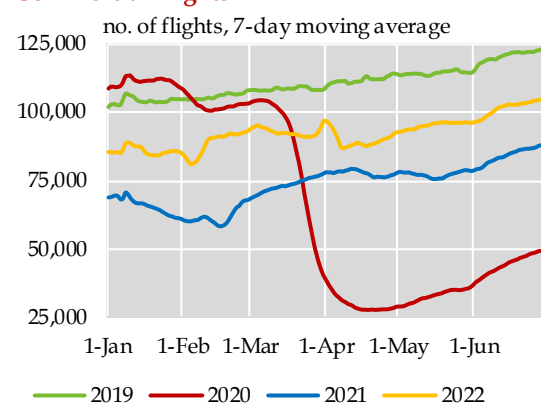
Figure 6.7a Global Shipping Cost and Revision in Freight Factor

Source: Statista and State Bank of Pakistan

and leisurely travelling out of the country also went up from last year.

Services exports reached US\$ 7.0 billion in FY22, up 16.9 percent from the year before. In particular, ICT services fetched US\$ 2.6 billion in exports receipts – 24.2 percent higher YoY. It was also the largest net export sector in services trade in FY22, with net receipts standing at US\$ 2.0 billion. ICT services exports have risen exponentially in recent years; multiple factors have led to this performance, which are discussed in **Box 6.1**.

Besides ICT, payments made by passengers travelling into the country by national airlines registered a 1.2 times YoY increase to US\$

Number of International Commercial Flights**Figure 6.8**

Source: Flightradar24

970.4 million in FY22.¹¹ Nevertheless, these inflows were outweighed by higher outflows on account of travel services, since Pakistani

airlines operate on considerably lower foreign routes compared to foreign airlines.

Box 6.1: Factors Underlying Expansion in Pakistan's ICT Services Exports

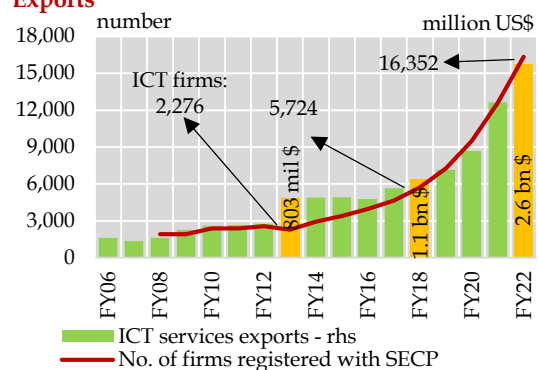
Pakistan's exports of telecommunications, computer and information services (also generally known as information and communications technology, or ICT services) have risen remarkably from US\$ 269 million in FY06 (7.2 percent of the overall services exports) to US\$ 2.6 billion (37.7 percent) in FY22. In FY18, they crossed the one-billion-dollar mark; and by FY21, the two-billion-dollar mark (**Figure 6.1.1**).

ICT services are divided into three sub-categories: telecommunication services, computer services, and information services. The largest contributor is the computer services, with its share averaging 76 percent between FY18 and FY22. Within computer services, software consultancy, software exports, and other computer services—mainly dominated by the freelancing activities, fetch highest receipts (**Figure 6.1.2**). The convergence of various supportive factors including rising global demand, enabling government policies, and Pakistan's demographics with a large share of young, tech-savvy population supported this sharp expansion in Pakistan's ICT exports as discussed in the following.

Rising global demand: Pakistan's ICT services exports have grown in the backdrop of rising global demand spurred by the tech-driven Fourth Industrial Revolution. Worldwide ICT spending has been on a rising trajectory since 2000's, notwithstanding the ebbs and flows (**Figure 6.1.3**). In view of the globalization of services, Pakistan has been one of the beneficiaries of the rising demand for ICT in the world, particularly in the computer software and other computer-related services (especially freelancing).

Moreover, Pakistan has also benefited from the Covid-19 pandemic, which has accelerated the adoption of technology across the globe, further fanning the demand for the ICT products and services. According to an UNCTAD report, global ICT services stayed not only resilient but grew through the Covid-19.¹² The pandemic enabled strong stimulus for businesses and individuals to leverage digital tools, which drove a 6 percent increase in worldwide ICT exports in 2020 that reached US\$ 676 billion. The report notes that the usage of communications services, computer services and software received a boost from the lockdown-related restrictions across the globe. Another report from the Asian Development Bank also found Covid-induced acceleration in global digital services trade, with Asia and Pacific at the core of it.¹³ Pakistan was able to capitalize

Growth of ICT Services Firms and Exports



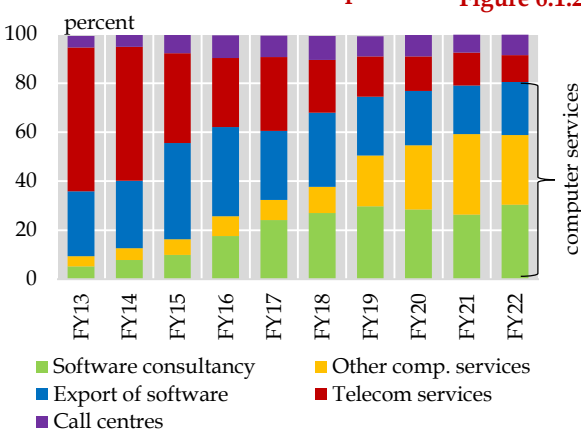
*Note: No. of firms data not available for FY06-07

Sources: Securities & Exchange Commission of Pakistan and State Bank of Pakistan

Figure 6.1.1

Breakdown of ICT Services Exports

Figure 6.1.2



Source: State Bank of Pakistan

¹¹ This number is calculated by adding services exports against "Air Passengers" and "Travel" in Table 6.3.

¹² Impacts of the Covid-19 Pandemic on Trade in the Digital Economy. UNCTAD Technical Notes on ICT for Development No. 19. United Nations Conference on Trade and Development. (Available at: www.unctad.org/system/files/official-document/tn_unctad_ict4d19_en.pdf)

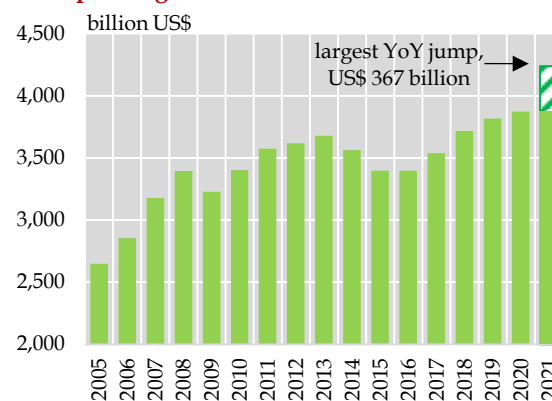
¹³ Asian Economic Integration Report 2022: Advancing Digital Services Trade in Asia and the Pacific. February 2022. Asian Development Bank. Philippines.

on some of that demand. Various homegrown factors have contributed to this expansion as discussed in the following.

a. Dedicated government policies and institutional framework:

Expansion of telecommunication infrastructure, including the internet broadband, software parks and call centers, has enabled sustainable growth in the IT sector. The government, in consultation with the industry stakeholders, has announced various policies and incentives in the budgets from time to time that have provided the necessary impetus to the sector's growth, which has eventually translated into higher ICT exports, making it one of the leading net export sectors of the economy. These policies included: IT Policy and Action Plan 2000, Broadband Policy 2004, Mobile Cellular Policy (2003 and 2013), Telecommunication Policy 2015, Digital Pakistan Policy 2018, Digital Pakistan Vision 2019, and Rolling Spectrum Policy 2020-23, among others. One of the objectives of Digital Pakistan Policy 2018 was to double ICT exports by 2020; that was achieved in FY21.

Historic Data Showing Worldwide ICT Spending **Figure 6.1.3**



Source: Statista

Some of the major incentives for the IT and IT-enabled services include:

- 100% foreign ownership;
- 100% repatriation of capital & dividends (subject to SBP approval);
- IT & ITeS export income tax exemption¹⁴;
- income tax holiday for venture capital companies or funds till June 2024;¹⁵
- exporters of software, including freelancers, can retain up to 35 percent of their net foreign exchange earnings in special FCY accounts, to serve assorted purposes, including payments of commission or discount to the overseas agents or buyers, advertisement expenses, and collection of market intelligence abroad.¹⁶

The incentives for IT startups included:

- exemption from income tax, minimum tax and withholding tax for PSEB-registered and certified IT startups offering technology-driven products and services for a period of three years;
- exemption from sales tax on export of IT services from Islamabad and other federal territories;
- IT companies allowed to open foreign exchange accounts in Pakistan.¹⁷

b. Pakistan Software Export Board (PSEB), an apex government body promoting the IT industry both locally and internationally, has also facilitated the growth of Pakistan's ICT services exports. PSEB has so far established 16 Software Technology Parks (STPs), including one in Gilgit in 2020, where many IT companies have relocated their business operations in a short span of time, providing services to customers beyond the borders. STPs provide a stable and reliable ICT infrastructure and other allied services to IT and ITeS companies; and encourage development and export of software and software services.¹⁸ Pakistan's software and software consultancy services exports have increased from around half a billion in FY17 to US\$ 1.4 billion in FY22. This was also in line with the global spending on 'enterprise software' that doubled between 2017 and 2021.¹⁹

¹⁴ In FY21, income tax exemption was replaced with 100 percent tax credit scheme through Finance Act 2021.

Later, through Finance Act 2022, it was abolished and substituted with 0.25 percent final tax on export proceeds of PSEB-registered IT and IT-enabled entities; the rate was 1.0 percent for non-registered entities.

¹⁵ This facility was extended to June-2025 under Finance Act 2022.

¹⁶ Chapter 12 – Exports, Foreign Exchange Manual.

¹⁷ Digital Pakistan Policy 2018, Ministry of Information Technology and Telecommunications

¹⁸ Source: www.pseb.org.pk/about-us

¹⁹ World IT spending on 'enterprise software' rose from US\$ 369 billion in 2017 to US\$ 736 billion in 2021. Source: Gartner Inc. (various press releases on "Worldwide IT Spending Forecast"). (note: Gartner Inc. is a management consultant company). (Available at: www.gartner.com/en/search?keywords=press%20release&context=ac)

In 2016, PSEB had also embarked on a project called “Enhancing IT Exports through Industry Support Programs”, which aimed at facilitating software developers earn international certifications, like Capability Maturity Model Integration (CMMI)—a de facto international standard for software process improvement and software capability evaluation.²⁰ Under the program, PSEB would bear up to 80 percent cost for a number of international certifications. Around 173 companies have been certified so far with its assistance, and others are in the pipeline.²¹

c. Cost competitiveness: One of the key motivations behind offshoring or outsourcing by any business is the cost advantage in other countries. Pakistan offers cost competitive ICT services. According to a World Economic Forum report that came out in 2016 and A.T. Kearney’s Global Services Location Index 2021, Pakistan is the most financially attractive destination for ICT services and services offshoring, respectively.^{22, 23} Pakistan’s IT industry, with its mature IT ecosystem, can serve at nearly 70 percent lower cost than the developed markets, such as North America.²⁴ Many international IT firms have established offices in Pakistan, including IBM, HP, Microsoft, Dell, Intel, Mentor Graphics, Oracle, Siemens, NCR, Teradata, and many more. Furthermore, Pakistani companies have many Fortune 500 companies as their clients, including Halliburton, BMW, Motorola, General Electric, Toyota, Daimler Chrysler, AT&T, among others.

d. Young labor force: Educated younger population is generally more inclined to adopting new technologies and communication products. According to Tech Destination Pakistan, a PSEB-run website, every year over 25,000 IT engineers graduate in Pakistan, and the number keeps rising. There are over 600,000 English-speaking IT and BPO (business processing outsourcing) professionals in the country, with expertise in current and emerging IT products and technologies. Pakistan is also the third-largest English-speaking country, as well as third-largest contributor of online labour.²⁵ It is also one of the youngest nations in the world, with 30.2 percent of the population in the age group of 18-35.²⁶

e. Freelancing: Freelancing, often called as gig economy, is a fast-growing IT-enabled service in the world. In 2019, Pakistan ranked as the third-most popular country for freelancing.²⁷ It also ranked as number 3rd on the Freelancer and 5th on Upwork (both are popular freelancing websites).²⁸ A report by Payoneer attributed the freelancing success in Pakistan to the very young population.²⁹ It says a more technically-oriented education has helped the country’s youth partake in the gig economy. The investment in the younger generation seems to be paying off as freelancers younger than 35 contribute around three-fourths in the overall revenues. Digiskills.pk, Pakistan’s first large-scale free online training program providing skill-based education for online labor market and funded by the government, has delivered more than 2.7 million trainings since 2018. It offers courses in

²⁰ Source: www.pseb.org.pk/images/status-of-certification-project.pdf

²¹ Source: www.pseb.org.pk/images/list-of-companies-for-certification.pdf, accessed at 28-07-22

²² The Global Information Technology Report 2016. World Economic Forum. Switzerland. (Available at: www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf)

²³ A.T. Kearney Global Services Location Index 2021. A.T. Kearney. United States. (A.T. Kearney is a management consultant company) Available at:

www.kenarney.com/documents/291362523/291367053/The+widening+Impact+of+Automation.pdf/95d8d519-e2b0-0e4f-994d-15e8716b339e?t=1505444810000

²⁴ Pakistan’s IT Industry Overview 2020. Ministry of Information Technology and Telecommunications, Government of Pakistan.

²⁵ Source: www.techdestination.com/

²⁶ United Nations, Department of Economic and Social Affairs, Population Division (2022). World Population Prospects 2022, Online Edition

²⁷ Pakistan’s IT Industry Overview 2020. Ministry of Information Technology and Telecommunications, Government of Pakistan.

²⁸ Pakistan Software Houses Association for IT and ITes (P@SHA). (Available at: www.pasha.org.pk/knowledge-center/industry-stats/)

²⁹ The Global Gig-Economy Index: Cross-border Freelancing Trends that Defined Q2-FY19. (Available at: www.cdn.techjuice.pk/wp-content/uploads/2019/08/Index-freelance.pdf)

freelancing; virtual assistance; video editing, animation and vlogging; graphic designing; digital marketing, among others.³⁰ Digiskills has contributed in fetching US\$ 200 million in IT export receipts.³¹

Financial Account

Net financial flows into Pakistan increased by over 27.2 percent YoY to US\$ 11.1 billion in FY22 (Figure 6.9). Significant inflows came from external loans and liabilities of US\$ 12.1 billion – much larger than US\$ 5.7 billion received in FY21. The largest inflow was a US\$ 3 billion time deposit from Saudi Arabia, along with a US\$ 2.7 billion SDR allocation from the IMF, US\$ 2.0 billion from issuing Eurobonds and Sukuk, and a US\$ 2.3 billion commercial loan from China. With respect to payments, Pakistan retired sovereign bonds worth US\$ 1 billion in October of 2021, repaid a commercial loan from China of US\$ 2.4 billion. In FY22, the country experienced net FPI outflows of US\$ 78 million, versus a net inflow of US\$ 2.8 billion in FY21.

Foreign Direct Investment

Global trends

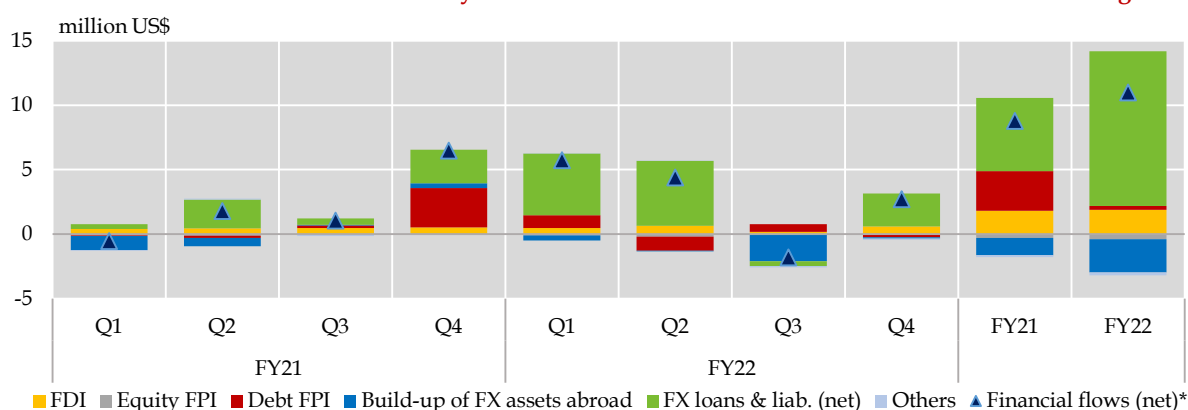
Globally, the rebound in economic activity, and financial stimulus for infrastructure sector

propped up FDI to pre- pandemic levels in CY21. However, with the outbreak of geopolitical turmoil in the shape of the Russia-Ukraine conflict, FDI flows began to reverse direction in Q3-FY22.³²

Around 75 percent of the upswing in global FDI was in developed economies, mainly due to mergers and acquisitions, retained earnings of multinational enterprises (MNEs) and cross-border financing of infrastructure projects.³³ Accommodative monetary conditions during most of the year and a resurgence in domestic demand underpinned a sharp expansion in MNEs' profitability, leading to higher retained earnings during the year. On the other hand, investment in SMEs declined throughout CY21. Although the green field investments witnessed a small recovery that was concentrated in developed countries, the flows remained below pre-pandemic levels in CY21. Greenfield investments underwent declines in emerging market economies, largely due to declines in investment in the coal, gas and oil

Breakdown of Financial Flows Received by Pakistan

Figure 6.9



*Financial account balance sign reversed from BPM6 convention. Positive value indicates net FX inflow & vice versa.

Source: State Bank of Pakistan

³⁰ This program is funded by Ignite – a National Technology Fund Source. (Available at: www.digiskills.pk/, accessed at 28-07-2022)

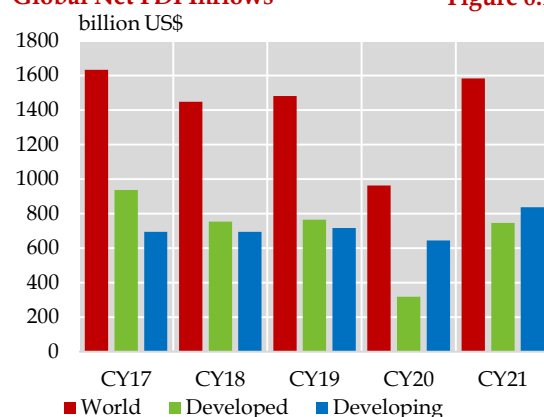
³¹ Source: www.ignite.org.pk/, accessed at 28-07-2022; Ignite is a National Technology Fund – a contributory fund maintained by the government.

³² World Investment Report, 2022, UNCTAD

³³ The leading recipients for global FDI inflows included the United States, China and Australia, while the leading benefactors for FDI outflows were the US, Australia and the UK. (Source: The FDI Report, fDi Intelligence)

Global Net FDI Inflows

Figure 6.10



Source: United Nations Conference on Trade & Development

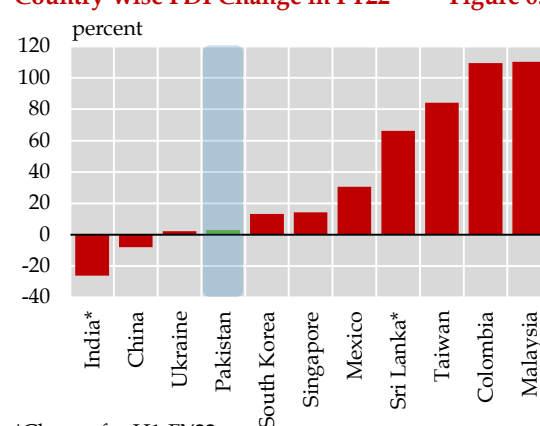
sectors. This was on the back of a global shift to clean energy investment in the wake of a growing shift towards environmental, social and governance (ESG) oriented investments. (Figure 6.10)

In terms of sectoral composition, renewable energy held the top spot for capital investment in CY21, followed by the communication sector. Investment in semiconductors, increased by around four times from CY20 to CY21, making it the third largest sector to receive FDI. In addition, global investment in SDG-relevant sectors including infrastructure, food, water, sanitation and health also grew significantly during the year.³⁴

In the developing region, Asia was the largest recipient of global FDI flows, although 70 percent of the FDI to the region was received by six economies.³⁵ In the South Asian economies, India witnessed a sizeable decline in net FDI flows (Figure 6.11). Notwithstanding the decline, India was the top FDI recipient in the Asian region by project numbers. These inflows were mainly in the services sector, constituting banking, research, and insurance, followed by the manufacturing sector, including pharmaceuticals, drugs and automobiles. By capital investment, China remained the top FDI recipient, with most investment channeling into the services and high-tech sectors.

Country-wise FDI Change in FY22

Figure 6.11



*Change for H1-FY22

Source: Haver Analytics

Developments in Pakistan

FDI in Pakistan rose marginally by 2.7 percent YoY in FY22 to US\$ 1.9 billion, largely due to net inflows into sectors including power, financial firms and energy (Table 6.4). A quarterly breakdown of the financial account shows that inflows were at their highest in Q1 and Q2 of FY22.

The power sector continued to dominate FDI inflows in FY22 largely due to CPEC projects (although there was a slight decline YoY from

Sector-wise Net FDI Flows

Table 6.4

	million US\$		
	FY21	FY22	Abs. Change
Power	911.7	737.6	-174.1
o/w Coal	512.1	423.4	-88.7
Hydel	203.1	174.1	-29
Financial firms	236.4	405.3	168.9
Oil & gas**	188.1	178.4	-9.7
ICT	117.1	118.9	1.8
o/w Telecom	43.6	-29.1	-72.7
IT	73.5	148.0	74.5
Trade	115.9	79.9	-36
Electrical machinery	114.1	36.8	-77.3
Transport	-93.6	34.8	128.4
Electronics	35.7	32.5	-3.2
Chemicals	0.9	29.3	28.4
Food*	12.0	-3.2	-15.2
Others	182.2	217.5	35.3
Total	1,820.5	1,867.8	47.3

*includes food packaging **exploration & refining

Source: State Bank of Pakistan

³⁴ The fDi Report 2022, fDi Intelligence

³⁵ China (18%), Malaysia (15%), Japan (13%), India (9.3%), Singapore (7.9%), Vietnam (6.8%). Total capital investment into the region in CY21 was US\$ 165.9 billion. Source: The fDi Report 2022, fDi Intelligence

FY21). China and the UAE both significantly invested in the power sector under the Thar Coal Block-I Power Plant as part of the CPEC project, a greater part of which has been completed thus far and is expected to be operational by August 2022.³⁶ Other important inflows were in coal-powered and hydropower projects under the CPEC umbrella.

Financial firms saw the second highest inflows into FDI during the year; a leading bank received inflows from companies from Switzerland for the extension of fintech services. FY22 saw firms from Hong Kong investing in the oil and gas services segment, in a foreign oil exploration and production company, for maintenance and extension of drilling operations in the country. Although the YoY absolute amount of net FDI into the sector fell in FY22, it remained the third largest source of sector-wise FDI in the country. There was a notable increase in the IT sector in FY22, which rose by US\$ 148 million YoY. The increase marked the rise of the start-up venture capital culture in the country, along with angel investment funds.³⁷

In the ICT sector, the UAE invested in a telecom company, mainly into cloud services, modernizing the IT infrastructure, and in transforming its billing platform. Inflows also realized into a Dubai based ride-hailing service, running operations in Pakistan, following a merger with a startup company. Investment into the country from Singapore rose to US\$ 114.7 million in FY22; one leading benefactor was an e-commerce marketplace for business-to-business (B2B) grocery supplies. The USA also invested in an online grocery-shopping venture, along with a financial firm that had entered into an alliance to facilitate customers with real-time B2B settlements.

Foreign Portfolio Investment

Global trends

Globally, portfolio flows had begun to show signs of improvement during Q1-FY22,

supported by economic recovery and improved risk sentiments. Equity flows in emerging economies were also recovering, although slowly; debt flows, on the other hand, remained weak. (Figure 6.12). However, amid rising inflation outturns, Q2-FY22 saw tightening of the external financing conditions reflecting normalization of monetary policy in advanced and emerging economies.

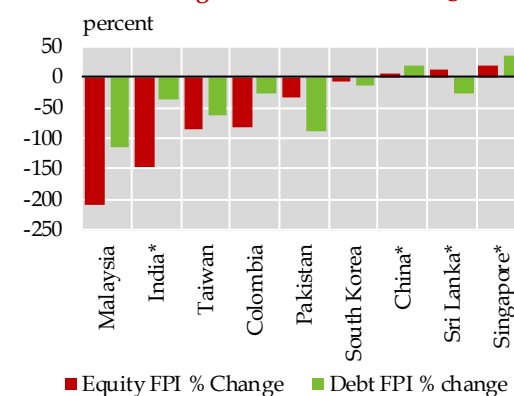
In H2-FY22, global financial conditions underwent further tightening due to the increase in interest rate by the US Federal Reserve and outbreak of the Russia-Ukraine conflict (the effects of which were mostly realized in European and Middle Eastern economies with closer links to Russia); which reflected in higher costs of funding and lowered equity valuations. Emerging economies witnessed more stringent financial conditions amid rising risks to capital flows.

Developments in Pakistan

Pakistan witnessed net FPI outflows of US\$ 78 million in FY22, against net inflows of US\$ 2.8 billion in FY21. While the debt securities saw US\$ 310 million of net inflows in FY22, equity securities reported net outflows of US\$388 million during the year. The constrained capital flows reflected global monetary tightening (Figure 6.13).

Additionally, MSCI downgraded Pakistan's status from an emerging to a frontier market

Global FPI Change in FY22 Figure 6.12

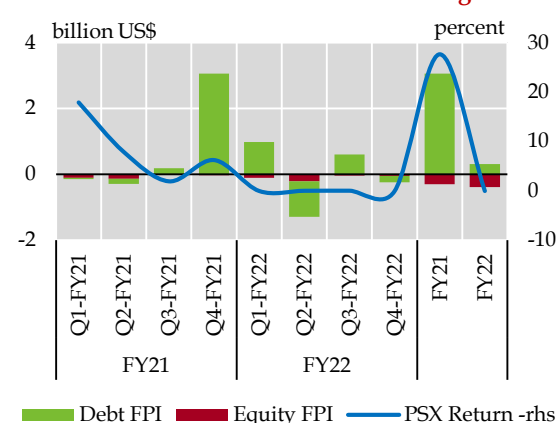


■ Equity FPI % Change ■ Debt FPI % change
*Change for H1-FY22

Sources: Haver Analytics

³⁶ CPEC Project Details, available at: www.cpec.gov.pk

³⁷ Box 5.1, State of Pakistan's Economy, First Quarterly Report 2021-22, State Bank of Pakistan

FPI into Pakistan and PSX Returns Figure 6.13

Sources: Haver Analytics & Bloomberg

economy (September 2021); Moody's also downgraded the outlook of Pakistan from stable to negative (June 2022), citing Pakistan's external vulnerability risks. The vulnerability was multiplied by factors including exchange rate volatility, political instability, and uncertainty around the resumption of IMF program leading to decline in FPI. Pakistan's CDS spreads also showed an increasing trend throughout FY22, particularly in the last quarter of FY22. This resulted in capital flight from the country, as the rise of CDS spreads indicates worsening risk profile, affecting most leading sectors listed at the PSX (Figure 6.14a & 6.14b). The FPI equity outflows were largely from the commercial banks' sector (US\$201.89 million), followed by the cement sector (US\$ 60.1 million), the fertilizer sector (US\$ 51.4 million), and the oil and gas sector (US\$ 28.7 million) (Figure 6.15).

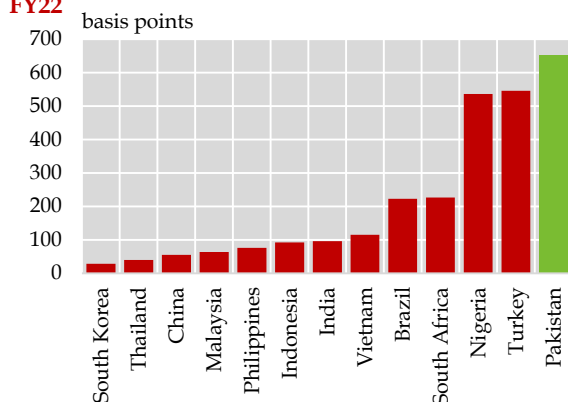
In debt securities, Pakistan raised US\$1 billion from the tap issuance of a Eurobond in Q1-FY22. The country repaid a maturing Sukuk of an equal amount in Q2-FY22. Additionally, US\$ 1 billion was raised by the issuance of Sukuk bonds in Q3-FY22.

Net Incurrence of Liabilities

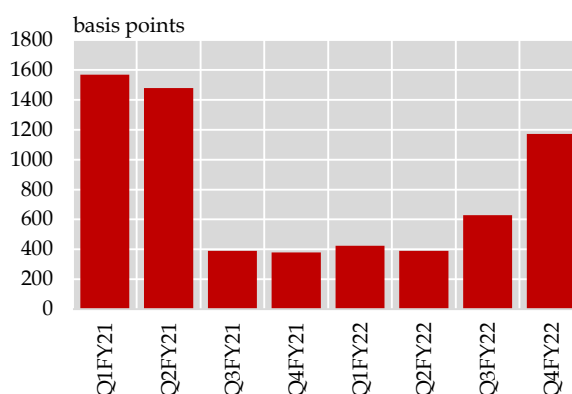
The net inflow of FX loans and liabilities into Pakistan rose to US\$ 12.1 billion in FY22, against US\$ 5.7 billion in FY21. The largest increase was seen in bilateral loans, mainly owing to time deposits from Saudi Arabia amounting to US\$ 3 billion during FY22 (Table 6.5). Loans from the ADB were concentrated in capital market development programs, energy sector reforms, and Covid vaccine support programs; the World Bank, on the other hand, lent amounts for water resource projects and clean energy programs. A bulk of the loans from AIIB went into power projects. The IDB lent towards Covid support programs (including vaccinations), along with short term financing of the import of oil and LNG by Pakistan.

Pakistan received a commercial loan of US\$ 2.3 billion from China to help boost forex reserves. Saudi Arabia had also deposited US\$ 3.0 billion to bolster the country's forex reserves to address the ongoing pressure on the balance of payments.

As of June 2022, total inflows into the Roshan Digital Account amounted to US\$ 4.6 billion from its inception in September 2020. Of the total, around 65 percent went into NPC's:

Average CDS Rates for Major EMs FY22 Figure 6.14a

Source: Bloomberg

Pakistan CDS Rates Figure 6.14b

Source: Bloomberg

Gross Loan Disbursements**Table 6.5**

million US\$

	FY21	FY22	Change
Comm. loans	4,721.2	4,863.3	142.1
ADB	1,476.1	1,624.0	147.9
Bonds	2,500.0	2,000.0	-500
World Bank*	2,035.5	1,527.1	-508.4
IDB**	623.9	1,406.8	782.9
AIIB	252.1	40.4	-211.7
Bilateral	1,258.9	597.4	2,338.5
Saudi Deposits	-	3,000.0	3,000.0
Others	1,164.7	1,675.5	510.8

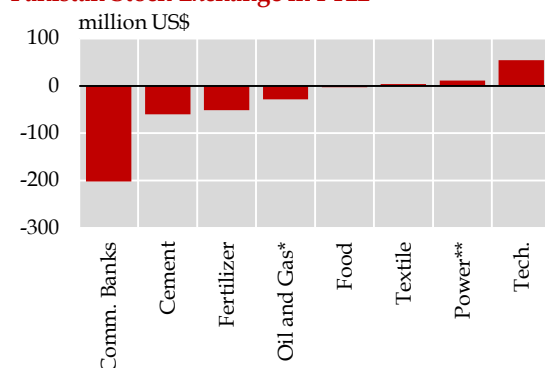
*IDA+IBRD; **including short-term

Source: Economic Affairs Division

US\$1.6 billion into conventional NPC's and US\$ 1.4 billion into Islamic NPC's. On the other hand, a small amount of US\$ 40 million went into the stock exchange through RDAs. In FY22, US\$ 3.0 billion were received in the RDA, out of which US\$ 970 million was invested into conventional NPCs, US\$ 967 million into Islamic NPCs, and US\$ 24 million went into the stock exchange (Figure 6.16).

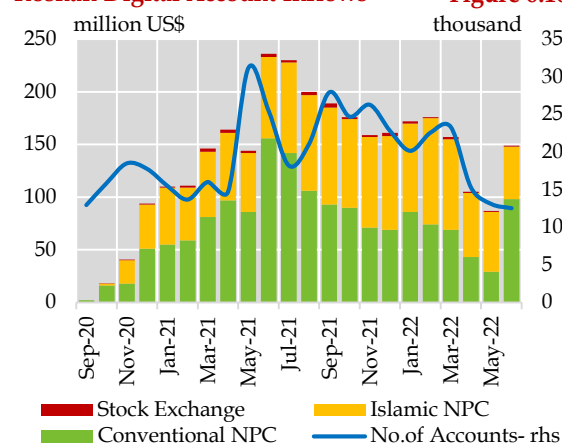
6.3 Exchange Rate and Reserves

Strong pressures on the country's external account took its toll as the country's liquid FX reserves fell by US\$ 8.9 billion during FY22. In particular, a wide expansion in CAD, significant external debt repayment pressures, sluggish FDI, net outflows from equity securities and delay in resumption of IMF program contributed to US\$ 7.5 billion reduction in SBP's liquid FX reserves, which

Net Foreign Buying/Selling in Pakistan Stock Exchange in FY22**Figure 6.15**

*marketing and exploration; **generation and distribution

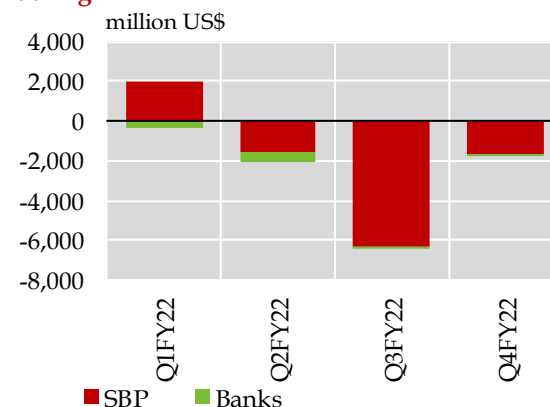
Source: National Clearing Company of Pakistan Limited

Roshan Digital Account Inflows**Figure 6.16**

Source: State Bank of Pakistan

dropped to US\$ 9.8 billion, by the end of FY22. The inflows of external debt & liabilities remained strong, but these were not sufficient to meet financing requirements (Figure 6.17). Commercial bank's reserves, on the other hand, dipped by US\$ 1.4 billion in this period as banks extended trade financing, and also witnessed outflows from FE-25 deposits.³⁸

After a brief respite in Q1-FY22, the SBP's liquid FX reserves saw an almost consistent downward slide since Q2-FY22. The availability of US\$ 2.8 billion under the IMF's additional SDR allocation and issuance of a US\$1.0 billion Eurobond shored up the level of SBP liquid forex reserves during the first quarter. The country received US\$ 3.0 billion deposits from Saudi Arabia in Q2 as well.

Changes in Liquid FX Reserves during FY22**Figure 6.17**

Source: State Bank of Pakistan

³⁸ During FY22, net trade financing extended by banks increased by US\$ 695 million, whereas FE-25 deposits dropped by US\$ 655 million. In contrast, in FY21, banks extended US\$ 9.0 million in net trade financing while its deposits increased by US\$ 318 million. Banks' liquid FX reserves are calculated as FE-25 deposits net of trade financing.

However, the available external financing proved insufficient to cover the sizeable debt and liability payments due in this period.

In Q3, despite a moderation in CAD relative to the sharp increase in Q2, and the receipt of US\$ 1.0 billion from a *Sukuk* issuance (in January 2022) and another US\$ 1 billion from the IMF (in February 2022 after the successful completion of the 6th EFF review), SBP's FX reserves dropped by US\$ 6.3 billion to US\$ 11.4 billion by end-March 2022. This was mainly because of the gross official loan and liability retirements reaching US\$ 3.7 billion during the quarter. Specifically, SBP reserves dropped by around US\$ 2.9 billion in the last week of March 2022, due to the repayment of a commercial loan. In Q4, while a steep increase in global commodity prices amid Russia-Ukraine conflict kept CAD at an elevated level, some of the pressure was alleviated in June, when the country received US\$ 2.3 billion in commercial loan from China.

Reflecting these external account developments along with the appreciation of USD index³⁹, the PKR depreciated by 23.1 percent YoY *vis-a-vis* the US dollar in FY22 in contrast to 6.7 percent appreciation witnessed in FY21 (Figure 6.18). It is worth noting that currencies of many other EMEs, especially commodity-importing ones, also depreciated

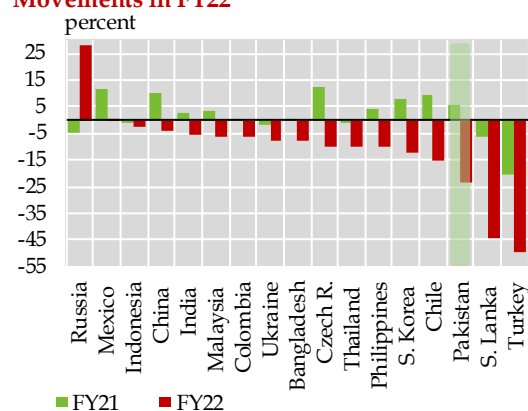
during the period, amidst stressed trade balances as well as the US Dollar's broad-based strengthening against other currencies (Figure 6.18). In the case of Pakistan, the situation was further exacerbated by uncertainty surrounding resumption of the IMF program and domestic political uncertainty. Hence, the PKR depreciated by a sharp 10.4 percent during March-June 2022.

In real terms, Pakistan was among those EMs where the depreciation in the nominal effective exchange rate (NEER) more than offset the rise in the relative price index (RPI) (Figure 6.19). Since the currencies of Pakistan's competitors also depreciated significantly during this period, nominal effective exchange rate (NEER) of PKR depreciated by only 10 percent in FY22. Also, with rising inflation in these competitor countries, Pakistan's relative price index (RPI) increased by merely 0.7 percent during the year, allowing real effective exchange rate (REER) to depreciate moderately by 9.3 percent during FY22.

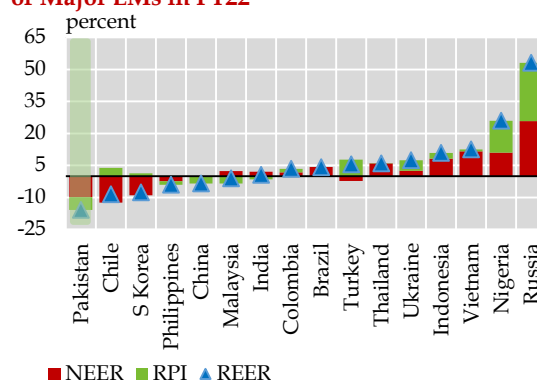
6.4 Trade Account⁴⁰

Pakistan's trade deficit worsened in FY22, as it grew by 55.6 percent to US\$ 48.4 billion, compared to US\$ 31.1 billion last year (Figure 6.20). This was despite a notable 25.6 percent

EME's Exchange rate Movements in FY22 Figure 6.18



Breakdown of Change in REERs of Major EMs in FY22* Figure 6.19



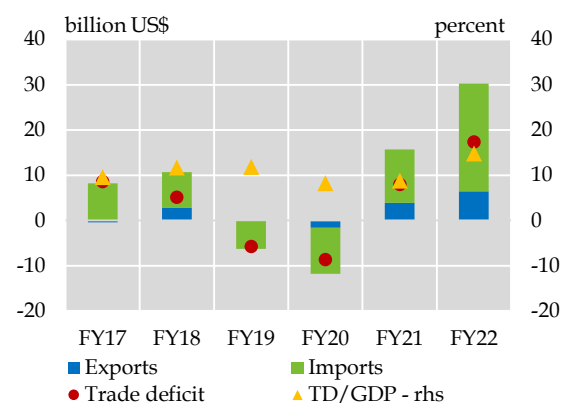
*JP Morgan Effective Exchange Rate

³⁹ US dollar index increased by 13.2 percent during Jul-Jun Y22.

⁴⁰ This section is based on customs data reported by the PBS. The information in this section does not tally with the payments record data, which is reported in Section 5.1. To understand the difference between these two data series, see Annexure on data explanatory notes.

Breakdown of YoY Change in Trade Deficit

Figure 6.20



Source: Pakistan Bureau of Statistics

expansion in exports during the year only to be outpaced by a strong 42.1 percent increase in imports. The upsurge in global commodity prices had a significant effect on Pakistan's trade account. The outbreak of Russia-Ukraine conflict further spurred the uptrend in prices of both energy and non-energy commodities, widening the trade deficit of many emerging energy importing economies in FY22 (Figure 6.21).⁴¹

In addition to the spike in import prices, the need to import Covid vaccine, surge in the demand for energy products, machinery, some metals, and transports further augmented the increase in imports. Exports also benefited from the rising global prices, particularly

cotton; whereas, volumes also remained strong. In terms of GDP, the trade deficit rose to 14.8 percent of GDP, which is slightly higher than the average level observed during pre-Covid years between FY17-19. This deterioration mainly reflect the impact of commodity price shock during the year.

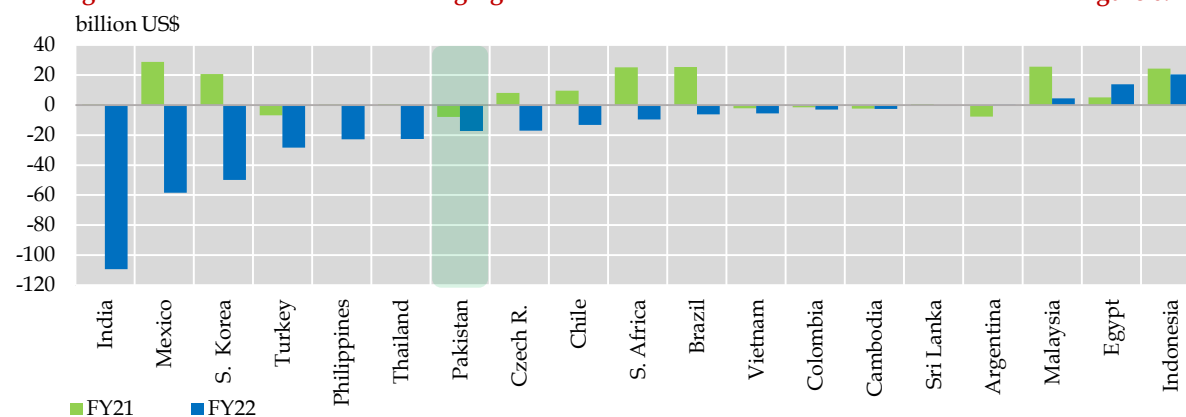
The large increase in imports intensified pressures on the country's external account, as seen from 10.7 percent depreciation of the PKR during H1-FY22. In the face of rising vulnerabilities, the government and the SBP introduced various demand management measures during the year to contain domestic demand, which succeeded in winding down the pace of expansion in non-energy imports during H2-FY22.⁴² However, with the eruption of Russia-Ukraine crisis, commodity prices reached at historic levels in Q3-FY22 that led to a sharp increase in imports, and hence trade deficit during H2-FY22.

Exports

Pakistan's merchandize exports (Customs record) gained further traction during FY22, with 25.6 percent YoY increase reaching US\$ 31.8 billion. This was the first time the country's exports crossed US\$ 30 billion mark. The increase in exports was broad-based, with a notable share of textile exports (Figure 6.22). The sector mainly benefited from elevated

Changes in Trade Balance in Peer Emerging Market Economies in FY22

Figure 6.21

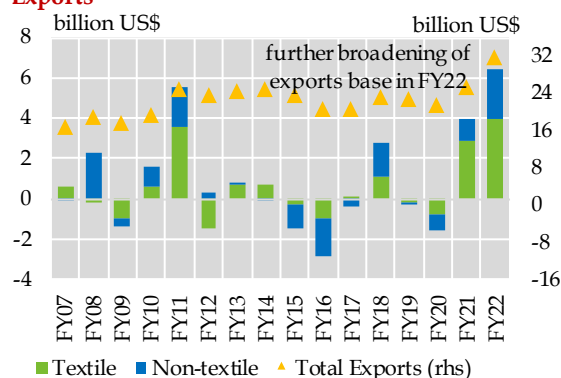


Source: Haver Analytics

⁴¹ Egypt, Indonesia, and Malaysia are three countries showing positive change in the trade deficit in FY22. Trade deficit improved in the case of Egypt from US\$ 39.8 billion in FY21 to US\$ 26.1 billion in FY22. Both Indonesia and Malaysia are leading exporters of palm oil, price of which witnessed a record increase in FY22.

⁴² The growth in non-energy imports slowed to 4.3 percent YoY in H2-FY22, compared to 55.1 percent during H1-FY22.

Pakistan's Merchandise Exports and YoY Change in Textile and Non-Textile Exports **Figure 6.22**



Source: Pakistan Bureau of Statistics

prices of cotton in the international market, as higher unit values constituted around three-quarters share in the entire increase of major textile exports during the year. In addition, policy support in the shape of competitive energy prices, subsidized lending through refinance schemes, particularly Temporary Economic Refinance Facility (TERF), tariff rationalization of key textile imports, and higher sales tax and customs duty refunds on YoY basis provided a further boost to textile exports.

In the case of non-textiles, rising volumes mainly drove the increase, and contributed around one-tenth in the total increase in exports during the year. The increased production of some agriculture commodities, availability of duty-free access under the

China Pakistan Free Trade Agreement (CPFTA) Phase II and increased demand in the international market were mainly responsible for this increase.

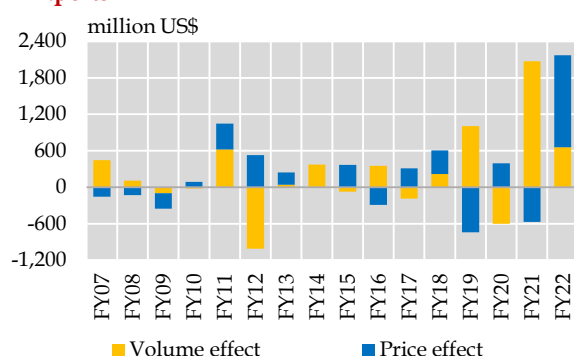
Price upturns led growth in textile exports, with higher volumes complementing

Textile exports continued the growth momentum of the last year and posted 25.5 percent increase, reaching US\$ 19.3 billion in FY22, against 22.9 percent increase last year. The country's share in global exports of apparel and textile made-ups (including bed wear and towels) increased by 0.4 percentage points YoY to 2.2 percent in 2021, after staying near-stagnant in the last four years.⁴³ Rising international prices of cotton had a significant positive impact on the textile export performance during the year, whereas a positive volume effect further reinforced the uptrend in exports (**Figures 6.23a & 6.23b**). Major export products included: apparel (knitwear and readymade garments), home textiles (bed wear and towels), cotton fabrics and cotton yarn (**Table 6.6**).

Price effect

International prices of cotton started spiraling up in 2021, amid widening supply-demand gap (**Figure 6.24**). The domestic prices of cotton also edged up during the year, which inflated the cost of production, and factored into the price of cotton-based products; the

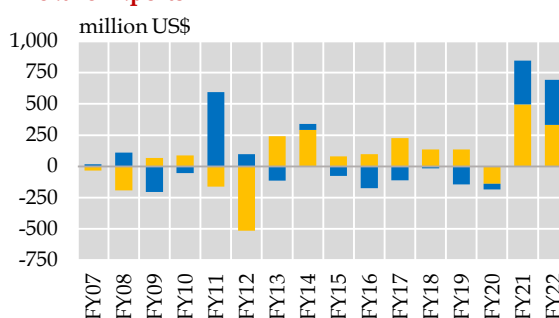
Breakdown of YoY Change in Apparel Exports **Figure 6.23a**



Note: Sum of volume effect & price effect equals YoY change for a given year

Source: Pakistan Bureau of Statistics

Breakdown of YoY Change in Home Textile Exports **Figure 6.23b**



⁴³ Data source: International Trade Centre. Note: Aggregated, global product-wise data is available for the full calendar year only, hence latest available data is 2021.

Pakistan's Textile Sector Exports

million US\$

Table 6.6

	FY21	FY22	Change	Volume Effect	Price Effect
Apparel	6,848	9,026	2,178	413	1,765
Home textiles	3,709	4,404	695	327	368
Cotton fabrics	1,921	2,438	517	56	460
Cotton yarn	1,017	1,207	190	-138	328
Synthetic textiles	370	460	90	-151	241
Non-cotton yarn	33	66	33	16	16
Non-home textiles made-ups	756	849	93	-	-
Other textile material	632	761	129	-	-
Overall textile exports	15,399	19,330	3,931	-	-
Total exports	25,304	31,782	6,478	-	-

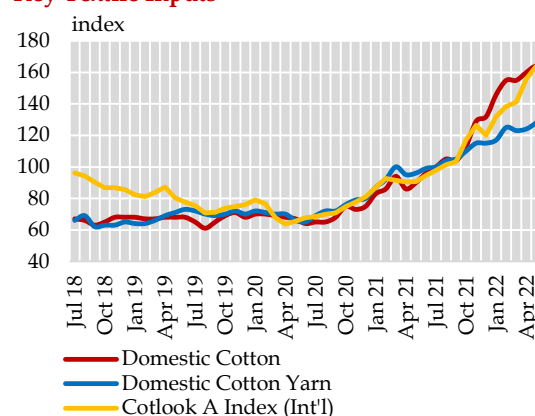
Source: Pakistan Bureau of Statistics

gains from the rising export unit values, exchange rate depreciation and various policy support measures aided the industry to benefit from the expansion in global demand.

Monthly international cotton prices rose by 56 percent YoY on average during FY22. This mainly reflected the widening supply-demand gap, which was aggravated by the supply chain disruptions. Supplies were further constrained by the logistical issues owing to the port congestions around the world, container shortages and delays in sea freight departures and arrivals.⁴⁴ These issues also supported commodity prices, as freight costs rose exponentially in 2021-22.

In addition, increase in cotton demand from China further inflated the global cotton prices during the year. China is one of the countries witnessing strong international demand for its value added textiles, besides Vietnam, Bangladesh, Pakistan, and Turkey. However, in December 2020, the US imposed a ban on textile product imports made from cotton produced in Xinjiang province of China⁴⁵,

which is a large producer of cotton with around 90 percent share in China's total cotton production. Hence, the Chinese textile industry shifted its demand for cotton and cotton intermediaries to the international market that stoked global supply pressures.^{46,47} China's effort to replenish its cotton reserves to increase share of imported cotton further boosted global demand.⁴⁸

Domestic and International Prices of Key Textile Inputs **Figure 6.24**

Source: Emerging Textiles

⁴⁴ A Textiles Intelligence report noted that, "Finished goods have been taking longer to reach their destinations as shortages of containers and outbreaks of Covid-19 have halted operations and caused delays at ports. In fact, in many destination ports, the average median times spent by containers in depots, referred to as dwell times, reached near-record levels in 2021 as a result of severe congestion." Source: Talking Strategy: Apparel Supply Chains Hit by Perfect Storm as Costs Rise on Multiple Fronts, January 2022. Textiles Intelligence. United Kingdom.

⁴⁵ Source: US Customs and Border Protection press release dated December 2, 2020; Available at: www.cbp.gov/newsroom/national-media-release/cbp-issues-detention-order-cotton-products-made-xinjiang-production

⁴⁶ Source: Talking Strategy: Apparel Supply Chains Hit by Perfect Storm as Costs Rise on Multiple Fronts. January 2022. Textiles Intelligence. United Kingdom.

⁴⁷ China's cotton imports – mainly fiber and yarn – were recorded at US\$ 10.6 billion in 2021, 16 percent above 2018-20 average. Source: China Customs Statistics

⁴⁸ Source: World Cotton Markets and Trade. December 2021. United States Department of Agriculture. United States

Imports of the US, EU-27 and UK from Major Origins and Breakdown of YoY Change in FY22**Table 6.7**

million US\$

	US				EU-27				UK			
	FY21	FY22	VE	PE	FY21	FY22	VE	PE	FY21	FY22	VE	PE
Pakistan	1,787	2,701	415	500	2,727	3,551	708	116	853	940	11	75
Bangladesh	5,890	9,034	2,451	693	15,251	20,448	3,558	1,639	2,772	3,508	441	295
Cambodia	2,996	4,135	459	680	2,731	3,303	457	116	674	651	25	-49
China	16,699	22,547	3,851	1,997	24,370	27,824	1,281	2,173	5,756	4,647	-109	-1,000
India	3,516	5,360	1,253	590	3,814	4,603	627	162	1,014	1,275	155	107
Turkey	669	1,008	256	83	10,535	11,938	1,377	26	1,840	1,868	-93	121
Vietnam	13,725	16,756	1,706	1,325	3,430	3,768	109	229	459	509	7	44
World	71,565	95,791	15,564	8,661	83,138	94,903	9,042	2,723	16,360	16,253	681	-788

Note:1) VE stands for Volume Effect and PE for Price Effect;

2) In case of the UK, PE of 'World' minus 'China' is positive

Sources: Office of Textile & Apparel (US); Eurostat (EU-27); UK Trade Info (UK)

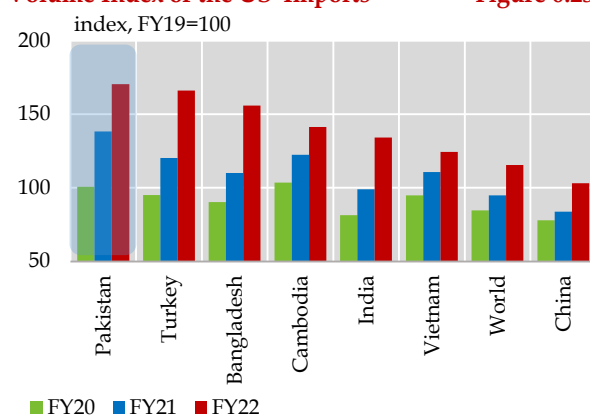
Table 6.7 shows that Pakistan, along with the other major exporters of textile and made-ups, passed on the impact of elevated cotton prices to final products, as reflected in notable price effects across the major import markets of the US, EU-27, and the UK. It is worth mentioning here that this trend was also true for the overall apparel imports of the US and EU-27; in case of the UK, barring China, the cumulative price effect was positive.

Volume effect

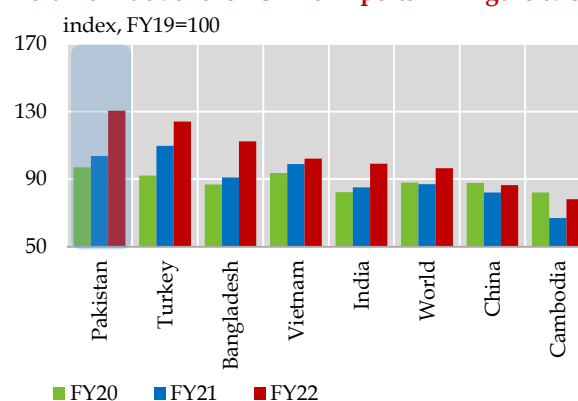
The volume of Pakistan's textile exports, particularly apparel and home textiles reached the highest level for the second consecutive year. Both demand and supply side factors drove the growth momentum of the textile

sector. On the demand side, there were higher orders from the traditional buyer countries or blocs – the US, EU-27 and the UK (**Table 6.7, Figures 6.25a, 6.25b & 6.25c**). Starting in FY21, Pakistan received deflected orders from the supplier countries mired in the pandemic-led economic disruptions.⁴⁹ That trend not only carried on into FY22, but also strengthened further due to increased appetite for cotton-based products in the buyer countries.

A United States Department of Agriculture (USDA) report noted that demand for cotton products in the US in 2021 was the highest since 2010. With the persisting trend of people working from home, consumers' choice for soft-knitted and comfortable clothes remained strong during FY22. In addition to that, strong U.S. home purchases and improvements

Volume Index of the US' Imports

Source: Office of Textile & Apparel (US)

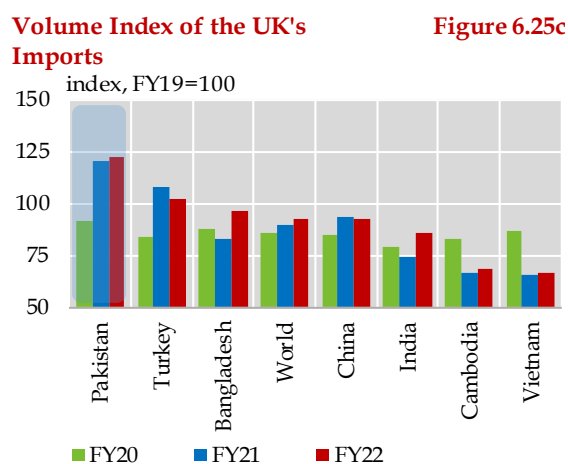
Figure 6.25a Volume Index of the EU-27's Imports**Figure 6.25b**

Source: Eurostat (EU-27)

⁴⁹ For details, see Chapter 6 – External in the State of the Economy's Report FY21.

prompted new home textiles purchases. Moreover, release of pent-up demand from 2020 and an increase in discretionary incomes also lifted imports; as, in 2020, the U.S. cotton product imports had reduced to the lowest level in almost 20 years.⁵⁰

On the supply side, textile industry enjoyed policy support that enabled optimal capacity utilization and expansion. Some of the support measures are discussed in the following: **a)** tariff rationalization on imports of textile inputs, like cotton yarn, artificial staple fibers, synthetic yarn, knitted fabric, and polyester yarn, announced in the budget of FY22⁵¹; **b)** provision of subsidy on energy tariffs – power at US 9 cents per KWh, and gas at US\$ 6.5 per MMBtu⁵²; **c)** higher sales tax and customs duty refunds⁵³; **d)** subsidized lending under TERF and LTFF schemes. Net fixed investment (LTFF and TERF) by the textile and apparel industry was Rs 131 billion, which was Rs 49 billion higher than last year.



Source: UK Trade Info (UK)

Disbursement under TERF and ongoing LTFF, underpinned capacity addition in the textile sector, particularly the upstream segments (cotton spinning, weaving and finishing). This can be seen from a sharp increase in textile machinery imports during FY22 that was 42.6 percent higher YoY in FY22.⁵⁴ Textile machinery import has increased sharply since the introduction of TERF in March 2020 (**Figure 6.26**).⁵⁵

Besides apparel and home textiles, cotton fabrics registered growth of 26.8 percent to US\$ 2.4 billion in FY22, and cotton yarn exports grew by 18.6 percent to US\$ 1.2 billion. Growth in these products came mainly on the back of high-trending cotton prices. As domestic demand for both intermediary products was quite robust, growth in their volumes was either negative (yarn) or muted (fabric).

Non-textile exports help broaden the exports base

Non-textile exports posted growth of 25.7 percent to US\$ 12.5 billion in FY22. Importantly, rising volumes had a pronounced share in the non-textile export increase during the year. Major items included agro-food products – rice, sesame seeds, and maize (corn); refined copper; petroleum crude (condensate); ethyl alcohol; leather garments and gloves (**Table 6.8**).

Agro-food exports

Exports of the agro-food sector – second largest after the textile sector – grew by US\$ 1.0 billion to US\$ 5.4 billion in FY22. The

⁵⁰ Source: World Cotton Markets and Trade. March 2022. United States Department of Agriculture. United States

⁵¹ There were some items, mainly raw cotton, whose tariffs had been already rationalized in FY21. This had been done to facilitate the import of key textiles for the value addition. Available at:

www.commerce.gov.pk/decisions-of-tariff-policy-board-tbp-implemented-under-finance-act-2021-22/

⁵² Gas tariff subsidy was revised in November-2021 from US\$ 6.5 to US\$ 9.0 per MMBtu for the province of Punjab; this revision was made for the gas being used by the industry in its captive power plants for power generation. For general industrial use, the subsidy rate stayed unchanged at US\$ 6.5 per MMBtu.

⁵³ These refunds totaled Rs 317 billion in FY22, Rs 84.2 billion more than last year. Source: Federal Board of Revenue

⁵⁴ Compared to the FY17-FY21 average, textile machinery imports were up 89 percent in FY22.

⁵⁵ TERF is a concessionary refinance facility aimed at promoting investment – both new and expansion – and/or Balancing, Modernization and Replacement (BMR). It had expired in March-2021. However, disbursements under it continued beyond March-21. Source: State Bank of Pakistan. It may be noted that impact of fixed investments, as under TERF/LTFF, on a firm's output comes with a lag. So, such investments made in the last two years had a cumulative impact on textile industry's output.

Major Non-textile Exports**Table 6.8**

million US\$

	FY21	FY22	Change
Rice	2,041.7	2,512.8	471.1
<i>Basmati rice</i>	569.5	694.5	125.0
<i>Non-basmati rice</i>	1,472.2	1,818	346.0
Refined copper	422.7	733.7	311.0
Sesame seeds	88.3	183.9	95.6
Chemicals	556.1	871.6	315.5
<i>Ethyl alcohol</i>	302.7	544.9	242.2
Maize (corn)	18.6	239.4	220.8
Petro crude	106.8	259.0	152.2
Leather products	562.4	621.1	58.7
<i>Garments</i>	286.2	315.2	29.0
<i>Gloves</i>	259.7	287.2	27.5
Fruits	480.1	477.4	-2.7
<i>Kinnow, fresh</i>	130.6	99.4	-31.2
<i>Mandarin</i>	59.9	25.7	-34.1
<i>Pine nuts (chilgoza)</i>	15.3	107.6	92.4
<i>Mangoes</i>	141.2	136.7	-4.5
Non-textile, total	9,905.1	12,452.3	2,547.2

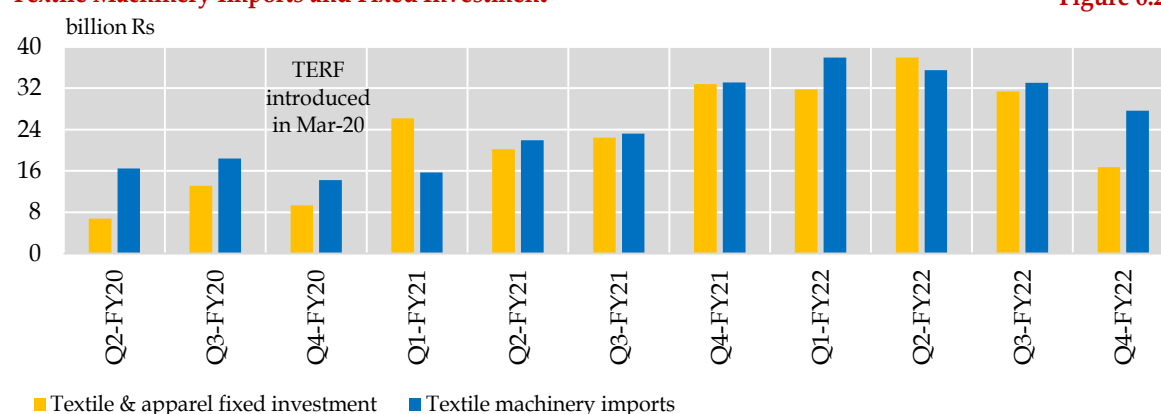
Source: Pakistan Bureau of Statistics

improved production of major agro-food exports in FY22, including rice, sesame seeds, and maize (corn), along with rising demand, shored up the growth in non-textiles during the year.

Rice

Rice exports registered growth of 23.1 percent to US\$ 2.5 billion in FY22, after staying stagnant last year. It was the volume-led growth as average export unit values were lower than last year. Importantly, rice production rose to a record high of 9.3 million tons in FY22 – up 0.9 million tons YoY, which had increased the exportable surplus. On the other hand, rice export prices remained in check as average export unit value fell by 8.9 percent during the year. With bumper crop and competitive prices, Pakistan was able to ship 35 percent more grains than last year, resulting in higher shipments supplanting the negative price effect.

Non-basmati rice had a greater share in overall increase, with higher demand from Malaysia and China.⁵⁶ A USDA report noted price competitiveness as the primary factor of surging demand from Malaysia; unit value of Malaysia's import from Pakistan declined from US\$ 500 per ton in 2020 to US\$ 455 per ton in 2021 (**Figure 6.27**).^{57,58} The report further noted that Pakistan replaced Vietnam

Textile Machinery Imports and Fixed Investment**Figure 6.26**

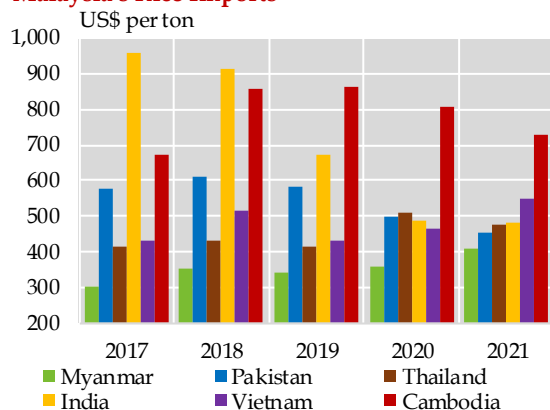
Note: Fixed investment includes LTFF & TERF; values represent outstanding loans at the end of each quarter

Sources: State Bank of Pakistan & Pakistan Bureau of Statistics

⁵⁶ Share of Malaysia in Pakistan's export volumes of non-basmati varieties rose from 4.4 percent in FY21 to 10.2 percent in FY22. During the same time periods, China's share in the country's broken rice exports increased from 48.1 percent to 66.5 percent.

⁵⁷ Grain and Feed Annual. Malaysia. April 12, 2022. Foreign Agriculture Service. United States Department of Agriculture. Available at: www.apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Grain%20and%20Feed%20Annual_Kuala%20Lumpur_Malaysia_MY2022-0001.pdf

⁵⁸ It may be noted here that Myanmar (Burma) offered lower prices than Pakistan in 2021. However, its exportable surplus was low due to a fall in milled rice production in 2021-22 amidst constant consumption. (Data source: USDA)

Unit Values Comparison of Malaysia's Rice Imports**Figure 6.27**

Source: Trade Data Monitor via USDA

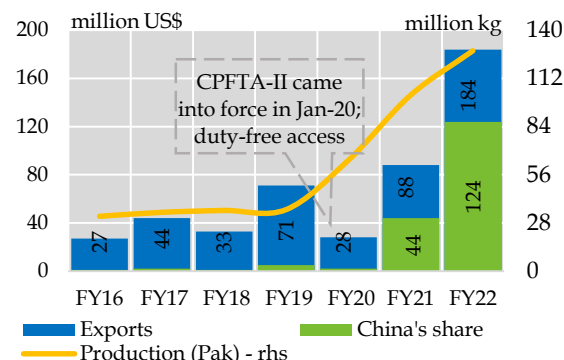
as the second largest rice exporter to Malaysia in 2021.

In the case of China, broken rice was in greater demand. It was primarily due to high corn prices in China that pushed substitution of corn used as feedstock with broken rice. Higher rice prices in China, amid the increase in its Minimum Support Price (MSP) in 2022 for the third consecutive year, also led to diversion of demand to imported rice. Lastly, China had registered seven more rice traders from Pakistan.⁵⁹

Basmati rice exports rose by 22 percent to US\$ 694.5 million in FY22, recovering strongly from last year's fall. Shipments to the UAE were significantly up.⁶⁰ Share of the UAE in Pakistan's basmati rice shipments jumped from 11.9 percent in FY21 to 22.2 percent in FY22.

Sesame seeds

Sesame seeds saw a significant growth of 108 percent to US\$ 183.9 million in FY22. Pakistan's sesame seeds production has

Pakistan's Sesame Seeds Production, Exports and China's Share**Figure 6.28**

Source: Pakistan Bureau of Statistics & Economic Survey of Pakistan 2021-22

increased exponentially in the last few years (Figure 6.28).⁶¹ Anecdotes suggest that farmers are increasingly interested in the seeds cultivation, as they offer high export unit values.⁶²

On the demand side, almost the entire increase came from higher shipments to China. Under the CPFTA Phase II, Pakistan's sesame seeds were among the products that got duty-free access to China—a market with a strong demand for the seed's oil and other uses in food.⁶³

Maize

Maize (corn) exports increased from US\$ 18.6 million in FY21 to US\$ 239.4 million in FY22, with volumes rising significantly to 755.2 thousand tons in FY22 from 84.5 thousand tons. Major destinations included Vietnam and Malaysia. Corn is often used as a feedstock. Vietnam, where Pakistan shipped US\$ 139.7 million worth of corn in FY22 against US\$ 11.9 million last year, has been substituting its own production with imports for last many years.⁶⁴

⁵⁹ Source: Grains: World Market and Trade. Various issues. United States Department of Agriculture. US.

⁶⁰ The anecdotal evidence suggests that in the absence of formal financial linkage with Iran, Pakistan's basmati rice is transshipped to Iran through the UAE.

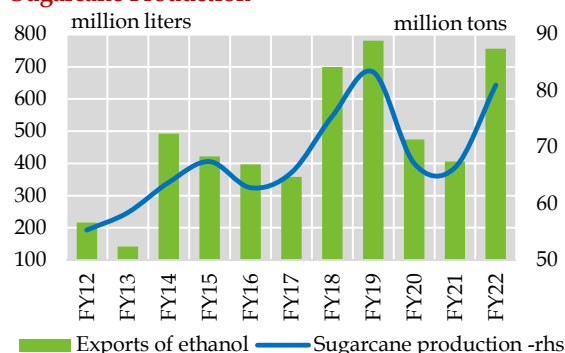
⁶¹ Sesame seeds production increased from 102 million kg in FY21 to 128 million kg in FY22 (p); it was 36 million kg in FY18. Source: Economic Survey of Pakistan 2021-22

⁶² Moreover, yield of sesame seeds in Punjab is also on the increasing trend in recent years; it increased 1.5 times between FY16 and FY21. Source: Crop Reporting Services, The Government of Punjab

⁶³ China's total imports of sesame seeds (not for cultivation) rose from 1.0 billion kg in 2020 to 1.2 billion kg in 2021; they stood at 828 million kg in 2018. Source: China Customs Statistics

⁶⁴ Source: www.fas.usda.gov/data/vietnam-feed-importing-powerhouse#:~:text=Vietnam%20has%20turned%20to%20imports,importer%20globally%20in%202021%2F22

Pakistan's Exports of Ethanol and Sugarcane Production **Figure 6.29**



Sugarcane production data is plotted with lag of one year.

Source: Pakistan Bureau of Statistics and Pakistan

Economic Survey 2021-22

In FY22, Vietnam partly substituted costlier wheat imports from the US with corn imports to use in feedstock.⁶⁵ Moreover, ample supplies from Pakistan were available to fulfil the international demand.⁶⁶

Other non-textile exports

Ethanol (ethyl alcohol)

Exports of ethanol increased by 80 percent to US\$ 544.9 million in FY22. It was all volume-led increase, with China and European countries – mainly the Netherlands, Italy and Spain – posting highest YoY increases. Ethanol, often used as a biofuel, is produced

mainly from sugarcane fermentation in Pakistan. Exports of ethanol are linked to production of sugarcane in the preceding year (Figure 6.29). In FY21, sugarcane production was up 22 percent that boosted its exports in FY22.

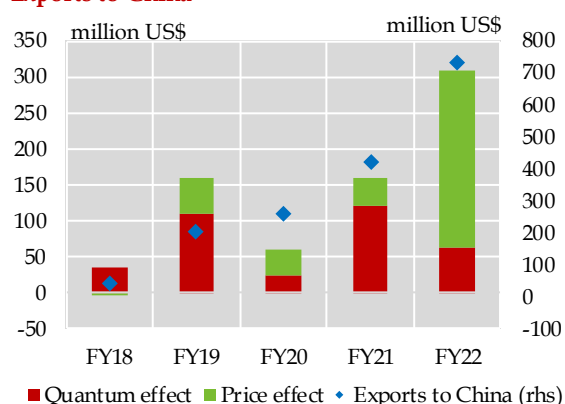
Refined copper

Refined copper exports almost doubled from US\$ 422.7 million in FY21 to US\$ 733.7 million in FY22. The entire increase can be traced to China. Pakistan is enjoying duty-free access to Chinese market under the CPFTA Phase II since January 2020. Inflated international copper prices also significantly supported Pakistan's copper exports during the year (Figure 6.30), as export unit values increased 51.1 percent YoY in FY22.

Petroleum crude

Petroleum crude (condensate) exports increased by US\$ 152.2 million to US\$ 259 million. Both volume and price effects were positive, with the latter having a more dominant contribution because of soaring international crude prices. Volume effect is partly due to the low base effect last year. Moreover, Thailand's demand for imported crude and condensate rose as economic activity increased post-lockdowns.⁶⁷

Breakdown of Pakistan's Copper Exports to China **Figure 6.30**



Source: PBS, World Bank & SBP calculations

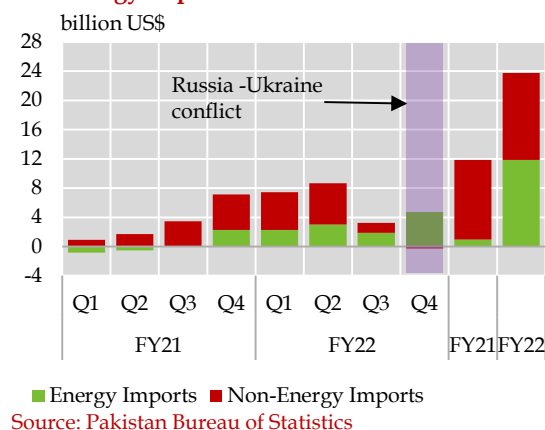
Fruits

Fruit exports stagnated at the last year's level during FY22. The volume of fruit exports dipped as there was a significant YoY drop of 51.5 percent in volume of the country's largest fruit export category, i.e. kinnow, in FY22. The decline in exports to Afghanistan owing to slowing down of mutual trade in the aftermath of political changes mainly explains this decline. It offset the increase in shipments of pine nuts that increased six times YoY in FY22.

⁶⁵ Source: www.agflow.com/agricultural-markets/vietnam-corn-imports-rise-while-wheat-tumbles/

⁶⁶ Maize (corn) production was estimated to be up 19 percent in FY22 (p), reaching record high of 10.6 million kg. Source: Economic Survey of Pakistan 2021-22

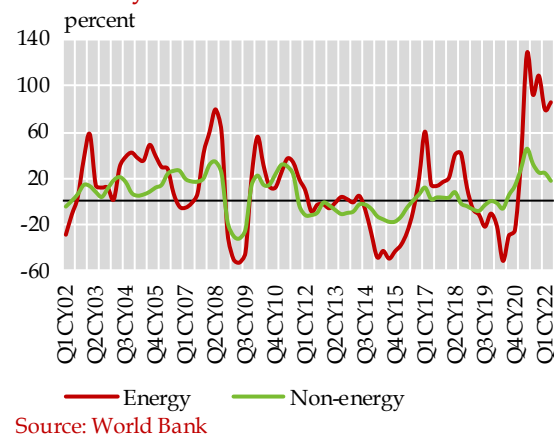
⁶⁷ Source: www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/050522-thailand-ramps-up-crude-imports-to-feed-high-refinery-runs-amid-tourism-revival

YoY Changes in Total, Energy and Non-energy Imports**Figure 6.31**

Imports

Pakistan's imports increased by 42.1 percent YoY in FY22, reaching US\$ 80.1 billion, compared to US\$ 56.4 billion in FY21. Soaring global commodity prices had a dominant contribution in this increase. In particular, rising prices of petroleum crude and products alone contributed around one-half of the entire increase in imports during the year. In addition, the need to import Covid vaccine and the expansion in domestic economic activity also pushed up import volumes of some capital goods and raw materials.

Specifically, first two quarters of FY22 saw continued momentum of both energy and non-energy imports (**Figure 6.31**). To contain import demand, SBP introduced various policy measures.⁶⁸ These measures along with the reduction in import of Covid vaccine arrested the growth momentum in imports, which posted MoM declines during January and February 2022.

Growth in Quarterly Global Commodity Price Indices**Figure 6.32**

However, the outbreak of Russia-Ukraine conflict provided new impetus to the global commodity market; both energy and non-energy products prices reached multi decade high in Q3-FY22 (**Figure 6.32 & 6.33**). This reinvigorated the otherwise slowing imports, thereby pushing the YoY quarterly growth to 21.7 percent, to US\$ 18.3 billion, in Q3-FY22.⁶⁹ In tandem, energy imports started dominating the import growth from Q3-FY22 onward.⁷⁰

Amidst the mounting pressure of energy imports, political instability in the country, and uncertainty around the IMF program, PKR remained under pressure, which depreciated by 10.4 percent in Q4-FY22. Consequently, SBP introduced additional demand management measures such as, adding 177 more items in the list of products attracting CMR on imports⁷¹, and raising policy rate gradually.⁷² Furthermore, the Government also imposed ban on imports of certain non-essential items in May 2022. As a result, Q4-FY22 witnessed YoY decline in non-energy imports, albeit marginally by 2.4 percent. However, a steep 123.7 percent YoY

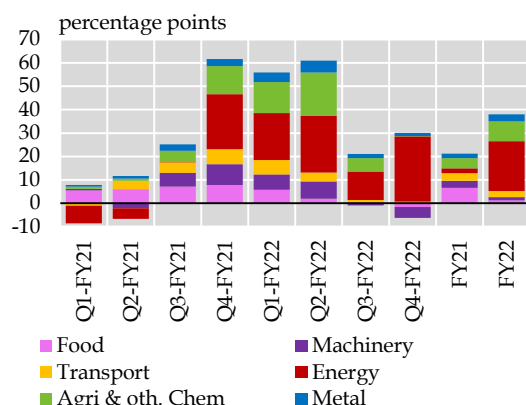
⁶⁸ These include, restricting consumer financing by amending the relevant prudential regulations (www.sbp.org.pk/bprd/2021/CL29.htm), expanding list of items attracting CMR on imports (www.sbp.org.pk/bprd/2021/CL30.htm), increasing the cash reserve requirements (CRR) for banks by 100 bps (www.sbp.org.pk/dmmd/2021/C20.htm), and raising the policy rate by 275 bps.

⁶⁹ In March 2022, imports increased by 9.5 percent on MoM basis. Nevertheless, energy imports declined by US\$ 1.0 billion while non-energy imports declined by US\$ 2.6 billion in Q3-FY22 compared to the previous quarter of FY22.

⁷⁰ Energy imports contributed 12 percentage points in 21.3 percent growth in Q3-FY22 imports.

⁷¹ BPRD Circular Letter No. 09 of April 07, 2022 (Available at: www.sbp.org.pk/bprd/2022/CL9.htm)

⁷² Policy rate was raised by 400 bps during Q4-FY22.

Sectoral Contribution to Import Growth**Figure 6.33**

Source: Pakistan Bureau of Statistics & SBP calculations

increase in the energy imports driven by Russia-Ukraine conflict propelled the Q4-FY22 imports to US\$ 21.3 billion with 26.0 percent YoY increase (Figure 6.31).⁷³

On aggregate, price effect mostly dominated the imports in FY22, specifically in case of energy products and for some non-energy products such as, palm oil, fertilizer and steel scraps (Table 6.9).⁷⁴

Energy had a pronounced share in FY22 imports

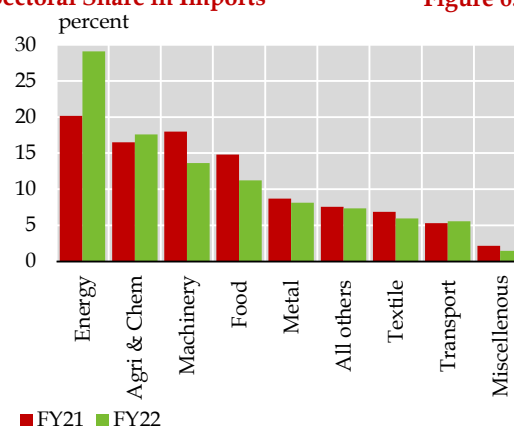
Pakistan's energy import bill more than doubled to US\$ 23.3 billion in FY22 from US\$ 11.4 billion in FY21.⁷⁵ Resultantly, the share of energy in total imports increased to 29 percent in FY22, compared to 20 percent in FY21 (Figure 6.34).

Prices of energy products such as, crude oil, natural gas, and coal rose sharply in FY22, specifically in the first half due to factors influencing demand and supply of these products. Most importantly, economic

stimulus provided to revive economic activity from Covid shock resulted in stronger than expected recovery in most of the advanced and emerging economies in 2021.⁷⁶ However, the supply of energy products remained lackluster as OPEC+ members adhered to their output quota.

On the other hand, Covid led unforeseen repair works and project delays weighed heavily on the gas supply.⁷⁷ The situation further aggravated as some of the energy demand was switched to gas due to lower wind power generation in Europe. Moreover, drought like situation that constrained hydropower generation in Brazil and in some surrounding countries also fueled gas demand, which further widened the gas supply-demand gap. During CY21, European natural gas index rose by a record 449.1 percent. On the other hand, coal prices also soared by 1,060.5 percent during CY21, as many countries switched to coal for electricity generation.⁷⁸

Given Pakistan was procuring gas partly from the spot market, the increase in LNG prices disrupted its energy supply chain and

Sectoral Share in Imports**Figure 6.34**

Source: Pakistan Bureau of Statistics

⁷³ Energy imports contributed 28 percentage points in the overall 26.2 percent growth in Q4-FY22 imports.

⁷⁴ Government also imposed ban on imports of certain non-essential items on May 2022 for the two months. (Source: S.R.O. 598(1)/2022, May 19 2022 of Ministry of Commerce).

⁷⁵ On aggregate, energy contributed 21.3 percentage points in 42.1 percent growth in the FY22 in overall imports (Figure 6.37).

⁷⁶ Besides, commodity prices dipped significantly during February 2020 to February 2021 in the wake of Covid shock. This lower base led to a sharp YoY rise in FY22.

⁷⁷ For further detail, see The State of Pakistan's Economy, Half Yearly Report of the Board of Directors 2021-22 (Source: State Bank of Pakistan).

⁷⁸ South African Coal Index. (Source: World Bank)

Pakistan's Major Imports in FY22

Table 6.9

million US\$

Items	FY21	FY22	Abs. change	Volume Effect	Price effect
Energy group	11,358	23,319	11,961	1,869	10,092
POL prods.	5,160	12,069	6,909	1,459	5,450
Crude oil	3,107	5,599	2,491	163.55531	2,328
LNG	2,617	4,990	2,373	291.28034	2,081
Agriculture and other chemicals group	9,300	14,086	4,786	-	-
Fertilizer	719	846	127	-195	322
Plastic Material	2,473	3,136	663	84	579
Medicinal Products	1,390	4,063	2,673	2040	632
Other Chemicals	4,529	5,840	1,311		
Transport group	2,987	4,454	1,466	-	-
Cars	1,247	2,007	760	-	-
CBUs	127	336	209	-	-
CKDs	1,120	1,671	551	-	-
Truck & buses	515	989	474	-	-
Aircraft & ships	514	761	248	-	-
Metals group	4,897	6,524	1,627	-	-
Steel scrap	1,858	2,305	448	-350	798
Iron & steel	1,960	2,937	977	309	668
Food group	8,348	9,016	668	-	-
Wheat	983	795	-188	-383	195
Sugar	129	192	63	14	49
Palm oil	2,669	3,549	881	-330	1211
Textile group	3,866	4,787	921	-	-
Raw cotton	1,480	1,828	349	-140	489
Syn. yarn	656	879	223	-50	273
Machinery group	10,147	10,920	774	-	-
Power gen	1,912	1,473	-439	-	-
Electrical	1,664	1,929	265	-	-
Cell phones	2,065	1,979	-87	-	-
Other machinery	2,688	3,192	504	-	-
All other items	4,259	5,839	1,580	-	-
Total imports	56,380	80,136	23,756	-	-

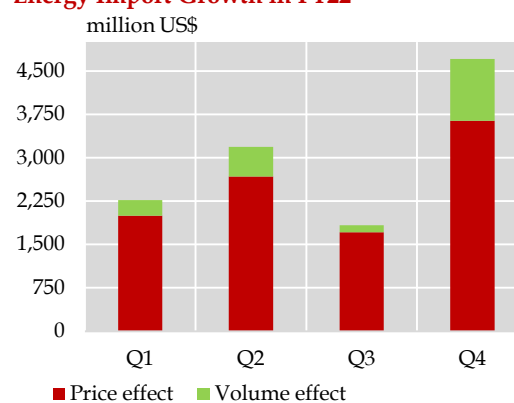
Source: Pakistan Bureau of Statistics and SBP calculations

constrained gas-based power generation in the country.⁷⁹ However, the country continued energy imports to fulfill the requirements of the growing economy. Accordingly, energy contributed around one-third in 65.6 percent YoY increase in import during H1-FY22.

The energy prices had started to ease at the dawn of Q3-FY22, amid slowdown in the pace of economic activity across countries. However, the outbreak of Russia-Ukraine conflict in February 2022 added new impetus to the receding prices (Figure 6.35). Proposed sanctions on Russia in the shape of ban on import of Russian crude, gas, coal, and

Impact of Price and Volume in Energy Import Growth in FY22

Figure 6.35

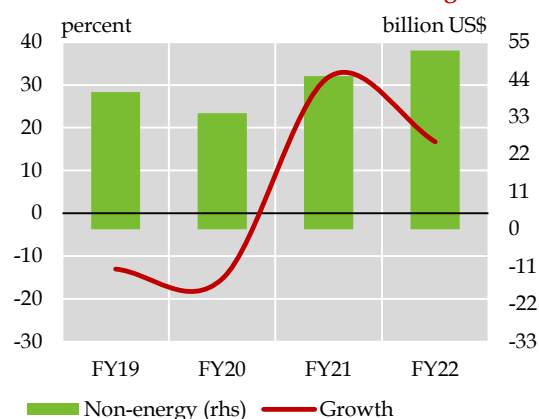


Source: Pakistan Bureau of Statistics

⁷⁹ S&P Commodity insight. Available at: www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/072022-fuel-shortages-hit-nearly-a-quarter-of-pakistans-operational-power-plants

Non-energy Imports

Figure 6.36



Source: Pakistan Bureau of Statistics

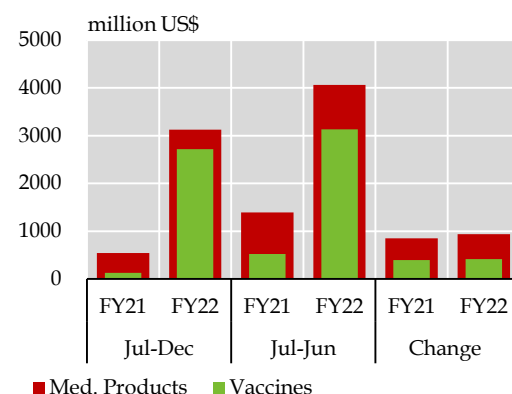
petroleum products jittered the energy market.⁸⁰ In addition, prolonged disruption in production in Angola and Nigeria, and marginal increase in the OPEC+ output kept the oil prices at higher level in H2-FY22.⁸¹ Moreover, retaliatory ban imposed by Russia on certain European and non-European energy companies,⁸² and expected cut in Russian gas supply to Europe pushed the prices of gas and coal to a new highs.⁸³ In tandem with these developments, Pakistan's energy import bill soared to US\$13.1 billion in H2-FY22, from US\$ 6.6 billion in H2-FY21 (Figure 6.35).

Non-energy imports

Non-energy imports rose by 16.7 percent, to US\$ 52.5 billion, during FY22 (Figure 6.36). Nonetheless, its growth tapered off considerably to 19.9 percent in H2-FY22, compared to 38.2 percent witnessed in H1-FY22, as measures taken by the SBP started bearing results. Groups such as, agriculture and other chemicals, transport, machinery and metals, had a significant contribution in growth of non-energy imports during the year (Figure 6.32).

Import of Medicinal Products Including Vaccines

Figure 6.37



Source: Pakistan Bureau of Statistics

Covid vaccines remain a significant driver of import growth during FY22

Share of agriculture and chemical group witnessed a considerable increase in FY22, largely due to procurement of Covid vaccines in H1 (Figure 6.34). In terms of contribution to growth, this group contributed 9 percentage points in 42.1 percent import growth during FY22 (Figure 6.32). Covid vaccine procurement slowed down significantly in H2-FY22 with decline in the infection ratio.

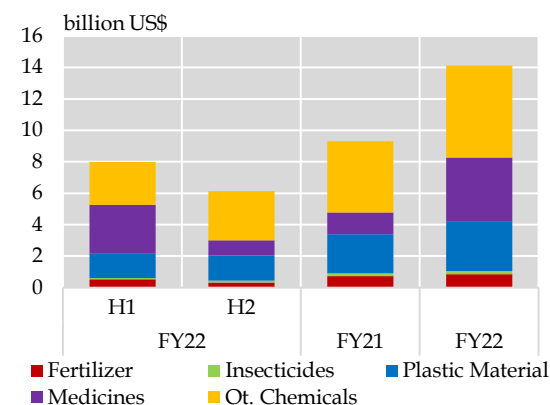
Pakistan imported US\$ 3.2 billion worth of Covid vaccines during FY22, compared to US\$ 525.1 million in the same period of last year (Figure 6.37). Though the spread of Covid had remained under control in H2-FY22, as the number of new cases being reported became insignificant, the country continued its import of Covid vaccines to provide booster jabs to the vulnerable people. In Jan-Jun FY22, Pakistan imported US\$ 414 million of Covid vaccine.

⁸⁰ US imposed a ban on imports of Russian crude and natural gas, certain petroleum products and coal. The U.S. imported nearly 700,000 barrels per day of crude oil and refined petroleum products from Russia in CY21. Source: The White House Statement -March 08 2022, available at: www.whitehouse.gov/briefing-room/statements-releases/2022/03/08/fact-sheet-united-states-bans-imports-of-russian-oil-liquefied-natural-gas-and-coal/

⁸¹ Commodity Market Outlook- April 2022 (Source: World Bank)

⁸² Russia sanctions 31 energy companies, including ex-subsidiaries of Gazprom in EU (Source: www.tass.com/economy/1449571).

⁸³ Source: www.reuters.com/business/energy/gazprom-may-lose-third-its-gas-exports-europe-2022-analysts-2022-04-22/

Imports of Agriculture & Other Chemicals**Figure 6.38**

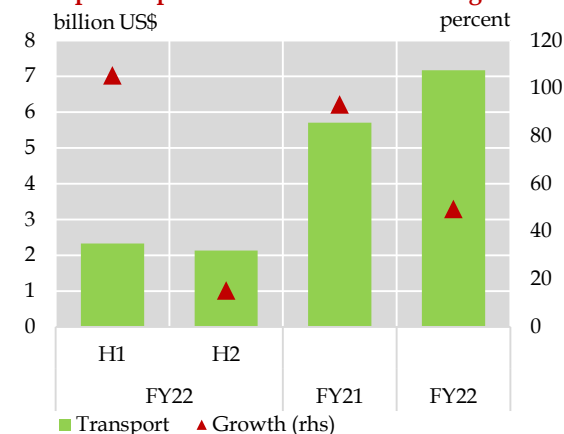
Source: Pakistan Bureau of Statistics

Apart from vaccines, the country imported antibiotics, and other immunological medicines and products during FY22, which also elevated the imports of medicinal products during FY22 (**Figure 6.37**).

Furthermore, the import of Plastic materials, Other chemicals and Fertilizers also rose significantly in FY22 (**Figure 6.38**). Both plastic materials and other chemicals include mostly raw materials that are used by industries. Therefore, increased economic activity supported imports of these products. Import of fertilizer, on the other hand, witnessed a volumetric decline of 27.2 percent in FY22, due to booming fertilizer prices. Record increase in the natural gas prices had spillover effect on fertilizer prices, as the natural gas is used as feedstock in fertilizer production.

Transport imports show a robust expansion

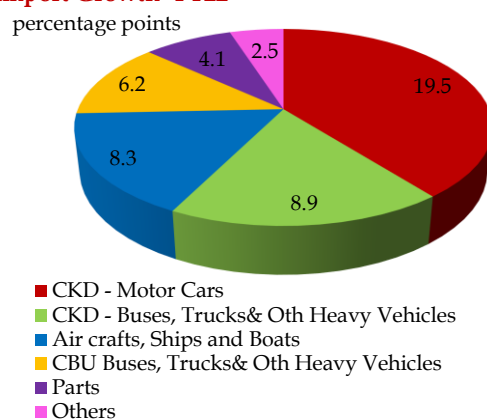
Transport group imports rose to US\$ 4.5 billion in FY22, 49.1 percent higher against last year. Accommodative monetary policy stance, and rising incomes had bolstered automobiles demand since last year. The momentum continued during the first half of FY22, as the commodity's imports more than doubled from US\$ 1.1 billion in H1-FY21 to US\$ 2.3 billion in H1-FY22. However, demand compression measures, sharp increase in prices, and a large depreciation in exchange rate, slowed the pace of increase in H2-FY22

Transport Imports**Figure 6.39**

Source: Pakistan Bureau of Statistics

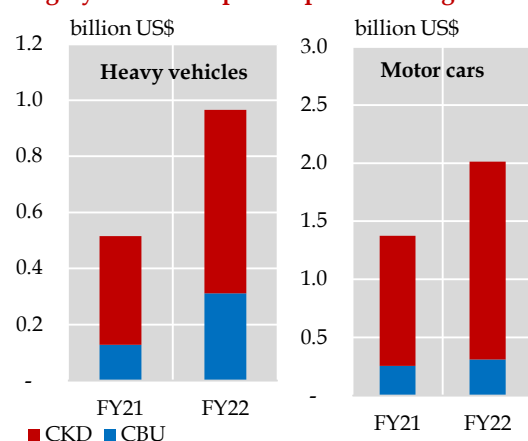
(**Figure 6.39**). In terms of composition, CKD units of cars, buses and other heavy vehicles explain around one-half of the expansion in transport imports during the year (**Figure 6.40**). In overall terms, while cars continued to dominate the transport imports, heavy vehicles (buses, trucks and other heavy vehicles) also showed a significant increase during FY22 (**Figure 6.41**). Moreover, despite the ban imposed by the government on imports of most of CBU units in Q4-FY22, imports of CBU heavy vehicles increased from US\$ 127.3 million in FY21, to US\$ 336.3 million in FY22; up by almost 164.3 percent.⁸⁴

CBU heavy vehicle imports registered a sharp increase due to (i) busses being imported for provisioning of public transport under various ongoing BRT schemes in different cities of the country;(ii) demand from

Contribution in Transport Group Import Growth- FY22**Figure 6.40**

Source: Pakistan Bureau of Statistics

⁸⁴ CKD/SKD heavy vehicles imports, on the other hand, rose by 68.2 percent to US\$ 652.4 million during FY22.

Category-wise Transport Imports **Figure 6.41**

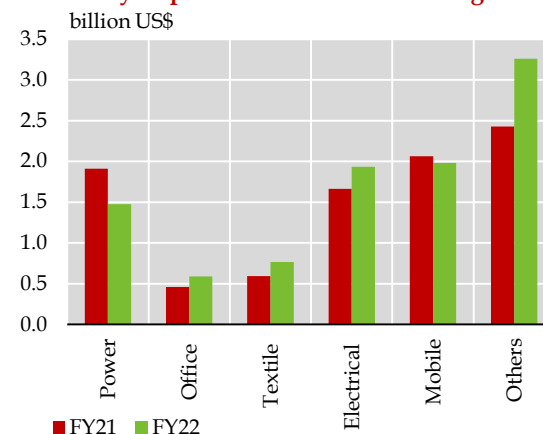
Source: Pakistan Bureau of Statistics

businesses, which are upgrading their transportation using TERF facility; and (iii) increase in households demand for cheaper minivans, as effective import duty is less on the older imported vehicles.⁸⁵

Despite a deceleration, imports of cellular mobile remained significant

Machinery import increased to US\$ 10.9 billion in FY22 compared to US\$ 10.1 billion witnessed last year. Though telecom equipment, specifically the cellular mobile phone, remained the key contributor of this group, its imports witnessed a decline of 4.2 percent during the year (**Figure 6.42**). In absolute term, Pakistan imported US\$ 2.0 billion of mobile Phones in FY22, marginally less than US\$ 2.1 billion of imports in FY21.

In FY22, the mobile imports were largely dominated by CKD/SKD units as a number of companies have setup mobile phone assembly plants in Pakistan to produce locally renowned international brands. This has led to substitution of the CBU mobiles with the CKD/SKD mobile phone imports (**Figure 6.43**).⁸⁶ Moreover, the government has imposed a ban on imports of CBU mobiles in

Machinery Imports **Figure 6.42**

Source: Pakistan Bureau of Statistics

May 2022, which also arrested the imports of mobile phones.⁸⁷

Apart from the telecom sector, imports of electrical machinery and apparatus, and textile machinery also rose significantly. Electrical machinery and apparatus rose to US\$ 1.9 billion during FY22, from US\$ 1.7 billion last year (**Figure 6.42**). The key imports of this group included photosensitive semiconductors (solar panels), and electrical equipment like static converters, batteries (lithium-ion), multi core cables, and boards panels and consoles.

Amid rising cost of electricity, green initiatives such as, subsidized loan promoted by SBP,⁸⁸ and net-metering embraced by the power distribution companies,⁸⁹ have promoted households and businesses to move to the alternate power source (specifically solar panels). As a result, import of solar panels increased to US\$ 31.5 million during FY22, compared to US\$ 30.3 million witnessed in the same period of last year.

Moreover, import of textile machinery rose from US\$ 592 million in FY21, to US\$ 764.0 million in FY22 (**Figure 6.26**). The textile sector

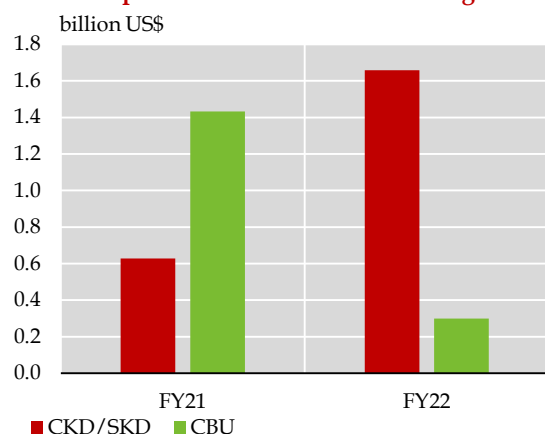
⁸⁵ Under the personal baggage scheme, import of cars- not older than 03 years- are allowed while imports of other vehicles, which also includes minivans- not older than 05 years- are allowed.

⁸⁶ For details, see SBP First Quarterly Report on State of Pakistan's Economy FY22.

⁸⁷ See footnote No. 16.

⁸⁸ For details see, SBP Financing Scheme for Renewable Energy and Islamic Financing Facility for Renewable Energy (Source: IH&SMEFD Circular No. 12 of 2021).

⁸⁹ Net-metering allows households and businesses to sell the excessive power produced by their equipment to their respective power distribution companies.

Mobile Imports**Figure 6.43**

Source: Pakistan Bureau of Statistics

benefited from the financing approved under the TERF and LTFF. Financing to the sector increased to PKR 348.5 billion during FY22, compared to PKR 237.7 billion witnessed in the same period of FY21.

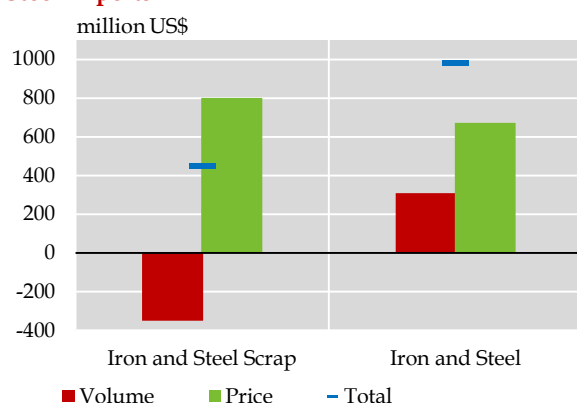
Metal imports soar amid rising prices and volume

During FY22, import of metals increased by 33.2 percent to US\$ 6.5 billion. Import of iron and steel and its scraps- both being the key drivers of metal imports- increased to US\$ 2.9 billion and US\$ 2.3 billion respectively in FY22, from around US\$ 2.0 billion imports of each in FY21.

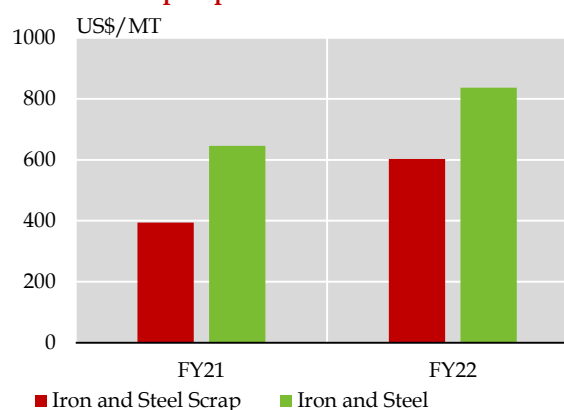
Importantly, import of iron and steel scrap was entirely driven by the increase in prices, as its volume witnessed a decline during FY22. On the contrary, the import of iron and steel metal witnessed a sharp increase in both volume and value (Figure 6.44a).

As energy prices are at record level and there are ongoing efforts to decarbonize the steel industry, ferrous scrap has become a 'new gold' for the industry. Steel produced using scrap in electric arc furnaces leads to just one-third of the carbon emission compared to the steel made from iron ore and coal in a blast furnace. China, Russia and Japan, have announced export restrictions, in order to keep at home more recycled raw materials for their steel and metal production.⁹⁰ Other countries and regions, including South Africa, Iran, the UK and the European Union, are preparing to follow the suit.

As the supply of scraps has become restricted, its price escalated more sharply compared to iron and steel. Average unit value of imported scrap was US\$ 602.8 per MT during FY22, 53.2 percent higher compared to the last year. On the contrary, the average unit value of the iron and steel metal imports were US\$ 837 per MT, around 29.6 percent higher than last year (Figure 6.44b).

Volume and Price Effect of Steel Imports**Figure 6.44a**

Source: Pakistan Bureau of Statistics

Average Unit Value of Iron & Steel and Scrap Imports**Figure 6.44b**

Source: Pakistan Bureau of Statistics

⁹⁰ The 's' word: Recycling scrap metal's image, S&P Global Commodity Insight, Available at: www.spglobal.com/commodityinsights/en/market-insights/blogs/metals/081822-scrap-metal-green-steel-decarbonization-circular-economy

Besides this global development, higher energy cost has driven out the small and inefficient billet producers from local market,

which uses scraps as its key raw material. This also has contributed to the decline in the imports of the iron and steel scraps.⁹¹

⁹¹ For details, see Chapter 2 of this report.

Chapter 7

The Promise of Pakistan's Demographic Dividend?

Demographic dividend is a period of accelerated economic growth in a country stemming from favourable age structure when the share of working age population is greater than the share of dependent population. The favourable age structure is achieved through a transition from high to low fertility, which in turn is facilitated by a decline in child and infant mortality rates and investments in population welfare and family planning. However, a favourable age structure alone does not yield the dividend. Harnessing demographic dividend requires the right policy mix, including investments in education and health care to improve human capital and productivity. Furthermore, high savings and work opportunities for youth alongside good governance, competitive markets, macroeconomic stability, and other enablers of economic growth and development are needed to capitalize on the window of opportunity provided by the favourable age structure. In Pakistan, the growing population, especially the large youth cohort, provides an opportunity to reap the demographic dividend. Although the country has achieved considerable progress in lowering total fertility rates (TFR) and dependency ratios, resulting in a large youth cohort, the pace of decline in TFR has slowed in the last two decades; it has also been slower compared to peer countries. Regarding educational attainment, Pakistan's performance has remained weak in terms of its access and quality, whereas more than a third of its current 0-5 years population is estimated to be stunted. Both these factors put the prospects of demographic dividend in Pakistan at risk, as do the persistent challenges to enabling economic environment, such as macroeconomic instability, low economic growth, weaknesses in governance, and inefficient markets. Importantly, gender disparity in educational attainment and labour force also needs to be narrowed for the country to reap the demographic dividend.

7 The Promise of Pakistan's Demographic Dividend?

7.1 Introduction

Behind Pakistan's recurring macroeconomic imbalances are several structural challenges that constrain the country's economic growth and development. These include low levels of human development, domestic savings, and labour productivity. Underlying these challenges is rapid population growth that adds a burden to the need for public and private infrastructure and government spending on public goods while reinforcing poverty.¹

Five decades ago, Pakistan ranked 10th among the world's top ten most populous countries, with a population of 59 million. In 2021, the country was ranked 5th, with a population of 231 million (**Figure 7.1**). At a compound average growth rate of 3.1 percent between the years 1980-2000, the country's population was the fastest growing among the top ten

populous countries. In 2021, the growth rate was 1.9 percent, second only to Nigeria.² Owing to this, Pakistan has a large young population where about 37 percent and 67 percent are less than or equal to 14 and 30 years, respectively. However, this also provides the country a unique opportunity for economic growth and development in what is called the 'demographic dividend'.

Demographic dividend refers to a period of accelerated economic growth of a country stemming from favourable age structure of its population. A favourable age structure refers to a population with low dependency, which is the sum of both young age dependency,³ and old age dependency.⁴ In other words, a country achieves a favourable age structure when the share of working age population is higher than the share of dependents including both young and old; globally, the working age

Pakistan's Rank in Top Ten Populous Countries

Figure 7.1

population in millions

Rank	1970	1980	1990	2000	2010	2020
1	China 823 (2.6)	China 982 (1.5)	China 1154 (1.7)	China 1264 (0.7)	China 1348 (0.7)	China 1425 (0.2)
2	India 558 (2.2)	India 697 (2.3)	India 870 (2.2)	India 1060 (1.8)	India 1241 (1.4)	India 1396 (1.0)
3	USA 200 (1.2)	USA 223 (1.2)	USA 248 (1.3)	USA 282 (1.2)	USA 311 (0.9)	USA 336 (0.5)
4	Russia 130 (0.5)	Indonesia 148 (2.4)	Indonesia 182 (1.8)	Indonesia 214 (1.5)	Indonesia 244 (1.3)	Indonesia 272 (0.8)
5	Indonesia 115 (2.7)	Russia 138 (0.5)	Brazil 151 (1.8)	Brazil 176 (1.4)	Brazil 196 (0.9)	Pakistan 227 (1.7)
6	Japan 105 (1.3)	Brazil 122 (2.4)	Russia 148 (0.5)	Pakistan 154 (3.1)	Pakistan 194 (2.3)	Brazil 213 (0.7)
7	Brazil 96 (2.5)	Japan 118 (0.7)	Japan 124 (0.3)	Russia 147 (-0.3)	Nigeria 161 (2.8)	Nigeria 208 (2.5)
8	Germany 78 (0.4)	Bangladesh 84 (2.5)	Pakistan 115 (3.4)	Bangladesh 129 (1.9)	Bangladesh 148 (1.1)	Bangladesh 167 (1.2)
9	Bangladesh 68 (2.5)	Pakistan 81 (4.2)	Bangladesh 107 (2.1)	Japan 127 (0.2)	Russia 143 (0.1)	Russia 146 (-0.1)
10	Pakistan 59 (2.8)	Germany 78 (-0.2)	Nigeria 95 (2.7)	Nigeria 123 (2.6)	Japan 128 (0.0)	Mexico 126 (0.7)

Note: Values without parenthesis are total population in millions, and values in parenthesis are population growth of respective years.

Source: United Nations Population Division. World Population Prospects 2022

¹ D. Nayab, R. Haq and S. Bashir (2019). *The Dynamic of Population in Pakistan in Population Growth: Implications for Human Development, Development Advocate United Nations Development Programme Pakistan* Vol. 6 Issue 1.; A. H. Khan, L. Hasan, A. Malik and B. Knerr (1992). "Dependency Ratio, Foreign Capital Inflows and the Rate of Savings in Pakistan." *The Pakistan Development Review*, Vol. 31, No. 4. pp. 843-856; State Bank of Pakistan (2002). "Chapter 11, Socio-economic Update, in the Report of the Central Board of Directors of the State Bank of Pakistan for the year ended 30th June 2002." Karachi: SBP

² Source: United Nations Population Division. World Population Prospects 2022.

³ The proportion of persons below the age of 15 years relative to those aged 15 to 64 years (ILO)

⁴ The proportion of persons aged over 64 years relative to those aged 15 to 64 years. (ILO)

population is defined as all persons between 15-64 years of age.⁵

Evidence suggests that a rise in the share of working-age population increases per capita output growth.⁶ In East Asia, whose miraculous economic growth between 1965 and 1990 prompted an inquiry into demographic factors, the changes in age structure is estimated to have accounted for 1.4 to 1.9 percentage points of annual GDP growth per capita for the period, which is approximately about one-third of observed economic growth during the period.⁷

Demographic dividend as a window in demographic transition

An economic growth inducing age structure is set in motion after a country's population transitions from high to low birth and death rates.⁸ The transition spans several decades. First, because of gradual improvements in health, nutrition, and medical expertise,⁹ the first phase of the transition begins from a state of high birth and high death rates to a state of high birth but lower death rates leading to the creation of youth bulge in the population.

Second, over time with improved food production, sanitation, and health, infant and

child mortality rates gradually fall, leading to lower birth rates and higher life expectancy.¹⁰ Accordingly, the second phase of the transition begins from high birth and low death rate to low birth and low death rate, which helps reduce total fertility rate (TFR)¹¹ and eventually creates a favourable working age population courtesy a rapid fall in youth dependency ratio.

The end of the second phase typically marks the onset of demographic window. During this demographic window, countries may reap the naturally occurring positive spillover of low population dependency on economic growth (or the accounting effect of demographic dividend)¹² provided the TFR continues to fall rapidly. However, a much higher demographic dividend potentially accruing from favourable age structure is realized when the TFR of country continues to fall rapidly alongside the implementation of policies that enhance the productive potential of the population.¹³

The onset of demographic window is not guaranteed in every country. If, for example, death rate falls due to initial investments in health care, but the birth rate is slow to decline leading to stagnating or a slow decline in TFR, large cohorts of youth will continue in a fast-

⁵ This range is defined for international comparability given the fact that working age structure thresholds usually correspond to societal standards for education and work eligibility and are anchored in national legislation. [C. Harasty and M. Ostermeier (2020). *Population Ageing: Alternative Measures of Dependency and Implications for the Future of Work*. ILO Working Paper 5. Geneva: ILO]

⁶ R. Gomez, and P. Hernandez de Cos. 2008. Does Population Ageing Promote Faster Economic Growth? *Review of Income and Wealth*. 54(3). pp. 350– 372.; Asian Development Bank (2011). *Asian Development Outlook 2011 update*. Preparing for Demographic Transition. Manila, Philippines: ADB.

⁷ D.E. Bloom and J. G. Williamson (1998). Demographic transitions and economic miracles in emerging Asia. *The World Bank Economic Review*, 12(3), 419-455.

⁸ J. N. Gribble and J. Bremner (2012). "Achieving a Demographic Dividend." *Population Bulletin*, Vol 67. Issue No. 2.

⁹ A. R. Omran (1971). "The Epidemiologic Transition: A Theory of the Epidemiology of Population Change." *Milbank Quarterly*, 83(4):731-57

¹⁰ Infant Mortality refers to probability of dying between birth and exact age 1. It is expressed as deaths per 1,000 live births. Child Mortality or under-five mortality refers to probability of dying between birth and exact age 5. It is expressed as deaths per 1,000 births. Source: Glossary of Demographic Terms, United Nations Population Division, available at: www.population.un.org/wpp/GlossaryOfDemographicTerms/, accessed on September 26, 2022.

¹¹ TFR is expressed as number of children per woman. (For technical definition see: www.un.org/en/development/desa/population/publications/dataset/fertility/total-fertility.asp)

¹² For details, see next sub-section

¹³ D. E Bloom and D. Canning (2006). "Global Demography: Fact, Force and Future," in C. Kent, A. Park and D. Rees (eds.), *Demography and Financial Markets*, Reserve Bank of Australia.

growing population. This exposes households to risks of underinvestment in health, nutrition, skills, and education that eventually leads to higher youth dependency ratios; poverty; unemployment, or underemployment; and economic instability.¹⁴

However, if a country is able to create a demographic window through a consistent decline in TFR and realize the potential demographic dividend beyond the accounting effect, the third phase of demographic transition begins when the TFR approaches replacement ratio¹⁵, i.e. TFR of about 2.1 per woman. Eventually, when the TFR falls below the replacement rate over a period of several decades, negative population growth rate, high old-age dependency and lower share of working age population mark the end of the demographic transition as is the case with certain advanced economies such as Europe and Japan.¹⁶

In the process of transition, several potential scenarios may affect the age structure of the population, which in turn affects the scale, scope, and timing of the demographic window. For instance, these scenarios are determined by the size of the population at the beginning of the transition, the speed of the transition, and the duration to achieve it.

Fertility transitions do not follow a set time period as they reflect differences in culture, family values and traditions, social institutions, norms, ethnic divisions, religious beliefs, various forces of modernization and development, which vary from one country to another.¹⁷ Other factors that affect fertility transition of a country include: urbanization, educational level of women, high costs of marriage and child-raising, basic health services that help reduce infant and child mortality; economic development and improved living standards.¹⁸

In Europe, fertility transition has taken more than 100 years. For instance in Sweden fertility rate was 4.2 in the 1800s, which declined to only 3.8 in 1900, but dropped to 1.5 by 1980s.¹⁹ This is because of the a gradual shift in the evolution of family size preferences with the trend of delayed marriages and slow developments in health and nutritional science.²⁰ However, from 1950s onwards, fertility transitions have been faster because countries have gained the benefit of advances in human knowledge and technology. The experience of advanced economies, particularly in matters of public health and medical services, spread of education, increased women's labour force participation, as well as the beginning of family planning programmes by governments around the

¹⁴ World Bank (2010). *Determinants and Consequences of High Fertility: A Synopsis of the Evidence*. Other Health Studies. Washington D.C.: World Bank

¹⁵ Replacement rate refers to the total fertility rate (average number of children born per woman) at which a population, without migration, exactly replaces itself from one generation to the next. This rate is roughly 2.1 children per woman for most countries; however, this may vary with mortality rates.

¹⁶ C. Kenny and G. Yang (2021). *Can Africa Help Europe Avoid Its Looming Aging Crisis?* Center for Global Development Working Paper 584. Washington D.C.: Center for Global Development; K. Snopkowski, and H. Kaplan (2018). *Demographic Transition*. In *The International Encyclopedia of Anthropology*, H. Callan (Ed.).

¹⁷ H.M. Yousif (2001). *Fertility Transition: Middle East and North Africa*, in the *International Encyclopedia of the Social and Behavioral Sciences* N. J. Smelser and P. B. Baltes (Ed.)

¹⁸ United Nations, Department of Economic and Social Affairs (UN DESA), Population Division (2002). *Fertility Levels and Trends in Countries with Intermediate Levels of Fertility*. New York: UN DESA, Population Division; N.

Eberstadt and A. Shah (2011). "Fertility Decline in Muslim World: A Veritable Change, still Curiously Unnoticed.", Working Paper Series on Development Policy No. 7. Washington D.C.: The American Enterprise Institute; C. Norville and R. Gomez, and R.L. Brown (2003). "Some Causes of Fertility Rates Movements". *IIPR Insurance and Pension Reports* 03-02.; L. Lugo, A. Cooperman, E. O'Connell and S. Stencel (2011). *The Future of the Global Muslim Population, Projections for 2010-2030*, Pew Research Center, Forum on Religion and Public Life.

¹⁹ S. C. Watkins (1987). "The Fertility Transition: Europe and the Third World Compared." *Sociological Forum, Special Issue: Demography as an Interdiscipline* Vol. 2, No. 4, pp. 645-673.

²⁰ F. Willenkens (2014). *Demographic Transitions in Europe and the world*. MPIDR Working Paper WP 2014-004. Rostock, Germany: Max Planck Institute for Demographic Research

world, has also fast-tracked fertility transition.²¹

Channels of demographic dividend

The interplay between changes in a country's population age structure (due to demographic transition) and rapid economic growth originates from two channels: macroeconomic and human development. These manifest themselves through several inter-linked mechanisms, the most important of which are labour supply, savings, and human capital improvements leading to increased productivity.

The most direct impact of demographic change on economy is through the accounting effect of a favourable working age structure. Prior to demographic transition, when countries have high fertility rates and high youth dependency, the ratio of working-age population to dependent population is around 1. When the TFR falls to the replacement level, the ratio rises to 2.5 workers per dependent. Even if output per worker remains constant, the rise in share of working-age population can lead to 43 percent rise in income per capita.²²

In other words, the accounting effect happens when falling TFR slows population growth rate, leading to an increase in economic output per capita, all other things being equal. Moreover, it increases workforce per capita, primarily through two channels. At the one end, labour supply per capita increases because of more workers per dependent population. At the other end, falling TFR allows higher female labour force

participation *ceteris paribus*, which raises both labour supply, and output per capita.²³

Given that working-age adults tend to earn more than the very young and the very old, falling TFR and ensuing decrease in dependency lifts savings per capita through both channels: higher output per capita and increased labour supply.

At the micro level, lower dependents contribute to an increase in household savings that provides capital accumulation needed to finance economic growth. At the macro level, public spending otherwise needed to support an increasing population can instead be channeled to productive investments in both physical and human capital, increasing both income and savings. Moreover, longer life spans encourage the large, better-earning cohort with less dependents to increase savings to sustain themselves after retirement age.²⁴ If these savings are channeled through a well-developed formal financial sector, it potentially enables higher investments leading to productivity gains.

As a country's TFR declines over time, household and individual attitudes about education, family, retirement, the role of women, and work evolve towards greater improvements in human capital. For example, as life expectancy increases, parents are likely to choose to educate their children to more advanced levels. Likewise, higher life expectancy contributes to an increased demand for life-long learning programmes. Similarly, investments in child health and nutrition at both household and national level enable greater cognitive development per year

²¹ J. Bongaarts and S. C. Watkins (1996). Social Interactions and Contemporary Fertility Transitions. *Population and Development Review*, Vol. 22, No. 4, pp. 639-682; S. C. Watkins (1987). "The Fertility Transition: Europe and the Third World Compared." *Sociological Forum*, Special Issue: Demography as an Interdiscipline Vol. 2, No. 4, pp. 645-673.; Asian Development Bank (2019). Asian Economic Integration Report 2019/2020. *Demographic Change, Productivity, and The Role of Technology*. Manila, Philippines: ADB

²² D. Canning, R. Sangeeta, and Abdo S. Yazbeck (2015). *Africa's Demographic Transition : Dividend or Disaster?* Africa Development Forum. Washington, DC: World Bank

²³ D. Bloom and J. Williamson (1998). *Demographic Transitions and Economic Miracles in Emerging Asia*, the World Bank Economic Review, Working Paper 77274, Vol. 12. No. 3, pp. 419-455. Washington D.C.: World Bank

²⁴ A. Mason, R. Lee, J. X. Jiang (2016). "Demographic Dividends, Human Capital, and Saving." *J Econ Ageing* 106-122; R. Lee, A. Mason and T. Miller (2003). "Saving, Wealth and the Transition from Transfers to Individual Responsibility: The Cases of Taiwan and the United States," *Scandinavian Journal of Economics*, Wiley Blackwell, vol. 105(3), pages 339-358.

of schooling than their less healthy counterparts. And as labour force becomes more productive, it promotes higher incomes and savings.²⁵

However, as mentioned earlier, a favourable working age structure will not necessarily yield the full potential of demographic dividend; it only results in the accounting effect of demographic dividend. The rest of the dividend is derived from the right kind of policies and investments in population welfare and family planning; in healthcare and education that promote productivity and economic growth; good governance; competitive markets; and macroeconomic channels and factors, such as vibrant external trade, adequate mechanisms for savings and investment, and economic growth sufficient to absorb the growing working age population. It is the successful creation of this enabling environment that helps reap higher demographic dividend potentially accruing from the favourable age structure.²⁶

In the context of Pakistan, two key questions emerge from the foregoing discussion. Does Pakistan have a favourable age structure that offers the demographic dividend window of opportunity? And does it have the enabling environment that can help extract the dividend from its youth bulge? This chapter sheds light on these two themes, where the key findings are as follows. Based on different estimates, academic consensus on whether or not Pakistan's period of demographic dividend has begun does not seem to exist. But there is overwhelming evidence that Pakistan needs to decrease TFR substantially if it is to reap the demographic dividend. Second, in order to reap the dividend, large investments need to be made in education and healthcare to ensure that productivity of the

country's workforce exceeds or comes at par with competing economies. Lastly, an enabling economic environment is needed to harness the demographic dividend particularly reforms in savings and creating work opportunities for youth and for females.

Whilst recognizing that the factors that help create demographic transition and reap the demographic dividend tend to overlap and interact with each other (**Figure 7.2**), the rest of the chapter is organized as follows. The next section assesses the state of population structure in Pakistan, and factors thereof. The third section discusses how reproductive/child health and family planning creates the opportunity for demographic dividend, and the state of its affairs in Pakistan. The fourth section talks about the role of education, followed by the section on the contribution of health and nutrition. The sixth section describes the need for enabling economic environment needed to reap the demographic dividend. The last section summarizes key insights for policy deliberations.

7.2 Population Structure in Pakistan

A country's population growth depends on its birth rate, death rate, and net migration (in and out) of a country. Of these, migration does not contribute to the increase in Pakistan's population, as from 1975 to 2021, total net migration from the country stands at 16.5 million people.²⁷ Population growth, therefore, is driven by a high rate of natural increase, the difference between the number of births and deaths.²⁸

While the country's death rate has fallen over the years due to overall advancement in health care science and improvement in living

²⁵ D. E. Bloom, D. Canning and J. Sevilla (2003). *The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change*. Population Matters, a RAND Program of Policy-Relevant Research Communication. California: RAND Corporation

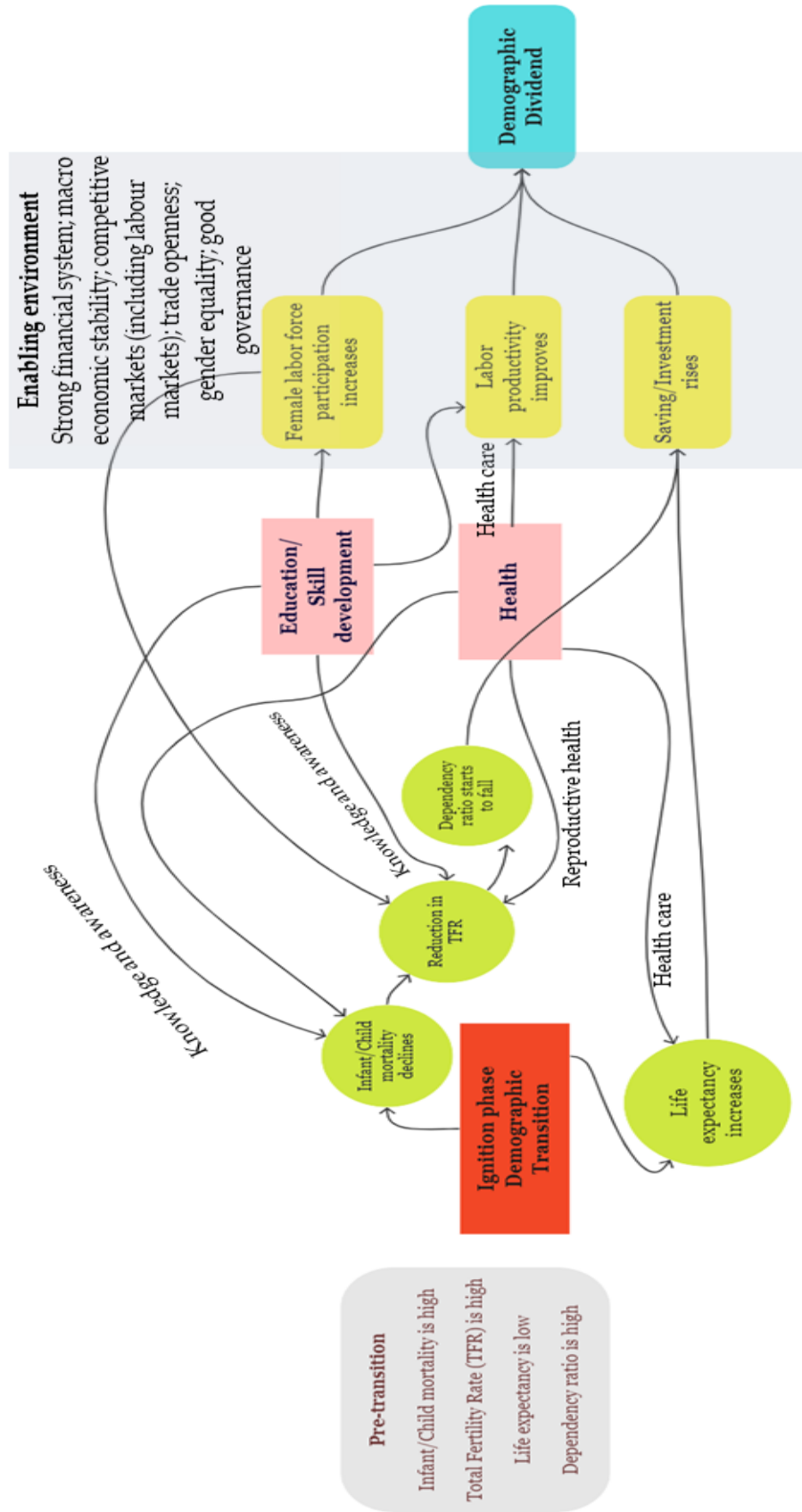
²⁶ K. Patierno, S. Gaith, and E. L. Madsen (2019). *Which Policies Promote a Demographic Dividend? An Evidence Review*. Population Reference Bureau (PRB) Project PACE: Policy, Advocacy, and Communication Enhanced for Population and Reproductive Health. Washington D.C: PRB

²⁷ The number is the sum of the annual net migration data from 1975-2021. Source: United Nations Population Division. World Population Prospects 2022.

²⁸ Death rate are mortalities per 1000 people and birth rate are births per 1000 people. TFR is different from birth rate, as it entails number of births per women.

Figure 7.2

From Demographic Transition to Demographic Dividend - An Indicative Snapshot of Key Drivers and Enablers



Note: Education and health are the primary factors that create and harness the demographic dividend.

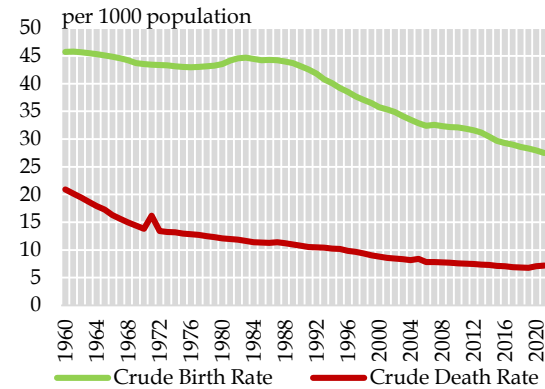
Source: SBP, based on various studies cited in this special chapter particularly (a) D.E. Bloom and J.G. Williamson (1998), Demographic transitions and economic miracles in emerging Asia. World Bank Economic Review, 12, 419-455; (b) J. Crespo Cuaresma, W. Lutz, and W. Sanderson (2014), Is the demographic dividend an education dividend?. Demography, 51(1), 299-315.

standards, the pace of decline in the birth rate has been slower (**Figure 7.3**).²⁹ This translates into an increase in the dependent population either in the form of child dependency (between ages of 0-14) or old age dependency (ages greater than 65). Due to this, among the most populous countries, Pakistan's dependent population is the highest after Nigeria (**Figure 7.4**).

Although Pakistan's dependency ratio has declined from 86.9 percent in 1980 to 70.0 percent in 2021, the pace of decline is slower than the global average and also against Pakistan's peers in South Asia (**Figure 7.5**).³⁰ The country's pace of decline has also decelerated over the last twenty years. In contrast, the dependency ratio in Bangladesh, which was higher than Pakistan's in 1980, has decreased at a much faster pace, and is now even lower than the global average.

A closer look at Pakistan's age structure reveals that the population has increased across all age groups over the last six decades, with the highest increase in the age-cohorts of 0-14 (**Figure 7.6**). This means that economic gains stemming from a growing working-age population are constrained by a large number of 0-14 dependents. The burden of high youth dependency is more significant in the poorest quintile, compared to the richest. This implies

Pakistan's Birth Rate and Death Rate **Figure 7.3**



Source: UN Population Division, *World Population Prospects 2022*.

that the rich are more likely to benefit from the favourable working age structure compared to the poor, aggravating income inequalities (**Figure 7.7**).

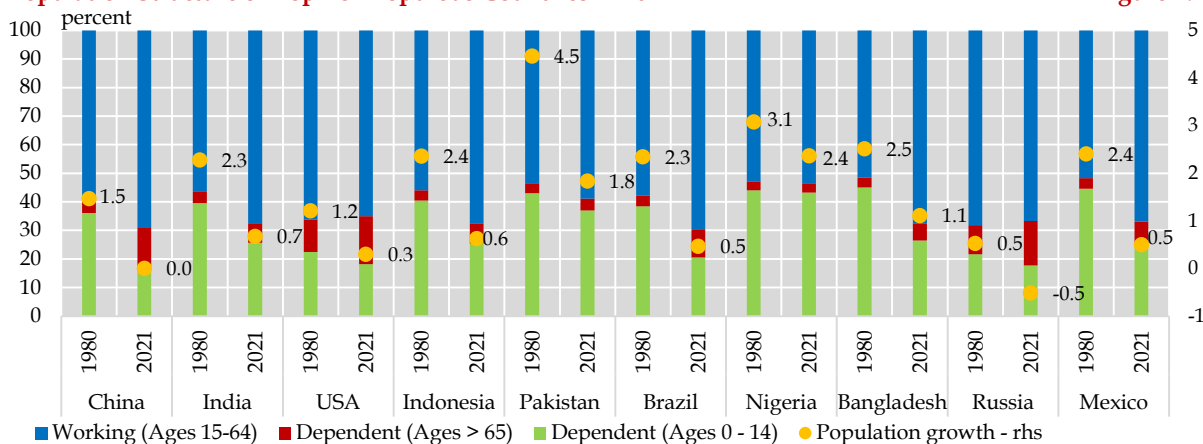
Demographic window in Pakistan

There are two main approaches to estimate the demographic window (in number of years) that offers a window of opportunity during which the dividend may accrue to a country.

According to Mason (2005), the window opens when the difference between the growth rate of working age population and total population is positive i.e., the growth rate of working age population outpaces the growth rate of total population as the decline in TFR

Population Structure of Top Ten Populous Countries in 2021

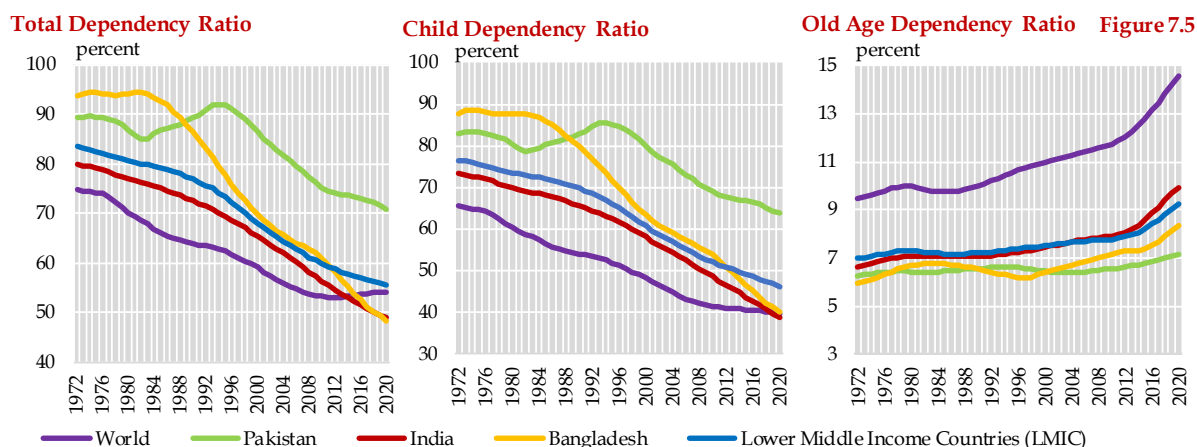
Figure 7.4



Source: UN Population Division, *World Population Prospects 2022*.

²⁹ Z. Sathar, R. Royan and J. Bongaarts (eds.) (2013). *Capturing the Demographic Dividend in Pakistan*. Islamabad: Population Council

³⁰ The dependency ratio is calculated as the dependent population (ages 0-14 plus 65 and above) over the working age population (ages 15-64).



Source: UN Population Division, World Population Prospects 2022.

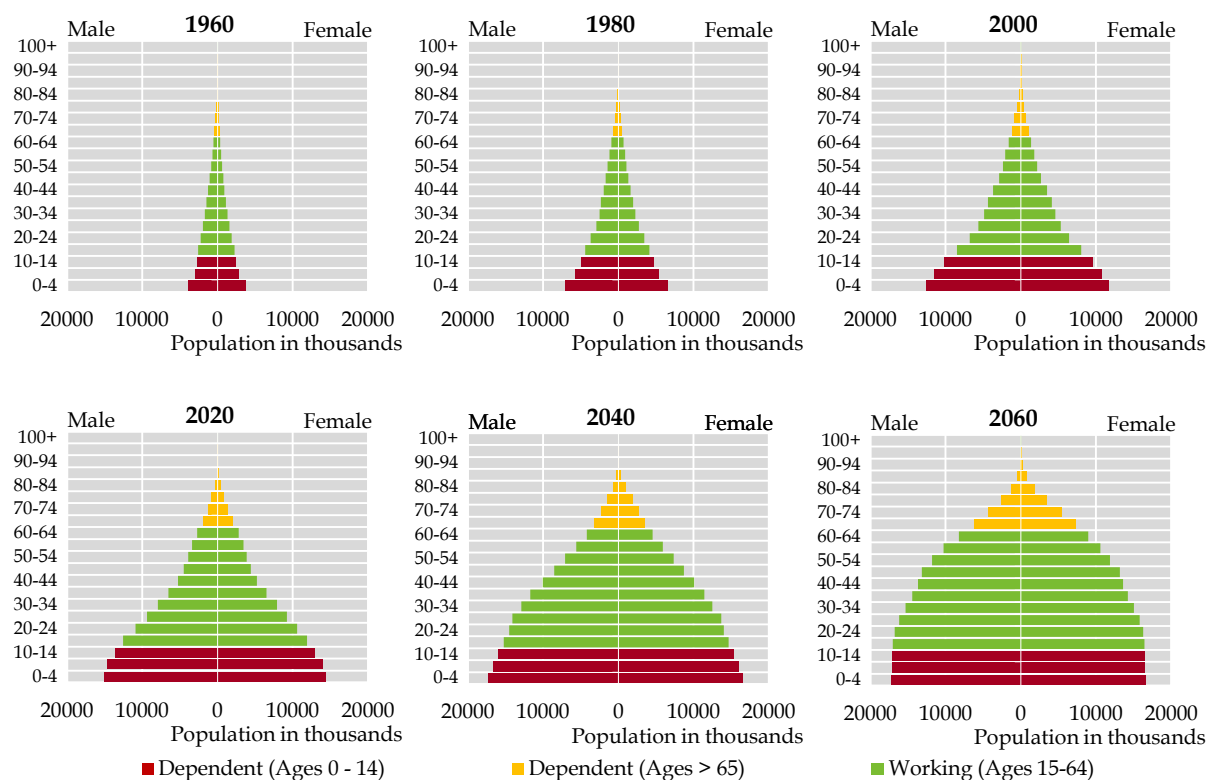
leads to lesser population in the 0-14 age cohort.³¹ Accordingly, the window shuts when the difference between the growth rates of working age population and total

population is negative; this phase is typically marked by high old age dependency.

The second approach, adopted by the United Nations Population Division relies on the

Age Structure in Pakistan

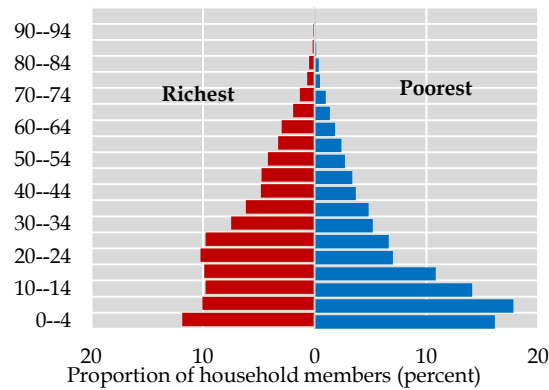
Figure 7.6



Note: Population for 2040 and 2060 are based on medium variant projections by United Nations.

Source: UN Population Division, World Population Prospects 2022.

³¹ A. Mason (2005). "Demographic Transition and Demographic Dividends in Developed and Developing Countries." *United Nations Expert Group Meeting on Social and Economic Implications of Changing Population Age Structure*. Population Division, Department of Economic and Social Affairs United Nations Secretariat. Mexico City.

Population by Wealth Quintiles in Pakistan**Figure 7.7**

Source: Pakistan Demographic Household Survey (PDHS) 2017-18

share of working age population. According to this approach, the demographic window opens when the share of the population between the ages 0-14 years falls below 30 percent, while the proportion of senior citizens (65 years and above) is still less than 15 percent.³² In 2015, every country that had reached this opportunity-creating favourable age structure had a TFR at or below three children per woman.³³ The window shuts when the decline in share of 0-14 population is

offset by the increase in +65 population, rising above 15 percent.

According to Mason's approach, the demographic window in Pakistan opened in the year 1995, and will shut by 2063, as per the UN's baseline medium variant projections of decline in fertility rate (see Box 7.1). However, if Pakistan's fertility rate remains constant around the current level, then the window is estimated to be shut by the year 2035 (Figure 7.8a).

In contrast, according to the UN's approach, Pakistan's demographic window has not yet opened; it is estimated to open in the year 2042 if the country follows medium variant of TFR decline or in the year 2035 if the TFR drops faster-than-expected at low fertility variant. However, if TFR remains constant around current levels, then demographic window may not open for a foreseeable future (Figure 7.8b).

While both Mason's and the UN's approaches to estimate the period of demographic window are followed by demographers, they have a common implication: that Pakistan needs to decrease its TFR at a fast pace.³⁴

Box 7.1: Fertility Scenario Projections by United Nations

Projections for estimating demographic window are based on different population scenarios reported in World Population Prospects 2022 (official UN population estimates), the baseline of which is called the medium variant. The medium scenario is based on historical trends in fertility, mortality, and other related factors, while also accounting for uncertainty about future changes based on the past experience of other countries under similar conditions. The medium scenario projection corresponds to the median of several thousand distinct trajectories of each demographic component derived using the probabilistic model of the variability in changes over time. This is followed by projections for different fertility scenarios that differ only with respect to the level of fertility, whereas assumptions for all other factors such as gender ratio at birth, mortality and international migration, remain the same. In the high scenario, total fertility is projected to reach a fertility level that is 0.5 births above the total fertility in the medium scenario. In the low scenario, total fertility is projected to remain 0.5 births below the total fertility in the medium scenario. In the constant-fertility scenario, total fertility remains constant at the level estimated for 2022.

Source: United Nations (www.population.un.org/wpp/DefinitionOfProjectionScenarios)

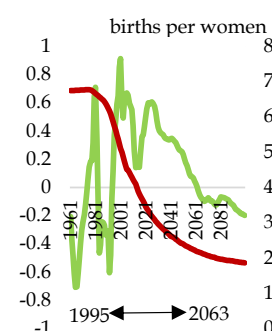
³² United Nations Population Division (2004). *World Population to 2300*. New York: United Nations Department of Economic and Social Affairs, Population Division

³³ United Nations Population Division (2017). *World Population Prospects*. New York: United Nations Department of Economic and Social Affairs, Population Division

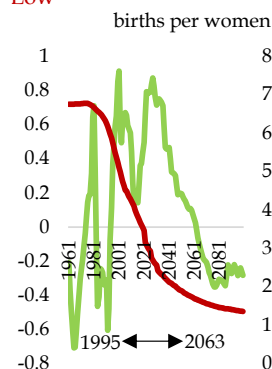
³⁴ For instance, Mason's approach is followed in "D. Nayab (2006). *Demographic Dividend or Demographic Threat in Pakistan*. PIDE Working Papers 2006:10. Islamabad: PIDE" and window calculation by "L. Crombach and J. Smith (2022). "The Demographic Window of Opportunity and Economic Growth at Sub-National Level in 91 Developing Countries." *Social Indicators Research* volume 161, pages 171-189" is built on the UN method.

Demographic Dividend with Different Fertility Variations (Mason Method)

Medium



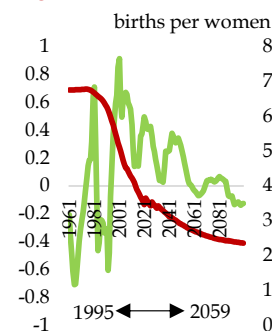
Low



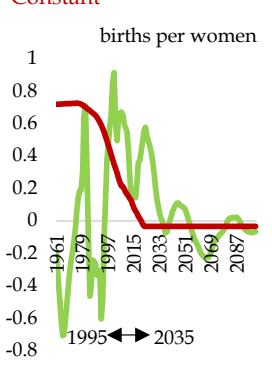
— Growth in ages of 15-64 subtracted by total population growth
— Fertility - rhs

Figure 7.8(a)

High

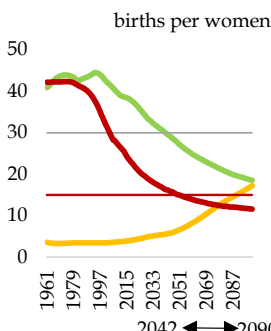


Constant

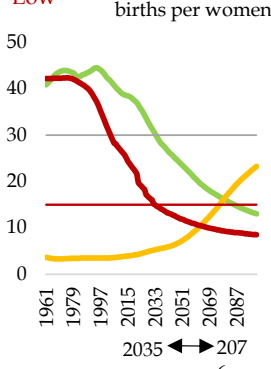


Demographic Dividend with Different Fertility Variations

Medium



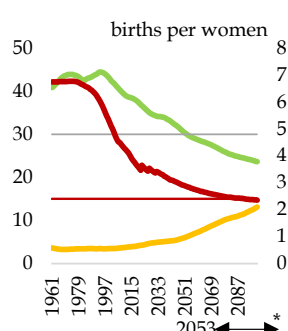
Low



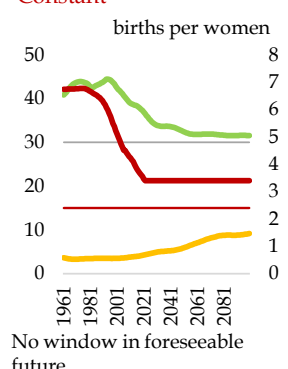
— 0-14 as percent of total population
— 65+ as percent of total population
— Fertility - rhs

Figure 7.8(b)

High



Constant



No window in foreseeable future.

Note: The arrow represents the window period. All calculations are based on different fertility variations reported by the United Nations.

* In the high fertility scenario, the end of demographic window may extend beyond year 2100; however, population projections by UN beyond 2100 are currently not available.

Source: UN Population Division. World Population Prospects 2022.

7.3 Child Health and Family Planning

Improvements in child health and family planning are two of the most critical factors for successfully attaining the fertility transition needed to achieve demographic dividend and consequently enhancing its effect on economic growth.³⁵ In addition, investment and improvement in childcare and education facilitates family planning,³⁶ which is an economic investment. Effective population policies and family planning are major

determinants of decrease in birth rates leading to a decline in the TFR,³⁷ and without the necessary decline in TFR the favourable change in working-age structure for the creation and extension of demographic window, does not ensue.

Reduction in Child and Infant Mortality Rate

The fertility transition typically starts after the mortality transition i.e. lowering of infant and

³⁵ D. E. Bloom, D. Canning and J. Sevilla (2003). *The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change*. Population Matters, a RAND Program of Policy-Relevant Research Communication. California: RAND Corporation

³⁶ Z. Sathar, R. Royan and J. Bongaarts (eds.) (2013). *Capturing the Demographic Dividend in Pakistan*. Islamabad: Population Council

³⁷ J. Bongaarts, W. P. Mauldin and J. F. Phillips (1990). "The Demographic Impact of Family Planning Programs." *Studies in Family Planning*, Vol. 21, No.6, pp. 299-310

child mortality rates. In other words, a reduced infant and child mortality rate is one of the key steps that ignite demographic transition.³⁸ In the beginning of transition, low infant mortality and high fertility rates lead to rapid population growth. However, when the decrease in infant and child mortality rate is sustained, it allows for effective family planning by ensuring a child's survival. This eventually leads to decreased fertility rate because of less number of children required to achieve the desired family size.³⁹ In turn, this improves maternal health, further improving child health, completing a virtuous cycle.

Since infant and child health is an integral part of the process, investments to improve medical care for infants is a crucial factor in realizing the dividend.⁴⁰ In addition, reducing

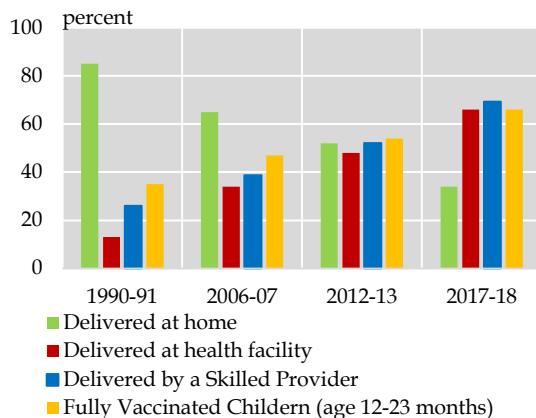
gender parity in education, health and employment can also positively affect infant and child mortality rates, as gender inequality and child mortality are positively correlated.⁴¹

Pakistan has made considerable progress in the area, as both indicators have consistently declined since 1950. The infant mortality rate has decreased from 108 deaths per 1000 live births in 1990 to 52 deaths in 2021. Similar gains have been made in under-five year mortality rate, with deaths declining from 140 per 1000 live births in 1990 to 63 in 2021.⁴²

These improvements are due to overall advancement in maternal and childcare in Pakistan (**Figure 7.9**). For instance, babies delivered at a health facility have increased from 13 percent to 66 percent of total births between 1991 and 2018. This is important considering that children who are not birthed in a health facility, face a 1.85 times higher likelihood of neonatal mortality rate (death within the first 28 days of a child's life).⁴³ Another indicator associated with decreased child mortality risk is basic vaccination coverage of children.⁴⁴ Pakistan has made progress in this area as well, with more than doubling of vaccine coverage for children of age 12-23 months since 1990.⁴⁵

Although these measures have contributed to a decrease in infant and child mortality rates, especially the initial gains during 1950-1970, the country does not compare favourably

Status of Children Health in Pakistan Figure 7.9



Source: Pakistan Demographic and Health Survey

³⁸ D. E. Bloom, D. Canning and J. Sevilla (2003). *The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change*. Population Matters, a RAND Program of Policy-Relevant Research Communication. California: RAND Corporation

³⁹ Z. Sathar, R. Royan and J. Bongaarts (eds.) (2013). *Capturing the Demographic Dividend in Pakistan*. Islamabad: Population Council

⁴⁰ D. E. Bloom, D. Canning and J. Sevilla (2003). *The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change*. Population Matters, a RAND Program of Policy-Relevant Research Communication. California: RAND Corporation

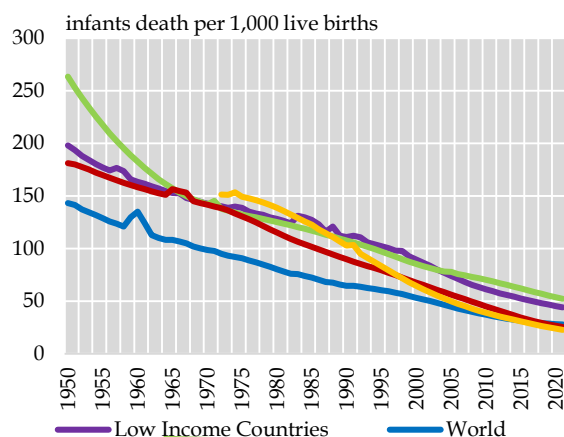
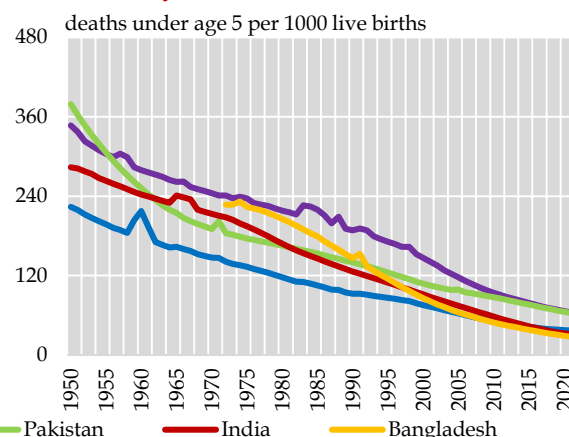
⁴¹ E.M. Brinda, A. P. Rajkumar, and U. Enemark (2015). "Association between Gender Inequality Index and Child Mortality Rates: A Cross-national Study of 138 Countries." *BMC Public Health* 15, 97.

⁴² United Nations Population Division. World Population Prospects 2022.

⁴³ J Ajaari, H. Masanja, R. Weiner, S. A. Abokyi, and S. Owusu-Agyei (2012). "Impact of Place of Delivery on Neonatal Mortality in Rural Tanzania." *International Journal of Maternal and Child Health and AIDS*, 1(1):49-59.

⁴⁴ M. E. McGovern and D. Canning (2015). "Vaccination and all-cause child mortality from 1985 to 2011: Global evidence from the Demographic and Health Surveys." *American Journal of Epidemiology* Vol. 182,9 (2015): 791-8.

⁴⁵ Basic vaccine for children 12-23 months includes BCG, three doses of DPT-HEPB-HIB, four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, and one dose of measles. (Source: PDHS 2017-18)

Infant Mortality Rate**Child Mortality Rate****Figure 7.10**

Source: UN Population Division, World Population Prospects 2022.

relative to regional and global average (**Figure 7.10**). Pakistan belongs to the group of low-middle income countries; however, its child mortality rate is close to that of low-income countries whereas infant mortality is even higher.⁴⁶ The country's progress has also been slow compared to its South Asian neighbors.⁴⁷

One of the reasons for elevated child mortality rate in Pakistan is high-risk fertility behaviors in which children face an increased probability of dying. There are three main high-risk scenarios: age of mother if it's below 18 or above 34 years; children born in less than two years of preceding birth; and the birth order of a child i.e., if a mother has already given birth to 3 or more children before, then successive children will be more prone to mortality risk. Collectively these risks are referred to as avoidable high-risk categories. In Pakistan, the percentage of births in any high-risk category is 56 percent of total births,⁴⁸ which is much higher compared to 32.6 percent and 31.3 percent in Bangladesh and India, respectively.⁴⁹

Out of the three sub-categories, 19.3 percent of births in Pakistan were at high mortality risk due to their higher birth order (**Figure 7.11**), which is mainly because of the preference for large family size in Pakistan. According to Pakistan Demographic and Health Survey (PDHS) (2017-2018), the number of children ideally desired by men (on average) in Pakistan is 4.3, and by women is 3.9. The second reason after high birth order is birth spacing, as 18.1 percent of children were born within 24 months of their immediate elder sibling. In Pakistan, the child mortality rate for children within 2 years of last birth stands at 122 deaths per 1000 live births, whereas the mortality rate for children born with an interval of more than 4 years since the last birth is 44 per 1000 live births.

Family Planning

The role of family planning is critical to bring about structural changes in the age dynamics required to attain the demographic dividend. In addition to the decline in infant and child mortality rates, family planning is the starting point of demographic transition as investment

⁴⁶ All income groups are as per World Bank's definition.

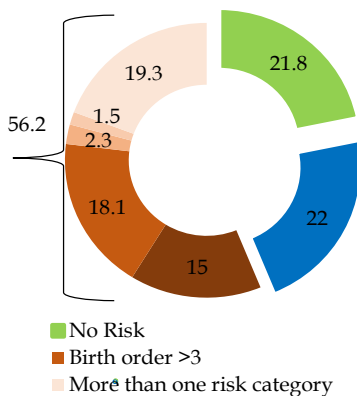
(www.datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups accessed on 01st June, 2022)

⁴⁷ United Nations Population Division. World Population Prospects 2022.

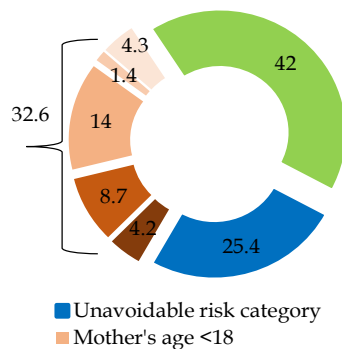
⁴⁸ National Institute of Population Studies (2019). *Pakistan Demographic and Health Survey (2017-18)*. Islamabad: NIPS

⁴⁹ National Institute of Population Research and Training (2020). *Demographic and Health Survey (2017-18)*. Dhaka: National Institute of Population Research and Training; International Institute for Population Sciences (2017). *India National Family Health Survey 2015-16*. Mumbai: International Institute for Population Sciences.

High-risk Fertility Behaviour Pakistan



Bangladesh



India

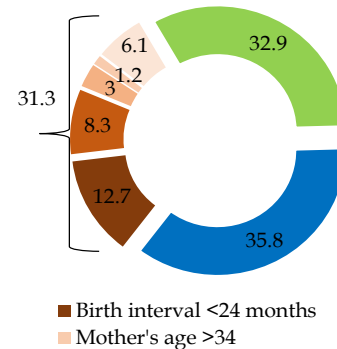


Figure 7.11

Source: Pakistan Demographic and Health Survey 2017-18, Bangladesh Demographic and Health Survey 2017-18 and India National Family Health Survey 2015-16.

in reproductive health triggers the changes in the demographic structure. It leads to a decrease in desired family size and empowers couples to plan their family effectively.⁵⁰

Since effective family planning leads to a decline in TFR and allows women to participate in the workforce actively,^{51,52} the successful implementation of a family planning program (FPP) is an essential accelerator of the fertility transition.⁵³ One aspect of the FPP is to increase awareness and education about reproductive health. This, for instance, includes interventions targeted at achieving a delay in the first birth, which can

help improve infant health.⁵⁴

Another aspect of the FPP includes increasing the use of contraceptives. Governments in many East Asian economies that harnessed the demographic dividend promoted the use of contraceptives to tackle a slow decline in TFR. These countries successfully executed the plans mainly because of a clear emphasis on family planning, funding from the government for FPPs, the public sector's willingness to engage with organisations in the private sector, and no active opposition from civil society (Box 7.2).⁵⁵

Box 7.2: Successful Family Planning Programs

Iran

The country's first FPP was launched in 1967; however, it became dysfunctional after 1979. Due to the high economic cost of rapid population growth, Iran reintroduced FPP in 1989. In 1989, Iran's fertility rate was 5 births per woman, which dropped to 2.1 by the year 1999.^a The country categorized its FPP into three main goals: delaying first pregnancy, discouraging births for women under 18 or more than 35 years old, and limiting the family size to three children. It gave full authority and resources to the ministry of health and medical

⁵⁰ T. H. Tulchinsky and E. A. Varavikova (2014). "Family Health" in T.H. Tulchinsky and E.A. Varavikova (eds), *The New Public Health* (Third Edition).

⁵¹ Ibid

⁵² K. Patierno, S. Gaith, and E. L. Madsen (2019). *Which Policies Promote a Demographic Dividend? An Evidence Review*. Washington D.C.: Population Reference Bureau

⁵³ J. DaVanzo, D. M. Adamson (1998). *Family Planning in Developing Countries: An Unfinished Success Story*. Issue Paper, Document No. IP-176. California: Rand Corporation

⁵⁴ J. N. Gribble and J. Bremner (2012). *Achieving A Demographic Dividend*. Population Bulletin Vol. 67, No. 2. Washington D.C.: Population Reference Bureau.

⁵⁵ A. Mason (2003). "Population Change and Economic Development: What Have we Learned from the East Asia Experience?" *Applied Population and Policy* 2003:1(1) 3-14

education to lead the FPP and ensure free reproductive service to everyone. To discourage more than three children, allowances given to large families were discontinued, and any government benefits were limited to the first three children.

Iran also used “health houses” present in rural areas. Since these were staffed by locals, it made communication and the spread of information easier. One additional function of people working in the health houses was to compile population data every year and gather information on TFR and the use of contraceptives at the local level. Education and awareness also remained one of important features of Iran’s FPP. For instance, all university graduates must take a two-credit hour course on family and population planning. Similarly, family planning education is also a part of the country’s curriculum for adult literacy programs. The requirement to complete a family planning course before the couples can receive their marriage license was also started.^b

Bangladesh

Bangladesh had family planning activities at the time of its creation, which it continued by shifting decision-making from the Family Planning Board and the Council to the Ministry of Health and Family Planning in 1972.^c The country has successfully executed its family planning policy, leading to a decline in its fertility rate from 6.8 births per woman in 1972 to 2 births per woman in 2021 (**Figure 7.2.1**).^d Bangladesh has achieved this “reproductive revolution” despite the challenges of illiteracy and the prevalence of trends like early marriage and son preference. The success is due to a carefully designed FPP that acknowledged the inequalities and social norms. It employed women to educate and deliver contraceptives to females in their homes. This strategy has also increased the contraceptive prevalence in rural areas of Bangladesh.^e

Indonesia

At the onset of the family planning program in 1970, the majority of Indonesians were financially constrained, and the literacy rate was also low. However, despite these challenges, the country successfully implemented the FPP program without active opposition from religious groups and other sections of civil society. Indonesia’s FPP now serves as a role model for developing countries. A separate institute, Indonesia National Family Planning Coordination Board, was formed in 1970, which reported directly to the president and remained responsible for FPP implementation. The country’s contraceptive prevalence rate was 8.6 percent in 1973, which increased to 50 percent in 1991.^f Resultantly, its fertility rate declined from 5.4 births in 1970 to 3.1 births in 1991.^g

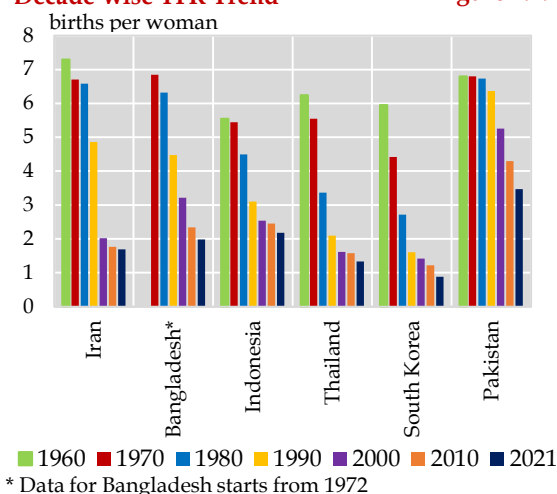
The country’s FPP focused on areas with high population density and moved towards low-density regions. In villages, it executed the family planning with the help of volunteers, leading to strong community support and awareness and reducing apprehensions. The services were mainly free and provided by the government in the villages. In contrast, family planning was a charged service in urban centres, and the government engaged the private sector to deliver it. The program followed a clear set of quantitative targets, for instance, halving of birth rate between 1970-2030, and used mass media with creative slogans to market family planning.^{h,i}

Thailand

After a pilot project, Thailand officially adopted its National Family Planning Program (NFPP) in 1970. The country successfully increased the contraceptive prevalence rate from 14.8 percent in 1970 to 53.4 percent in 1978.^j This led to a fertility decline from 5.6 births per woman in 1970 to 3.7 births in 1978. By 1990, the country had reached the replacement fertility rate of 2.1 births. Multiple factors made Thailand’s FPP a success. The Ministry of Public Health in Thailand performed the function of the central organisation in implementing the NFPP. The program closely engaged the private sector, with the private sector actively motivating people to use family planning services. Multiple NGOs complimented the government’s efforts by educating people and promoting contraceptives with the support of volunteers from teaching, farming and shop keeping community. This support from civil society organisations contributed to the country achieving its family planning targets.^k

Decade-wise TFR Trend

Figure 7.2.1



Source: United Nations Population Division. World Population Prospects 2022

South Korea

South Korea decreased its fertility rate from 6.1 births per woman in 1960 to 0.8 births in 2020 by prioritizing FPP. Contraceptive prevalence in the country increased from 16 percent in 1965 to 82.3 percent in 2018. It promoted reproductive education through health centres but made major headways with door-to-door visits by health care workers.¹ The country also actively engaged players from non-government sectors.

References

- ^aSource: United Nations Population Division. World Population Prospects 2022.
- ^bF. R. Fahimi (2002). *Iran's Family Planning Program: Responding to a Nation's Needs*. MENA Policy Brief No.2. Washington D.C.: Population Reference Bureau
- ^cSource: Directorate General of Family Planning, Health Education and Family Welfare Division, Ministry of Health and Family Welfare (www.dgfp.gov.bd/site/page/ca81e7a3-33dd-442b-90bc-da21a34a0c13/-, accessed on September 09, 2022)
- ^dD. E. Bloom, D. Canning and J. Sevilla (2003). *The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change*. Population Matters, a RAND Program of Policy-Relevant Research Communication. California: RAND Corporation
- ^eS. R. Schuler, S. M. Hashemi, and A. H. Jenkins (1995). "Bangladesh's Family Planning Success Story: A Gender Perspective." *International Family Planning Perspectives*, 21:132-137 & 166.
- ^fSource: World Bank
- ^gSource: United Nations Population Division. World Population Prospects 2022.
- ^hL. B. Curtin, C. N. Jhonson, A. B. Kantner, and A. Panilaya (1992). *Indonesia's National Family Planning Program: Ingredients of Success*. Population Technical Assistance Project Occasional Paper do. 6. Washington D.C.: USAID.
- ⁱD. P. Warwick (1986). "The Indonesian Family Planning Program: Government Influence and Client Choice." *Population and Development Review*, Vol. 12, No. 3, pp. 453-490.
- ^jSource: World Bank
- ^kH. J. Rutz (1989). "Adoption and Diffusion Theories used in Thailand's Family Planning Program." *Retrospective Theses and Dissertations*, 17305.
- ^lJ. N. Gribble and J. Bremner (2012). *Achieving A Demographic Dividend*. Population Bulletin Vol. 67, No. 2. Washington D.C.: Population Reference Bureau.

In Pakistan, the fertility rate remained high between 1950 to 1979 at around 6.8 births per woman. This is despite Pakistan being one of the first Asian countries to have family planning activities.⁵⁶ The family planning initiative was first taken by an NGO, the Family Planning Association of Pakistan, in 1953. Under the first 5-year plan, the government supported family planning by issuing small grants to volunteers working in the private sector.⁵⁷

During the 1960-65, under the second five-year plan, a mechanism for implementing family planning was envisioned. The plan included the formation of clinics under the then existing health infrastructure in the country. It laid emphasis on the training of health professionals and education of the masses by using media platforms and engaging NGOs.

The third plan provided formal institutions focusing on the subject in the form of Family Planning Council at the federal level and Family Planning Boards at the provincial level (**Figure 7.12**).⁵⁸

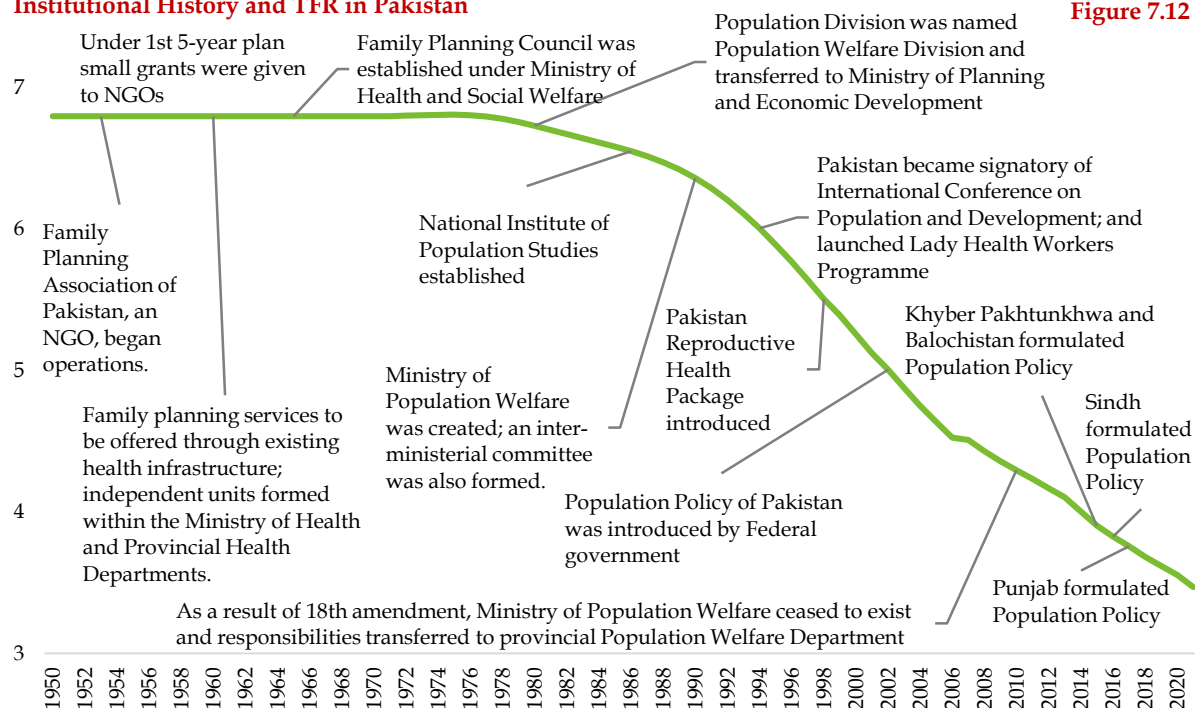
Although these efforts provided initial infrastructure and mainstreamed some channels through which an FPP can be implemented, they did not bring any visible changes in fertility rates. In the decade following the third plan, the government took no significant initiatives to further family planning in the country.⁵⁹ This is also reflected in the contraceptive prevalence rate, which, between 1975 to 1980, dropped from 5.4 to 3.3, the lowest ever in the country's recorded history (**Figure 7.13**)

⁵⁶ J. B. Casterline, Z. A. Sathar, and M. Haque (2001). "Obstacles to Contraceptive Use in Pakistan: A Study in Punjab." *Studies in Family Planning* 32[2]: 95-110.

⁵⁷ W. C. Robinson (1966). "Family Planning in Pakistan's Third Five Year Plan." *The Pakistan Development Review* Vol. 6, No. 2 (SUMMER 1966), pp. 255-281

⁵⁸ Ibid

⁵⁹ Source: Population Welfare Department, Government of Punjab available at www.pwd.punjab.gov.pk/history, accessed on 06 June, 2022.

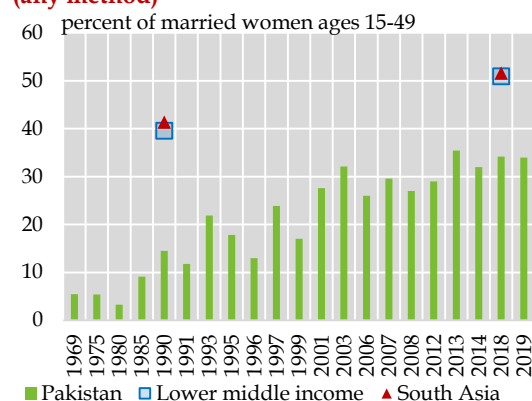
Institutional History and TFR in Pakistan

Source: UN Population Division. World Population Prospects 2022; Population Welfare Department, of Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan; W. C. Robinson (1966). "Family Planning in Pakistan's Third Five Year Plan." *The Pakistan Development Review* Vol. 6, No. 2, pp. 255-281; N. Mahmood and D. Nayab and A. Hakim (2000). "An Analysis of Reproductive Health Issues in Pakistan." *The Pakistan Development Review*, Vol. 39, No. 4, pp. 675-693

In 1990, the Ministry of Population Welfare was formed. In 1994, Pakistan also became a signatory of the International Conference on Population and Development and later introduced Reproductive Health Package, focusing on family planning as well as maternal and infant health.⁶⁰

These initiatives are a few reasons for a visible increase in contraceptive prevalence from 11.8 percent in 1991 to 32.1 percent in 2003 and a rapid decline in the fertility rate during the same period. Another factor that accelerated the pace of fertility decline during the 1990s was the hiring of Lady Health Workers (LHW). The LHW provided the awareness and family planning services at community level.⁶¹ In 2002, Pakistan issued its Population Policy, which aimed at achieving a TFR of 2.1

by 2015.⁶² However, the policy did not achieve its targets, as the TFR declined to 3.5 by 2021 from 5 in 2002.⁶³

Pakistan's Contraceptive Prevalence (any method)

Source: World Bank

⁶⁰ N. Mahmood and D. Nayab and A. Hakim (2000). "An Analysis of Reproductive Health Issues in Pakistan." *The Pakistan Development Review*, Vol. 39, No. 4, pp. 675-693

⁶¹ A. Hafeez, B. K. Mohamud, M. R. Shiekh, S. A. I. Shah, and R. Jooma Lady Health Workers Programme in Pakistan: Challenges, Achievements and the Way Forward. *J Pak Med Assoc.* 61(3):210-5.

⁶² Ministry of Planning Development and Reform (2013-18). Chapter 4: Population, in 11th Five Year Plan 2013-18. Islamabad: Planning Commission, Ministry of Planning Development and Reform

⁶³ United Nations Population Division. World Population Prospects 2022.

Provincial Population Policy

Figure 7.14

	KP 2015		Balochistan 2015		Sindh 2016		Punjab 2017	
	Target	Target Year	Target	Target Year	Target	Target Year	Target	Target Year
Fertility Rate	2.1	2032	2.1	2040	2.1	2035	2.1	2030
	3.3	2020	4	2020	3	2020	3.3	2020
Universal Reproductive Health & Family Planning	-	2020	-	2020	-	2020	-	2025
Contraceptive Prevalence Rate	42	2020	25	2020	45	2020	60	2030

Source: Population Welfare Department of Khyber Pakhtunkhwa (KP), Balochistan, Sindh and Punjab.

Under the 18th amendment, population planning became a provincial subject, which led to the dissolution of the Ministry of Population Welfare and the transfer of responsibility to the provincial Population Welfare Departments. The provinces of Khyber Pakhtunkhwa (KP), Sindh, and Punjab have announced their population policies with the revised targets (Figure 7.14). Punjab's TFR, despite being higher than its target, is the lowest among the four provinces, reflecting highest use of contraception. (Figure 7.15a and b).

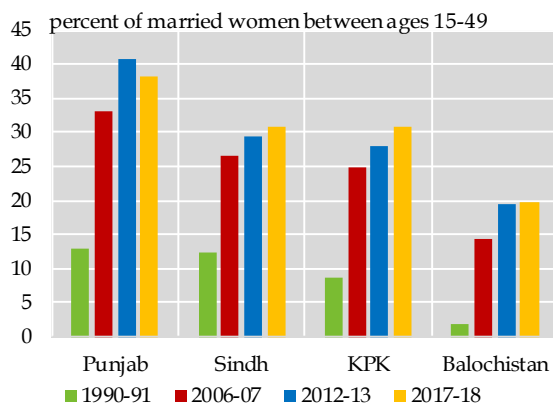
From the perspective of wealth quintiles, the TFR declines with increasing level of income (Figure 7.16). The lowest and highest quintile difference is 2.1 births per woman; the same

difference is 0.6 and 1.7 for Bangladesh and India respectively. This shows a stark fertility variation between the poorest and the richest in the country. Further, the fertility rate for even the highest income quintile of Pakistan is higher than the first (poorest) and second income quintiles of Bangladesh and India, respectively. The country's overall fertility rate is also the highest among the top ten populous countries in the world, except for Nigeria (Figure 7.17).

Moreover, wanted fertility in Pakistan is also high.⁶⁴ Pakistan's wanted fertility rate was 2.9 births per woman in 2017-18. In comparison, Bangladesh's rate was 1.7 in 2017-18, and India's rate was 1.8 in 2016-17. High wanted fertility shows a preference for large family

Province-wise Contraception Use

Figure 7.15a

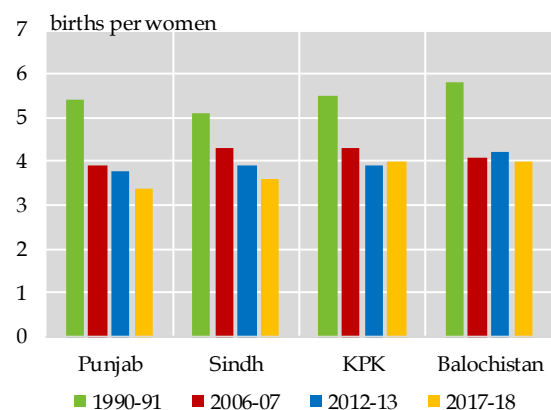


Note: For 1990-91 and 2006-07 Punjab includes data for Islamabad as well.

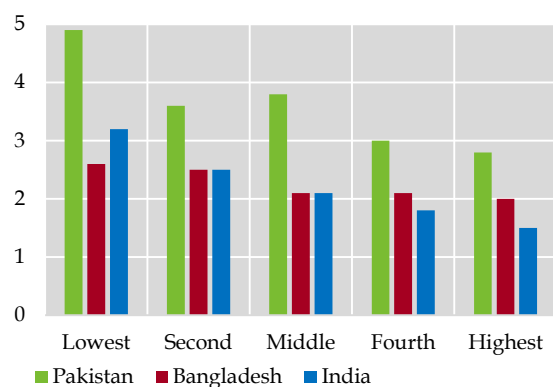
Source: Pakistan Demographic and Household Survey (PDHS)

Province-wise Fertility Rate

Figure 7.15b



⁶⁴ Wanted births refers to any birth fewer than or equal to the number of children a woman reports as her ideal number. Wanted fertility rate refers to the average number of children a woman would have by the end of her childbearing years at current fertility rates, excluding unwanted births (any birth in excess of the number of children a woman reported as her ideal number). Source: PDHS 2017-18 (For technical definition see PDHS 2017-18, available at www.dhsprogram.com/pubs/pdf/FR354/FR354.pdf)

Wealth Quintile-wise Fertility Rates Figure 7.16

Note: Data for Pakistan and Bangladesh is for 2017-18 and for India 2015-16.

Source: Pakistan DHS, Bangladesh DHS and National Family Health Survey, India

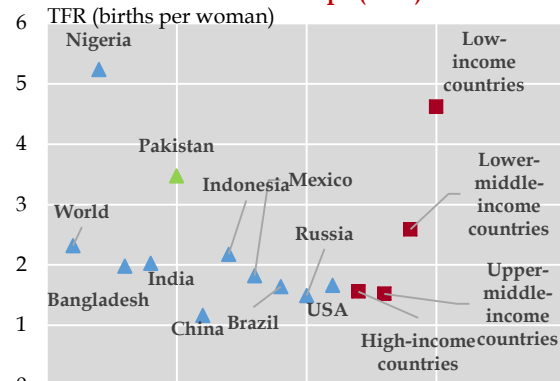
sizes. It is worth pointing out that wanted fertility rate and total fertility rate decrease with increasing level of education. As per (PDHS 2017-18), wanted fertility is 3.5 for parents with no education as against 2.25 for parents with higher education.

7.4 Role of Education

Education has a significant role to play in both driving the demographic transition towards a demographic window and harnessing that window into a demographic dividend. In the former context, education helps lower the TFR. In the latter context, education contributes to an increase in labour force participation, labour productivity, use of technology, and innovation.⁶⁵

Creating the desired age structure

Education, particularly female education, helps bring about the desired age structure by lowering the TFR through two channels: (a) by reducing infant and child mortality, which, as discussed earlier, ignites fertility transition; and (b) by informed family planning

TFR across Top Ten Populous Countries and Income Groups (2021) Figure 7.17

Note: Income groups are as per World Bank definition.

Source: UN Population Division. World Population Prospects 2022.

decisions.

In the case of former, educated mothers are better informed about specific diseases; they can identify early signs of illness and seek immediate medical advice; and thus, reduce child mortality. Simple measures like ensuring clean water and malaria nets can mitigate the risks from preventable life-threatening diseases, such as malaria and diarrhea. Pneumonia, the deadliest cause of child mortality, is estimated to be curtailed by 14 percent if women had just one additional year of education. Similarly, diarrhea, is expected to drop by 8 percent if all mothers are literate up to primary level education; this can further be reduced by 30 percent if they completed secondary education.⁶⁶ Moreover, reducing differences in education provided to women and men by 10 percent can lead to 59.5 fewer maternal deaths per 1000 live births and can increase the life expectancy of females and males by 2.1 and 1 year, respectively.⁶⁷ Education also lowers the preference to have a son, which is one of the factors behind higher

⁶⁵ N. G. Mankiw, D. Romer, and D. W. Weil (1992). "A Contribution to the Empirics of Economic Growth." *Quarterly Journal of Economics*, 107, 407-437.; J. Benhabib and M. Spiegel (2005). "Human Capital and Technology Diffusion." In P. Aghion and S. Durlauf (Eds.), *Handbook of Economic Growth* Vol. 1, pp. 935-966. Amsterdam, The Netherlands: Elsevier.

⁶⁶ UNESCO (2013). *Education Transforms Lives*. ED.2013/WS/25. Paris: UNESCO

⁶⁷ J. Heymann (2020). Gender parity at scale: "Examining correlations of country-level female participation in education and work with measures of men's and women's survival." *eClinicalMedicine*, Vol. 20.

TFR in many developing countries.⁶⁸

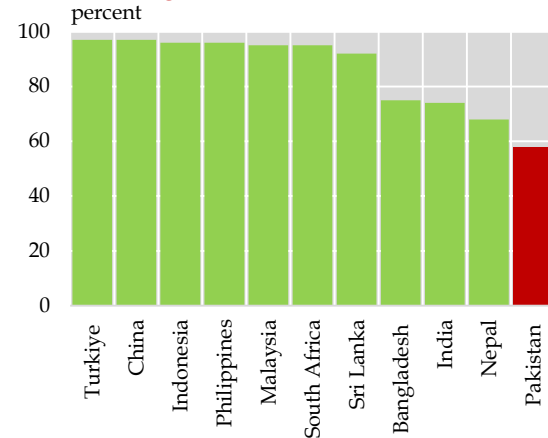
In the case of latter, educated couples have a better understanding of family planning, as well as higher use of contraception. Moreover, educated females are relatively more autonomous in taking reproductive decisions.⁶⁹ Evidence from sub-Saharan Africa shows 2.6 births among women with higher education, compared to 4.2 births among women without education.⁷⁰ Moreover, the number of children born is noticeably lower when women are educated beyond the primary level.⁷¹ For instance, secondary education of mothers is found to be an important driver for reducing the fertility rate and child malnutrition in Bangladesh.⁷² Similarly, a study based on a tribe in the Indian state of Assam finds that women's education and fertility have positive relation up to 5.3 years of education level. After this tipping point, education and fertility are negatively correlated. The TFR reaches a replacement rate when graduate-level education is achieved.⁷³

In addition to lowering fertility rates through aforementioned channels, educational attainment also lowers the TFR through the channel of labour force participation, particularly female participation in the labour market.⁷⁴ Women who are part of the workforce tend to have fewer children keeping in view the management of work, resources,

and childbearing as well as the need to investment in child's health and education.⁷⁵ In turn, with lower fertility rates more females are motivated to join the work force that spurs economic growth.⁷⁶

In Pakistan's context, there is a need to improve basic education at primary and secondary levels for the country to be able to create the desired age structure for demographic window. Adult literacy rate in Pakistan is low compared to other peer economies (**Figure 7.18**) where literacy⁷⁷ rate for females is 46 percent out of the adult female population (aged 15 years plus) against

Adult Literacy Rate* (percent of people with age 15 and above) **Figure 7.18**



* Latest values ranging between year 2018 and 2020

Source: World Bank

⁶⁸ N. Tavassoli (2021). "The Transition of Son Preference: Evidence from Southeast Asian Countries." *Economics*, Vol.9, no.1, 2021, pp.43-67.

⁶⁹ J. Bongaarts, (2010). "The causes of educational differences in fertility in Sub-Saharan Africa." *Vienna Yearbook of Population Research*, 31-50.

⁷⁰ H. Groth, J. F. May, and V. Turbat (2019). "Policies needed to capture a demographic dividend in Sub-Saharan Africa." *Canadian Studies in Population*, 46(1), 61-72.

⁷¹ D. Canning, R. Sangeeta, and Abdo S. Yazbeck (2015). *Africa's Demographic Transition : Dividend or Disaster?* Africa Development Forum. Washington, DC: World Bank

⁷² S. El-Saharty, S. Chowdhury, N. Ohno, and I. Sarker(2016). *Improving Maternal and Reproductive Health in South Asia: Drivers and Enablers*. World Bank Studies. Washington D.C.: World Bank

⁷³ *ibid*

⁷⁴ W. G. Bowen, and T. A. Finegan (1966). "Educational attainment and labor force participation." *The American Economic Review*, 56(1/2), 567-582.

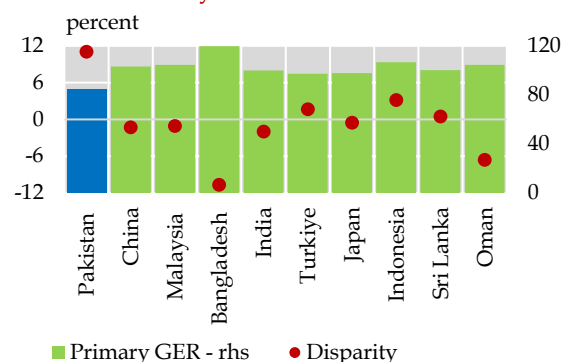
⁷⁵ O. Galor and D. N. Weil (1999). "From Malthusian stagnation to modern growth." *The American Economic Review*, 89(2), 150-154.

⁷⁶ D. E. Bloom, D. Canning, G. Fink, and J. E. Finlay (2009). "Fertility, Female Labor Force Participation, and the Demographic Dividend." *Journal of Economic Growth*, 14(2), 79-101.

⁷⁷ According to PBS, literate is defined as the person who can read and write in any language.

Gender Disparity in Gross Enrollment Ratio (GER) of Male and Female Students at Primary Level

Figure 7.19



*Note: Difference is calculated as Male value minus Female values. Positive value means female GER < Male GER. Latest values ranging between year 2018 and 2020

Source: World Bank and Pakistan Social And Living Standards Measurement

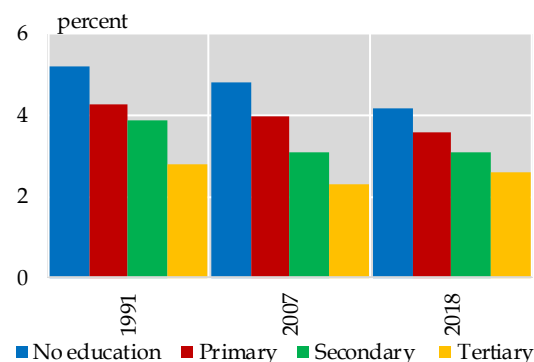
68 percent in the case of male population.⁷⁸

While the gender differences in education especially at the primary level are narrowing down globally,⁷⁹ the differences between male and female students in the gross enrollment ratio (GER)⁸⁰ at the primary level remained highest in Pakistan in comparison to other regional economies (Figure 7.19). Around 27 percent of female children at primary school age are not going to school as compared to 19 percent male children.⁸¹

Moreover, there are large gaps in educational attainment across rich and poor. The poorest segment of the country accounts for around 51 percent of the children of primary school age who are out of school against 4 percent of the richest group.⁸² About 75 percent of the poorest youth of upper secondary school age

Total Fertility Rate by Educational Attainment in Pakistan

Figure 7.20a



Excludes Azad Jammu and Kashmir and Gilgit Baltistan

Source: Population Council and PDHS 2017-18

is not in school; whereas, under the richest group, 14 percent of the youth of upper secondary school age is out of school.⁸³

Considering that education, particularly female education, leads to lower TFR, such a high degree of children with no and little education has two implications. First, it implies that unless significant investments are made in education the TFR will decline slowly in Pakistan (Figure 7.20a). Second, it implies that income and wealth inequality is at risk of perpetuating since the affluent and educated have less TFR and thus benefit from favourable age structure compared to the poor (Figure 7.20b).

Harnessing the Demographic Dividend

In macroeconomic theory, education is one of the most important determinants of economic growth,⁸⁴ mainly through the channel of labour productivity, which contributes to growth in incomes.⁸⁵ Accordingly, a large part

⁷⁸ Pakistan Bureau of Statistics (2020). *Pakistan Social and Living Standards Measurement*. Islamabad: PBS

⁷⁹ World Economic Forum (2021). *Global Gender Gap Report*. Switzerland: WEF

⁸⁰ Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education.

⁸¹ United Nations Educational, Scientific and Cultural Organization. *World Inequality Database on Education*. Paris: UNESCO

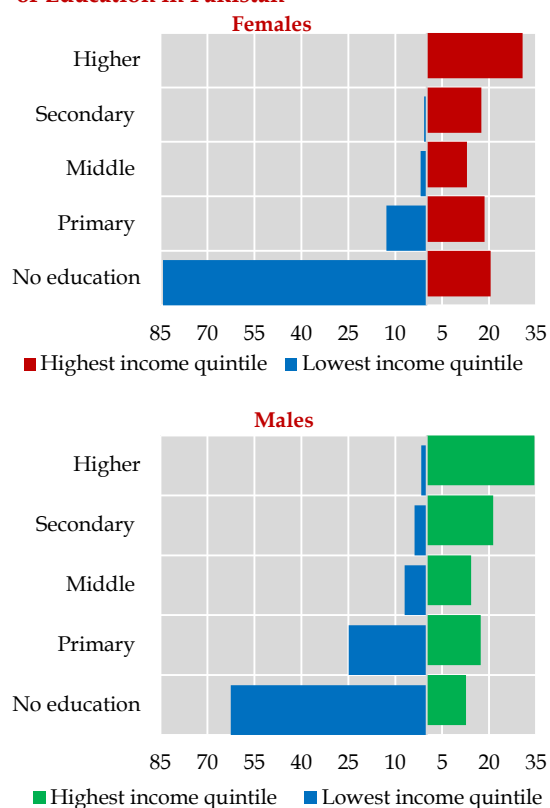
⁸² United Nations Educational, Scientific and Cultural Organization. *World Inequality Database on Education*. Paris: UNESCO

⁸³ *ibid.*

⁸⁴ E. A. Hanushek, E. A. and L. Woessmann (2010). "Education and economic growth." *Economics of Education*, 60, p.67.

⁸⁵ G. H. Sahlgren (2014). *Incentive to Invest: How Education Affects Economic Growth*. London: Adam Smith Institute, 1, 2016.

Percentage of Population by Level of Education in Pakistan **Figure 7.20b**



Source: Pakistan Demographic and Health Survey 2017-18

of the demographic dividend is in essence an education dividend.⁸⁶

Cross country evidence suggests that primary and secondary education accelerates the trajectory of economic growth.⁸⁷ During their demographic transition of 1965-1980, East

Asian economies, consistently made significant public investments in primary and secondary education to serve large segments of the population that otherwise would have been deprived of access to education.⁸⁸ In addition to sharp improvements in primary and secondary enrollment rates through the achievement of universal primary education,⁸⁹ the East Asian economies also invested in the quality of education enabling their students to consistently outperform standardized international exams.⁹⁰ Furthermore, educational policies that focused on basic education (at primary and secondary levels) also lead to improvements in labour force skills of these economies.⁹¹

Unlike East Asian economies, the demographic transition proved to be a bane in the Middle East and North Africa, and Sub-Saharan Africa where governments did not prioritize spending on education. As a result, the regions faced low levels of primary education and secondary enrollment, and high levels of youth unemployment.⁹² This exposed the young population to lifelong economic vulnerability and inter-generational poverty.⁹³ Indeed, increased government spending is strongly related to higher enrollment rates (**Figure 7.21a**), and the average number of years of formal education (**Figure 7.21b**)

While basic education (primary and secondary) is a necessary condition to begin

⁸⁶ J. Crespo Cuaresma, W. Lutz, and W. Sanderson (2014). "Is the Demographic Dividend an Education Dividend?" *Demography*, 51(1), 299-315.

⁸⁷ R. J. Barro (1997). *Determinants of Economic Growth: A Cross-country Empirical Study*. Development Discussion Paper No. 579. Harvard Institute for International Development. Massachusetts: Harvard University.

⁸⁸ World Bank (1993). *The East Asian Miracle. Economic Growth and Public Policy*. World Bank Policy Research Report. Washington D.C.: World Bank.

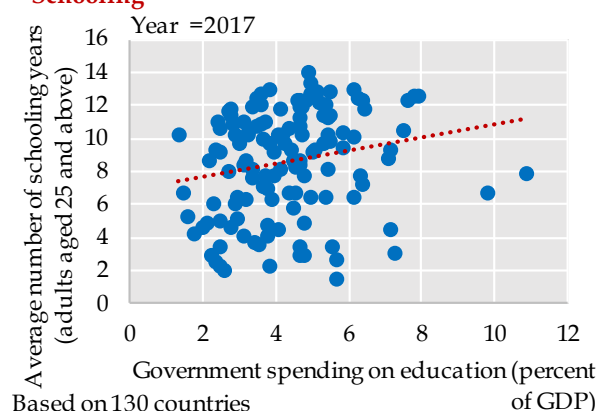
⁸⁹ J. Page (1994). *The East Asian Miracle: Four Lessons for Development Policy*. NBER Macroeconomics Annual, 9, 219-269. Massachusetts: MIT Press

⁹⁰ M. O. Martin, Ina V. S. Mullis, E. J. Gonzalez, S. J. Chrostowski. 2004a. *TIMSS 2003 International Mathematics Report: Findings from IEA's Trends in Mathematics and Science Study at the Fourth and Eighth Grades*. Boston: International Association for the Evaluation of Education Achievement (IEA).

⁹¹ World Bank (1993). *The East Asian Miracle. Economic Growth and Public Policy*. World Bank Policy Research Report. Washington D.C.: World Bank.

⁹² L. Vilhuber (2006). *The Transition from School to the Labor Market in Uganda*. Preliminary Outline presented at the World Bank Youth in Africa's Labor Market Workshop. Washington, DC: The World Bank.

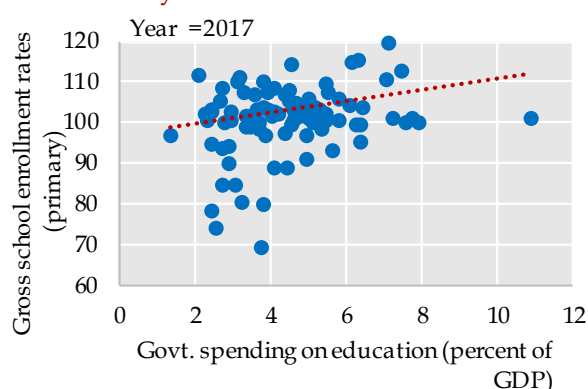
⁹³ H. Oosterbeek and H. A. Patrinos (2008). *Financing Lifelong Learning*. Policy Research Working Paper, 4569. Washington, DC: The World Bank.

Correlation between Government Spending and Average Years of Schooling**Figure 7.21a**

Source: World Bank

reaping demographic dividend, it isn't a sufficient condition to exploit the full potential of demographic dividend, since labour has to be gainfully employed in jobs that demand high skills which are frequently upgraded to keep pace with evolving technological needs of industries.⁹⁴ Therefore, in addition to public spending on basic education, the East Asian economies also allocated funding to post-secondary education prioritized for technical and vocational skills for enhancing scientific and technological knowledge. Moreover, policy initiatives were taken to import education services⁹⁵ on a higher scale specifically in sophisticated vocational and technical areas.⁹⁶

In Pakistan, however, weak state of education has become a constraint to the prospects of harnessing the demographic dividend. According to Labour Force Survey (LFS) 2021, about 27 million children between the

Correlation between Government Spending and Gross Enrollment Rates at the Primary Level**Figure 7.21b**

ages of 5-14 were illiterate in 2021, and around 10 million children aged 10-14 only had primary education. Unless these children are provided education later on in their lives, this illiterate and little educated cohort would translate into an estimated 21 percent of projected working age population in 2031.⁹⁷ This would be in addition to 57 million people (or 33 percent of the projected working age population) in 2031 who are either illiterate or only have primary education, from the age cohorts that are already in the 2021 workforce and would still be within the working age in the next ten years. These estimates necessitate a substantial increase in public expenditure on education including technical and vocational training.

In comparison to the estimated need to spend 5.7 percent of GDP to increase the quantity and quality of teachers and improve the infrastructure of educational institutions,⁹⁸

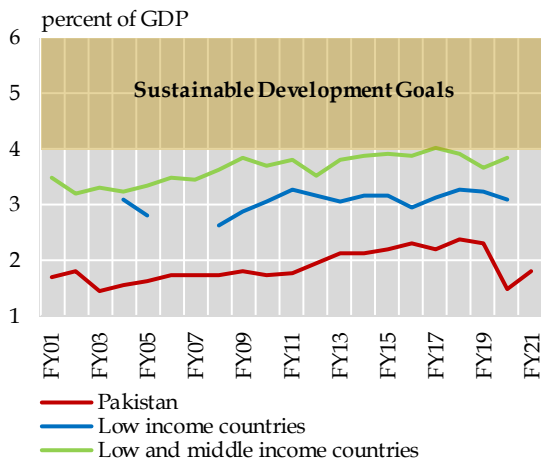
⁹⁴ A. Jankowska, A. Nagengast, and J.R. Perea, (2012). *The Product Space and the Middle-Income Trap: Comparing Asian and Latin American Experiences*. OECD Development Centre Working Paper No. 311, Paris: OECD Publishing.

⁹⁵ These imports include payments made for the students studying abroad that usually include tuition and living expenses. Source: K. Larsen, J. P. Martin and R. Morris (2002). "Trade in educational services: Trends and emerging issues." *The World Economy*, 25(6), 849-868.

⁹⁶ World Bank (1993). *The East Asian Miracle. Economic Growth and Public Policy*. World Bank Policy Research Report. Washington D.C.: World Bank.

⁹⁷ The number for population with no education or primary education is taken from Labor Force Survey (2020-21). Projected working age population (173.3 million) is based on the medium-fertility variant. Source: UN's World Population Prospects, 2022.

⁹⁸ E. Hanedar, S. Walker, and F. Brollo (2021). *Pakistan: Spending Needs for Reaching Sustainable Development Goals (SDGs)*. Washington D.C.:IMF

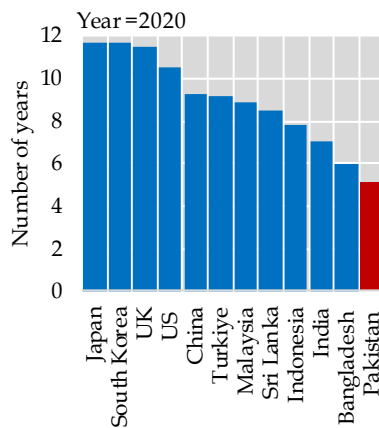
Total Spending on Education**Figure 7.22**

Source: Ministry of Finance, World Bank, United Nations

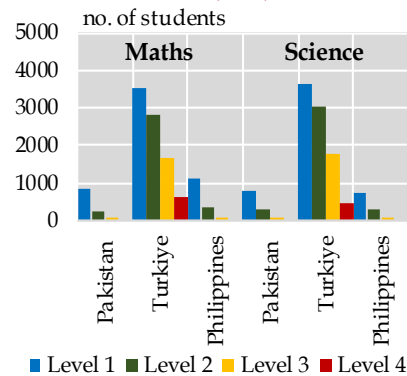
spending on education in Pakistan has consistently remained below 2.5 percent of GDP. This is the lowest among South Asian economies and much less than the Sustainable Development Goals (SDG) (Figure 7.22).⁹⁹ In addition, improvement in the efficiency of education spending is crucial to curtail the

expenditure leakages. In this regard, the challenge of ghost schools, high teacher absenteeism, and proxy teachers requires special attention. Teachers' salaries are estimated to account for around seventy to eighty percent of provincial education budgets. In light of this, estimates of 30,000 to 40,000 ghost schools in the country require urgent attention.¹⁰⁰ Although efforts are being made at provincial level to minimize the number of absent teachers, considerable efforts are needed to improve teacher management and quality.¹⁰¹

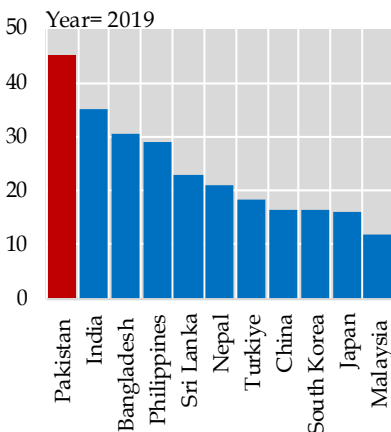
Furthermore, education quality at the primary and secondary school level has remained marginal, as significant proportion of public spending on education has been allocated to the provision of basic infrastructure.¹⁰² For instance, in terms of Learning Adjusted Years of Schooling (LAYS) indicator that captures both the quality and quantity of education attained in years of schooling, Pakistan's position is comparatively weak relative to peer

Learning Adjusted Years of Schooling (LAYS)**Figure 7.23a**

Source: World Bank

Performance of the primary level students appeared in the Mathematics and Science Assessment TIMSS (2019)**Figure 7.23b**

Source: United Nations Educational, Scientific and Cultural Organization

Pupil to Teacher Ratio at Primary Level**Figure 7.23c**

Source: World Bank

The estimate is line with Education 2030 Framework for Action of Sustainable Development Goals, the governments need to spend 4 to 6 percent of GDP (add SDG source).

⁹⁹ Ministry of Finance (2020). *Pakistan Economic Survey*. Islamabad: MoF

¹⁰⁰ N. Naviwala (2016). *Pakistan's Education Crisis: The Real Story*. Wilson Center, Asia Program. Washington D.C.: Woodrow Wilson International Center for Scholars.

¹⁰¹ Z. Zhongming, L. Linong, Y. Xiaona, Z. Wangqiang, and L. Wei (2019). *School Education in Pakistan: A Sector Assessment*. Manila: Asian Development Bank

¹⁰² F. Khaliq and W. Ahmad (2016). *Quality and Effectiveness of Public Spending on Education in Pakistan*. Staff Note 02/16. Karachi: State Bank of Pakistan

economies (Figure 7.23a).¹⁰³

Similarly, in areas of math and science, as assessed by the global Trends in International Mathematics and Science Study (TIMSS), students in Pakistan are at much lower learning levels compared to other economies¹⁰⁴ (Figure 7.23b). Likewise, while the quality of teachers is also a challenge in Pakistan due to insufficient teacher training, the country also compares unfavourably in terms of pupil-to-teacher ratio, which means teachers have a larger workload that impairs the quality of education imparted (Figure 7.23c).^{105,106}

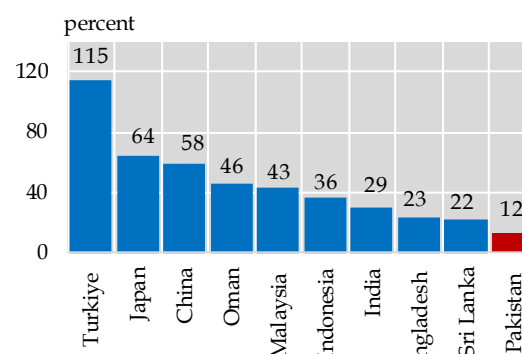
On the tertiary education front, the gross enrollment ratio in the country is markedly poor compared to peer economies, which is a major hurdle in the reaping of demographic dividend, especially in light of growing specialization of academic disciplines and technological progress (Figures 7.24). Similarly, the state of the technical education and vocational training system (TVET) remains weak on account of a host of reasons, which pose a challenge to prospects of demographic dividend. These are discussed in Section 7.6.

7.5 Health Care and Nutrition

A healthy state of human capital helps reap demographic dividend through two main

Total Gross Enrollment Ratio at Tertiary Level

Figure 7.24



*Latest values ranging between year 2018 and 2020

Data source: World Bank

channels: productivity and life expectancy. In the former sense, gains in the quality of health are estimated to improve an individual's productivity (output per worker) across countries.¹⁰⁷ In fact, about 17 percent of the variation in labour productivity across economies is estimated to be explained by the differences in the countries' health conditions.¹⁰⁸

In addition to health care, overall nutritional intake also affects productivity. The malnourishment in children from conception to age 2 leads to stunted growth. This is mainly because of poor maternal nourishment or an improper intake of nutrients after birth.¹⁰⁹ It affects cognition and academic performance, which may translate into

¹⁰³ LAYS indicator captures estimates of expected years of education as well as learning outcome assessments based on literacy, numeracy, and reasoning capabilities. Source: World Bank

¹⁰⁴ According to TIMSS, the level 4 or the advanced level refers to advanced mathematical functions at the primary level. Source: UNESCO

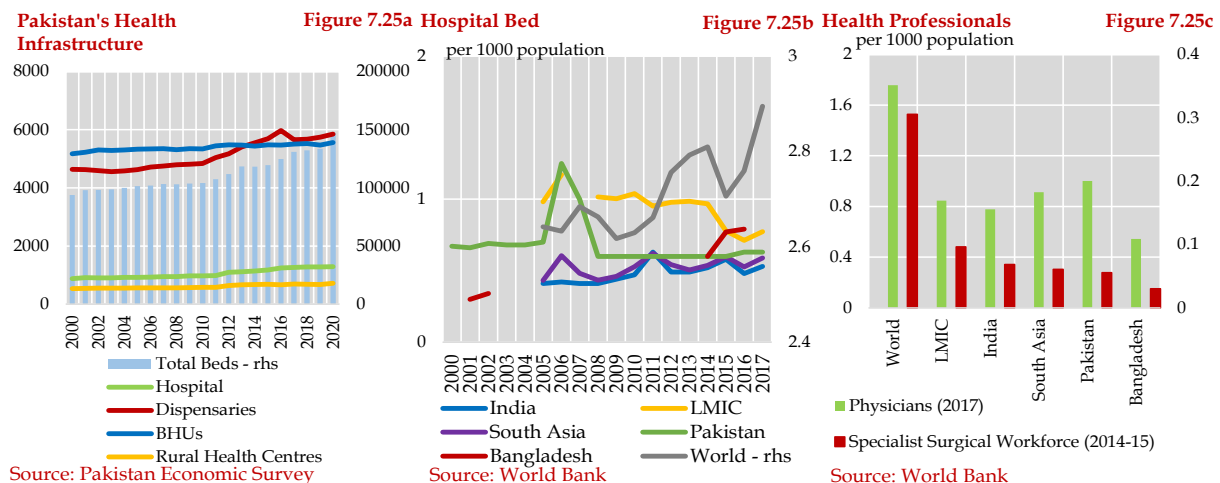
¹⁰⁵ D. Shah et. al (2018). *Financing in Education Sector (Public and Private)*. Islamabad: Academy of Educational Planning and Management; K.A. Siddiqui, S.H. Mughal, I. A. Soomro, and M. A. Dool (2021). "Teacher Training in Pakistan: Overview of Challenges and their Suggested Solutions." *International Journal of Recent Educational Research*, 2(2), 215-223.

¹⁰⁶ Pupil to teacher ratio refers to number of students taught by a teacher at one point in time. This indicator also explain the class size.

¹⁰⁷ W. D. Savedoff and T. P. Schultz (eds.) (2000). *Wealth from Health Linking Social Investments to Earnings in Latin America*. Washington D.C.: Inter-American Development Bank

¹⁰⁸ D. E. Bloom and D. Canning (2005). *Health and Economic Growth: Reconciling the Micro and Macro Evidence*. Center on Democracy, Development and the Rule of Law. Working Paper Number 42. Stanford: The Center on Democracy, Development and the Rule of Law, Stanford University

¹⁰⁹ J. Colombo J, B. Koletzko, and M. Lampl (2017) (eds.). *Causes of Stunting and Preventive Dietary Interventions in Pregnancy and Early Childhood*. 89th Nestlé Nutrition Institute Workshop, Dubai, March 2017.



decreased productivity and low wages.¹¹⁰

Apart from productivity, longevity positively effects economic growth. Estimates show that a one percent increase in the adult survival rate leads to a 2.8 percent increase in labour productivity.^{111,112} For instance, increased life expectancy has been estimated to be one of the main drivers of economic growth rates in China and India between 1960 and 2000.¹¹³ In addition, increasing longevity results in a growing need for retirement income which can lead to a high saving rate.¹¹⁴ The increase in life expectancy is brought about by improvements in public health care in the accessibility of preventive and curative care.¹¹⁵

In Pakistan, the number of health infrastructure facilities have increased over the years. For instance, the number of hospitals and dispensaries has increased from 876 and 4,635 in 2000 to 1,289 and 5,849 in 2020, respectively. Resultantly, hospital beds increased from 93907 to 147,112 (**Figure 7.25a**). However, the gains in the number of beds have not compensated for the population growth in the country, as the bed per population decreased from 0.67 bed per 1000 population in 2000 to 0.63 bed per 1000 population in 2020 (**Figure 7.25b**). The country has also witnessed increased medical professionals, with physicians per 1000 population surpassing the average of lower-

¹¹⁰ M. A. Mendez and L. Adair (1999). "Severity and Timing of Stunting in the First Two Years of Life Affect Performance on Cognitive Tests in Late Childhood." *The Journal of Nutrition*, Vol. 129, Issue 8, page 1555-1562; T. Woldehanna, J. R. Behrman, and M. W. Araya (2017). The Effect of Early Childhood Stunting on Children's Cognitive Achievements: Evidence from Young Lives Ethiopia. *The Ethiopian Journal of Health Development*, 31(2), 75-84.

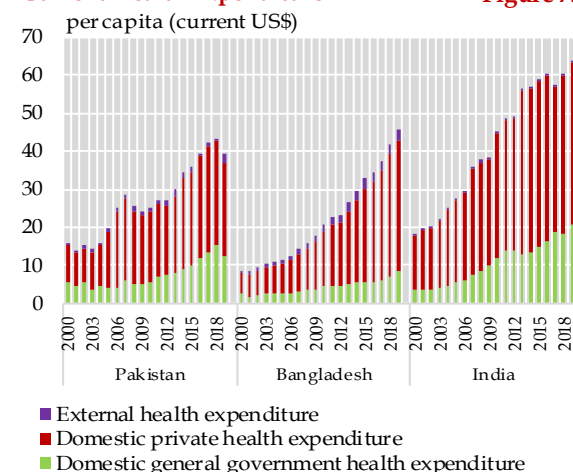
¹¹¹ Adult survival rate is proportion of 15 years old surviving till the age of 60 years at current mortality rate.

¹¹² D. E. Bloom and D. Canning (2005). *Health and Economic Growth: Reconciling the Micro and Macro Evidence*. Center on Democracy, Development and the Rule of Law Working Paper Number 42. Stanford: The Center on Democracy, Development and the Rule of Law, Stanford University

¹¹³ D. E. Bloom, D. Canning, L. Hu, Y. Liu, A. Mahal and W. Yip (2010). "The contribution of population health and demographic change to economic growth in China and India." *Journal of Comparative Economics*, Volume 38, Issue 1, Pages 17-33

¹¹⁴ D. E. Bloom, D. Canning and B. S. Graham (2002). *Longevity and Life Cycle Savings*. National Bureau of Economic Research (NBER), Working Paper No. w8808. Cambridge, Massachusetts: NBER; T. Kinugasa and A. Mason (2007). "Why Nations Become Wealthy: The Effects of Adult Longevity on Saving." *World Development* 35(1):1-23.

¹¹⁵ L. Hao, X. Xu, M. E. Dupre, A. Guo, X. Zhang, L. Qiu, Y. Zhao and D. Gu (2020). "Adequate Access to Healthcare and Added Life Expectancy among Older Adults in China." *BioMed Central Geriatrics*, Vol. 20, Article number: 129.; SR. Rasmussen, J.L. Thomsen, J. Kilsmark, A. Hvenegaard, M. Engberg, T. Lauritzen, J. Sogaard (2007). "Preventive health screenings and health consultations in primary care increase life expectancy without increasing costs." *Scandinavian Journal of Public Health*, 35(4):365-72.

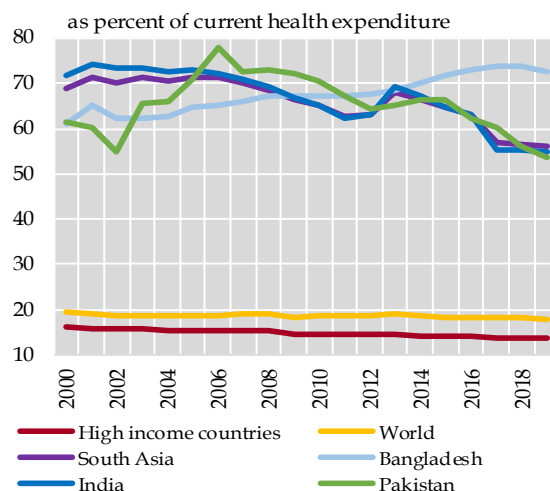
Current Health Expenditure

Source: World Bank

middle-income countries. However, the number of specialist surgical workforce per 1000 population in the country is short of regional and global averages (**Figure 7.25c**).

Other indicators also point to weaknesses in the state of health care in the country. The current health expenditure¹¹⁶ in the country improved from US\$ 15.6 per capita in 2000 to US\$ 39.5 per capita in 2019, a compound annual growth rate of 4.8 percent (**Figure 7.26a**). However, during the same time, Bangladesh and India's per capita health spending increased with a compound growth of 8.7 and 6.4 percent. Also, Pakistan's spending remains very small compared to the global average of US\$ 1121 per capita.

Approximately 61 percent of Pakistan's total health spending in 2019 is private, of which 88 percent is out-of-pocket (OOP) expenditure.¹¹⁷ Pakistan's OOP as percentage of total current health expenditure is similar to India's and lower than Bangladesh's, but still very high compared to the global average and high-

Figure 7.26a Out of Pocket Health Spending**Figure 7.26b**

income countries (**Figure 7.26b**). High OOP spending indicates inequality in the health system with an excessive burden on savings, pushing those on the margins into poverty.¹¹⁸

From the perspective of life expectancy, the death rate across all age groups in Pakistan has declined over the years, translating into increased life expectancy in the country, from 45.3 years in 1960 to 67.4 years in 2020 (**Figure 7.27a**). This has been in part a result of improvements in the number of medical professionals and per capita health spending. However, similar to other health indicators, life expectancy in Pakistan is still lower than other South Asian economies (**Figure 7.27b**).

Another challenge to the reaping of demographic dividend in Pakistan relates to stunting. Stunting, defined as low height for age, is an indicator of chronic malnutrition in children, which leads to a loss in human capital and productivity. It limits cognitive development and lowers educational attainment and learning capacity.^{119,120} It is

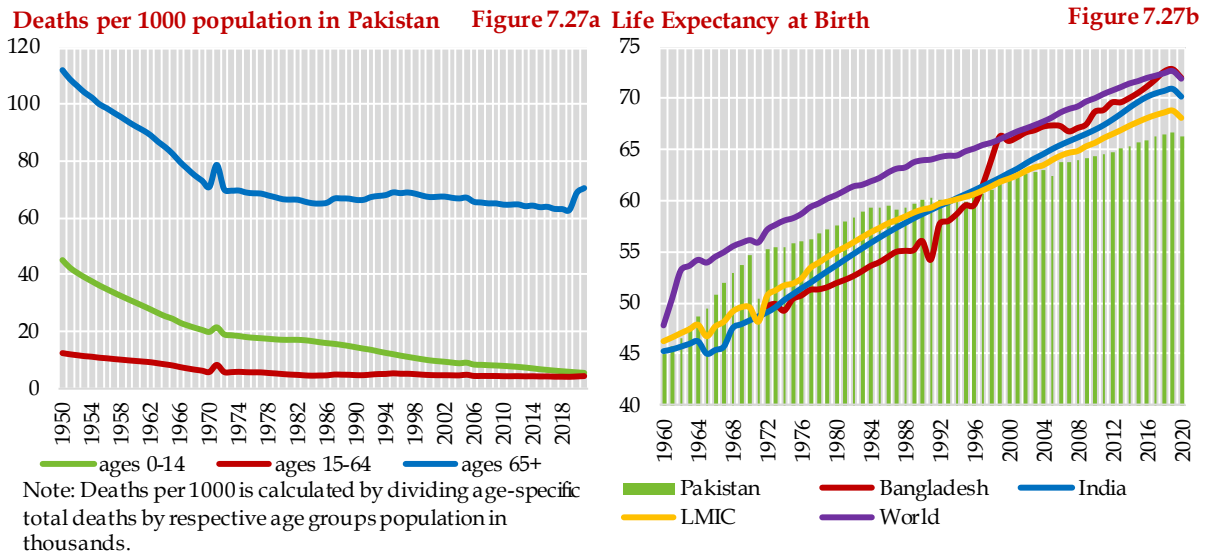
¹¹⁶ The current health expenditure includes private, public and external spending on health in a country.

¹¹⁷ Out-of-pocket is defined as expenses paid directly out of the pocket of households.

¹¹⁸ F. S. Jalali, P. Bikineh and S. Delavari (2021). "Strategies for Reducing out of Pocket Payments in the Health System: A Scoping Review." *Cost Effectiveness and Resource Allocation*, vol. 19, article no. 47.; A. Wagstaff, P. Eozenou and M. Smits (2020). "Out-of-Pocket Expenditures on Health: A Global Stocktake." *The World Bank Research Observer*, Volume 35, Issue 2

¹¹⁹ L. Oot, K. Sethuraman, J. Ross, and A. E. Sommerfelt (2016). "The Effect of Chronic Malnutrition (Stunting) on Learning Ability, a Measure of Human Capital: A Model in Profiles for Country-Level Advocacy." *Technical Brief Food and Nutrition Technical Assistance III Project*

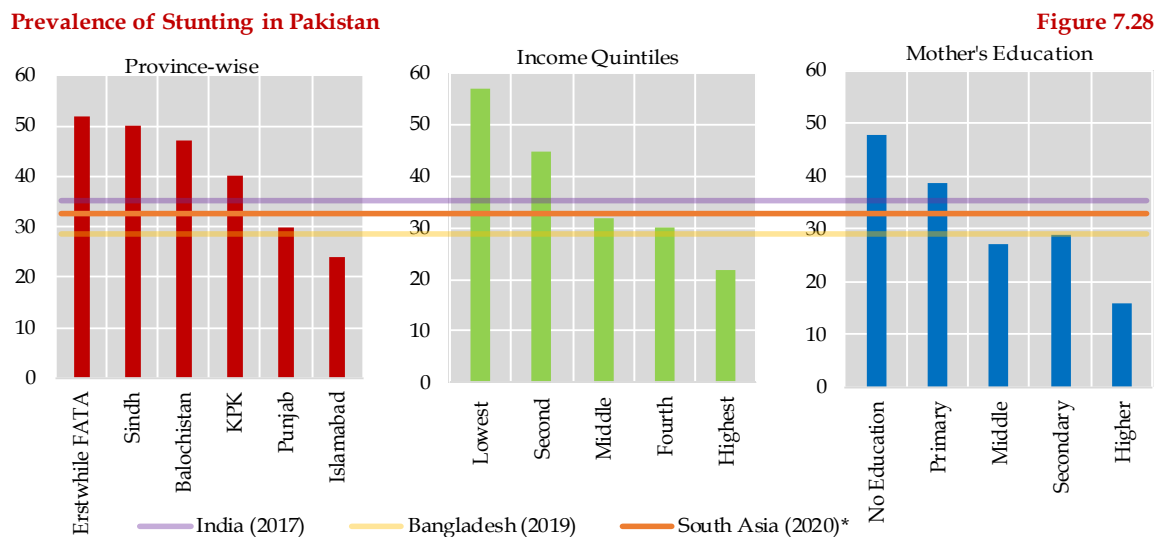
¹²⁰ K. G. Dewey and K. Begum (2011). Long-Term Consequences of Stunting in Early Life. *Maternal and Child Nutrition*, Vol 7, Issue S3



imperative to prevent stunting as fully reversing its effects is difficult.¹²¹

Although Pakistan's stunting rate has decreased from 62.5 percent in 1986 to 37.6 percent in 2018, it is still among the top 20 most stunted countries in the world.¹²² At the provincial level, 50 percent of children in

Sindh are stunted, and even the best performing province, Punjab, remains behind Bangladesh's national average (**Figure 7.28**). Since stunting affects the poorest and least educated the most, who also have high TFR, this becomes a vicious cycle where individual productivity remains weak leading to lower wages, malnutrition, poverty, and lack of



¹²¹ J. L. Leroy, E. A. Frongillo, P. Dewan, M. M. Black, R. A. Waterland (2020). "Can Children Catch up from the Consequences of Undernourishment? Evidence from Child Linear Growth, Developmental Epigenetics, and Brain and Neurocognitive Development." *Advances in Nutrition*, Volume 11, Issue 4.; M. Shekar, J. Kakietek, J. D. Eberwein, and D. Walters (2017). *An Investment Framework for Nutrition: Reaching the Global Targets for Stunting, Anemia, Breastfeeding, and Wasting*. Directions in Development. Washington, DC: World Bank.

¹²² Source: World Bank

education which fuel each other and prevent the TFR from falling to give way to demographic window.¹²³

The fact that detrimental impact of stunting on cognition and learning abilities cannot be fully reversed means the stunted children carry its adverse effects in their adult life as well, and thus implying risks of structurally impaired labour productivity. Based on various nationally representative surveys of stunting conducted in different years between 1986 and 2018, about 48 million adults in the year 2033 would be classified as those who were estimated to be suffering from stunting in their childhood years. This equals about 27 percent of the estimated 181 million working age population in 2033. (Table 7.1)

7.6 Enabling Economic Policy Environment

In addition to investments in education and health to boost productivity, countries that have benefitted from demographic dividend have created an enabling economic policy environment to reap those dividends. In particular, favourable macroeconomic environment, including high saving and investment; sustainable fiscal and external deficits; openness to trade; pro-industrial policies; efficient markets (including that of labour market); and a healthy state of competition have been found to be important for materializing the demographic dividend.¹²⁴

Moreover, while the contribution of specific governance enhancing policy interventions on demographic dividend has not been measured, studies have shown that stability and security of administrative systems helped East Asian economies in achieving demographic dividend. This is because good governance and quality institutions, primarily

Estimates of Adult Population in 2033 Affected by Stunting in their Childhood years **Table 7.1**

Year	Stunting Rate for Children Under 5	Total Under-5 Pop.**	Total Stunted Pop.	Ages of Stunted Pop. in 2033
	(percent)	(millions)	(millions)	
1986	62.5	16.2	10.1	47-52
1992	42.7	19.5	8.3	41-46
2001	41.4	22.1	9.2	32-37
2011	43.6	24.4	10.6	22-27
2018	37.6	27.3	10.3	15-19
Total		109.5	48.5*	

* These estimates do not account for the mortality rate, which may decrease the number. However, because stunting estimates are available from 1986 onward, and are unavailable at regular intervals, the number may increase as it does not include the estimates of stunted population who would be in age cohorts of 53-64, 38-40, 28-31, and 20-21 in 2033.

** Pop. refers population

Source: Calculations based on UNICEF, WHO and World Bank's Joint Malnutrition Estimates and UN Population Division, World Population Prospects

revolving around accountability, government effectiveness, regulatory quality, rule of law, stability, and control of corruption, act as catalysts for economic growth necessary for reaping the opportunity offered by demographic window.¹²⁵

In Pakistan, the overall economic policy environment is marked by various challenges. There are recurring episodes of macroeconomic instability amid high cost and poor accessibility of utilities, economic policy uncertainty, low savings and investment rate and low incidence of trade openness. The macroeconomic instability also reflects structural and institutional impediments, including inadequate market development, lack of competition, and dysfunctional operational infrastructure. Moreover, issues in contract enforcement, dispute resolution, legal cover for innovation, and other legal bottlenecks to growth exist in the economy

¹²³ F. Siddiqui, R. A. Salam, Z. S. Lassi and J. K. Das (2020). The Intertwined Relationship between Malnutrition and Poverty. *Frontiers in Public Health*. Vol. 8

¹²⁴ J. Page (1994). *The East Asian Miracle: Four Lessons for Development Policy*. NBER Macroeconomics Annual, 9, 219-269. Massachusetts: MIT Press

¹²⁵ K. Patierno, S. Gaith, and E. L. Madsen (2019). *Which Policies Promote a Demographic Dividend? An Evidence Review*. Washington D.C.: Population Reference Bureau; World Bank (2017). *Governance and the Law: World Development Report*. Washington D.C.: World Bank

alongside incidences of corruption.¹²⁶ While all these challenges need to be addressed from the perspective of demographic dividend, the following two challenges particularly stand out.

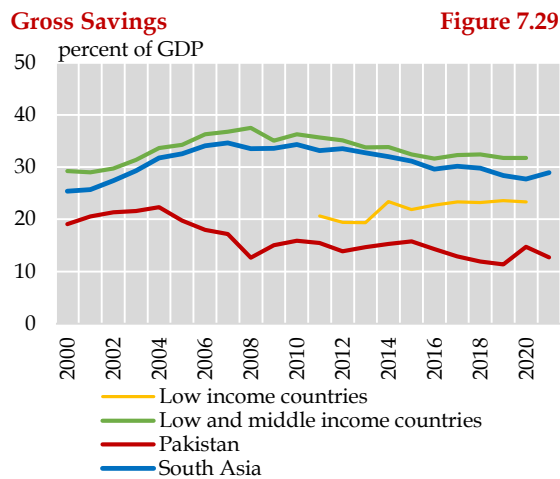
Savings

As discussed earlier, one of the key dividends accruing from a favourable age structure is higher savings per capita.¹²⁷ Higher savings are positively linked to the country's capacity for investment stimulating economic growth; indeed, the high growth rates of East Asian economies, which were the first countries in Asia to achieve the demographic transition, were helped by higher savings.¹²⁸ A deep domestic financial system and higher savings

rates also helped Malaysia and Thailand to finance their deficits while avoiding inflationary financing.¹²⁹ The need to have high savings underscores the significance of greater financial inclusion as well. This is important because the absence of inclusive financial systems amplifies income inequality and slows down economic growth.¹³⁰

In Pakistan, however, formal savings are substantially small on account of low levels of income, rate of return, and public investment amid high inflation (**Figure 7.29**).¹³¹ Low savings leads to lower investments that are affected by shallow financial markets, a large informal economy, and other institutional and administrative challenges, including structural weaknesses in revenue mobilization that contribute to low public savings.¹³² Pension, insurance, and social security systems also remain weak in the country due to institutional and capacity-building challenges in the country's insurance and pension landscape and the pension framework.¹³³ This presents a two-fold challenge: (a) it contributes to the problem of low levels of long term savings needed to finance long-term projects; and (b) puts the post-retirement life of working age population at risk.

Although, the level of financial inclusion in the country has improved over the years, Pakistan ranks low compared to peer economies, where



¹²⁶ State Bank of Pakistan (2019). *Factors Constraining Investments in Pakistan: Beyond the Macroeconomics*. Annual Report on the State of Pakistan's Economy. Karachi: SBP; State Bank of Pakistan (2015). *What has Caused Stagnation in Pakistan's Exports*. Annual Report on the State of Pakistan's Economy. Karachi: SBP; State Bank of Pakistan (2021). *Special Economic Zones in Pakistan: Isles of Excellence or Labs for Policy Reforms*. Annual Report on the State of Pakistan's Economy. Karachi: SBP; State Bank of Pakistan (2020). *The State of Competition in Pakistan*. Second Quarterly Report on the State of Pakistan's Economy. Karachi: SBP; Planning Commission (2011). *Pakistan: Framework for Economic Growth*. Islamabad: Planning Commission

¹²⁷ This stage of economic growth is called the **second demographic dividend** occurring in the later stage of the demographic transition.

¹²⁸ P. R. Masson, T. Bayoumi, and H. Samiei (1995). *Saving Behavior in Industrial and Developing Countries*. In Staff Studies for the World Economic Outlook. International Monetary Fund.

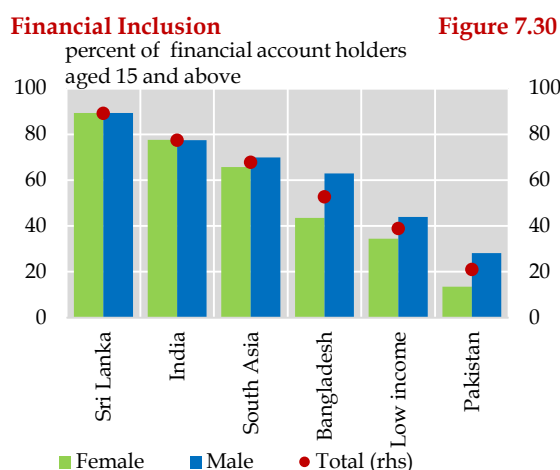
¹²⁹ . Page (1994). *The East Asian Miracle: Four Lessons for Development Policy*. NBER Macroeconomics Annual, 9, 219-269. Massachusetts: MIT Press

¹³⁰ A. Demircuc-Kunt and R. Levine (2009). "Finance and Inequality: Theory and Evidence." *Annual Review of Financial Economics*, 287-318

¹³¹ A. Ali (2016). *Saving and Investment in Pakistan*. SBP Staff Notes 01/16. Karachi: State Bank of Pakistan

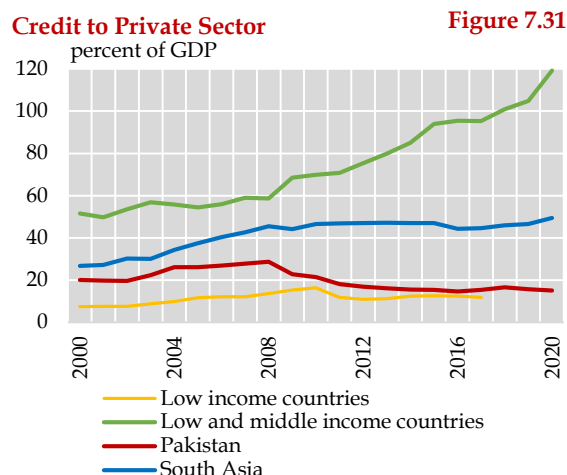
¹³² State Bank of Pakistan (2019). *Factors Constraining Investments in Pakistan: Beyond the Macroeconomics*. Annual Report on the State of Pakistan's Economy. Karachi: SBP

¹³³ Asian Development Bank. *Strengthening Pakistan's Pension and Insurance Systems*. Social Protection Project Briefs. Manila: ADB



gender disparity is rather large (Figure 7.30). Moreover, overall credit to private sector in the country also needs substantial improvement (Figure 7.31), as the credit largely flows to big corporates instead of individuals, and micro, small and medium enterprises (MSMEs). Consequently, individuals and MSMEs excessively rely on their own savings (retained earnings or owners' personal funds) and informal lending channels that are expensive and unreliable.¹³⁴ The combined impact of these trends present a challenge to the increasing youth bulge as savings remain insufficient to meet the growing needs for public and private investments. However, recent initiatives taken by the State Bank of Pakistan to incentivize SME finance, housing, and Islamic banking are steps in the right direction.¹³⁵

Furthermore, in terms of total investment to GDP, Pakistan stands lowest in the region with around 15 percent of GDP. In comparison, total investments in India and Sri Lanka are more than 30 percent of their respective GDP. This is primarily attributed to



low domestic savings in the country amid high degree of reliance on foreign direct investments, low business growth, macroeconomic instability, and policy uncertainty.¹³⁶

Opportunities for youth

The youth bulge of a country, characterized by a rising working age population, can help reap demographic dividend through inclusive economic growth and better utilization of resources. However, to achieve this, youth has to have opportunities for employment and entrepreneurship in productive sectors of the economy, and is sufficiently educated or skilled to contribute to productivity gains accompanied by wage growth.¹³⁷ In Pakistan, however, five key challenges limit the potential of youth in the country.

First, the pace of economic growth has been insufficient to absorb the increasing number of youth joining the workforce. In contrast to the need to grow at least 6 or 7 percent to be able to offer work opportunities to the youth,¹³⁸

¹³⁴ SBP (2006). *Trends in Financial Savings*. Financial Stability Review. Karachi: SBP; State Bank of Pakistan (2020).

The State of Competition in Pakistan. Second Quarterly Report on the State of Pakistan's Economy. Karachi: SBP

¹³⁵ SBP (2018). *Monetary Policy and Inflation*. Annual Report on the State of Pakistan's Economy. Karachi: SBP; State Bank of Pakistan. *Incentive Schemes for SMEs and Other Sectors*. Karachi: SBP. www.sbp.org.pk/Incen-others/index.asp

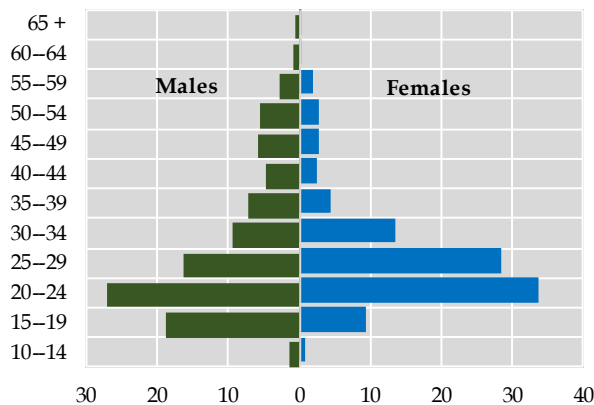
¹³⁶ U. Ahmad, A. Urooj, and U. Zia (2022). *Business and Investment Issues in Pakistan* (No. 2022: 91). Pakistan Institute of Development Economics.

¹³⁷ S. Dewan and E. Ekkehard (Winter 2020). "Rethinking the World of Work". *Finance and Development* (www.imf.org/external/pubs/ft/fandd/2020/12/rethinking-theworld-of-work-dewan.html).

¹³⁸ Planning Commission (2011). *Pakistan: Framework for Economic Growth*. Islamabad: Planning Commission; World Bank (2018). *South Asia Economic Focus, Spring 2018: Jobless Growth?* Washington DC: World Bank

Percentage of Unemployed Population in Pakistan

Figure 7.32



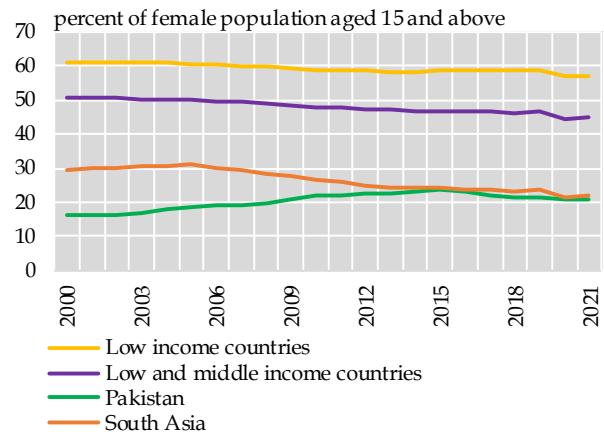
Source: Labor Force Survey 2020-21

Pakistan's GDP growth has averaged only 4.3 percent between 2001-2022.¹³⁹ As a result, unemployment in youth segments of the population has been particularly high (Figure 7.32).

Second, female unemployment is higher than that of men, whereas female labour force participation rate in the country is only around 20 percent as against almost 78 percent for male and is much lower compared to peer economies (Figure 7.33). Considering that the share of women in Pakistan's total population is around 49 percent,¹⁴⁰ this implies that women's contribution to the economy needs to grow if Pakistan is to reap the demographic dividend.¹⁴¹

Female Labor Force Participation

Figure 7.33



Source: World Bank (ILO modeled estimates)

Amongst other things, this requires a change in social norms and cultural attitudes, including change in the notion, "women should not be allowed to work outside house," and parental aspirations that imagine girls' lives to be confined to housework and childcare.¹⁴² Moreover, physical proximity to educational and training facilities and work places, as well as a safe environment, such as low crime, also need to be improved to lower the restrictions on women's physical mobility.¹⁴³ Indeed, women who have and demonstrate agency have both lower fertility rate, and are better able to overcome societal constraints to pursue education, skills and job opportunities.¹⁴⁴

¹³⁹ The GDP growth of 2001-16 is calculated by taking 2005-06 as base period; while GDP growth rates for 2017-22 are based on 2015-16 as the base period. Source: National Income Accounts. Islamabad: Pakistan Bureau of Statistics (www.pbs.gov.pk/sites/default/files/tables/national_accounts/2021-22/Table_1.pdf)

¹⁴⁰ Population Census (2017). Islamabad: Pakistan Bureau of Statistics.

¹⁴¹ World Bank (2019). *Pakistan @ 100 – Shaping the Future*. Washington D.C.: World Bank

¹⁴² A. L. Minardi, M. Akmal, L. Crawford, and S. Hares. (2021). *Promoting Gender Inequality in Pakistan Means Tackling Both Real and Misplaced Gender Norms*. Centre for Global Development (CGD) Blog Post. Washington D.C.: CGD.

¹⁴³ E. Field and K. Vyborny (2022). *Women's Mobility and Labor Supply Experimental Evidence from Pakistan*. Asian Development Bank Economics Working Paper Series No. 655. Manila: ADB; and A. Cheema, A. I. Khwaja, M F. Naseer and J. N. Shapiro (2020). *Glass Walls: Experimental Evidence on Access Constraints Faced by Women*. Working Paper.

¹⁴⁴ A. Cheema, A. I. Khwaja, M F. Naseer and J. N Shapiro (2020). *Glass Walls: Experimental Evidence on Access Constraints Faced by Women*, Working Paper; G. Samari (2019). "Education and Fertility in Egypt: Mediation by Women's Empowerment." *SSM - Population Health* Volume 9; A. Sayeed and N. Ansari (2019). *Women's Mobility, Agency, and Labour Force Participation in the Megacity of Karachi*, International Growth Centre (IGC), Reference Number: C-37429-PAK-1. London: IGC and Asian Development Bank (2016). *Policy Brief on Female Labor Force Participation in Pakistan*, Policy Brief No. 70. Manila: ADB

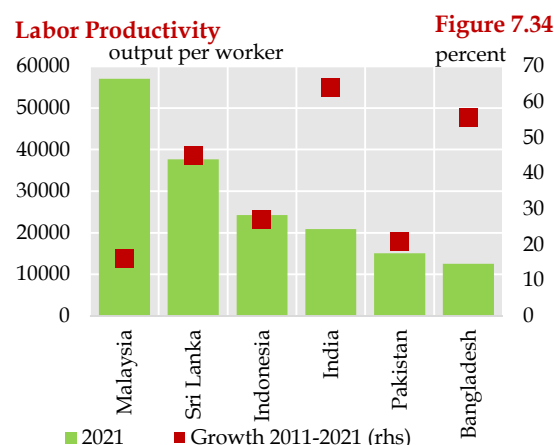
The third challenge relates to the quality of work opportunities available vis-à-vis productive sectors of the economy. At the one end, informal employment is notably high in Pakistan.¹⁴⁵ Around three quarters of the total employed people work in the informal sector,¹⁴⁶ whereas almost 71 percent of employed women work in the informal sector.¹⁴⁷ The labour force working in the informal sector is predominantly unpaid as 52 percent of employed young women are unpaid family workers mostly in the agricultural sector.¹⁴⁸ Furthermore, around 47.6 percent of labour in the informal sector is paid below the minimum wage due to their non-specialized skillset, having lower or no education and training.¹⁴⁹ High degree of informality in job market leaves the workforce vulnerable to shocks, leading to lower savings and inadequate access to health and education.

At the other end, the share of industry in employment hovered around 21 percent for the period of 1991-2019,¹⁵⁰ as investments have been directed to less productive sectors, such as real estate,¹⁵¹ or low value-added sectors including primary agriculture commodities or low-tech manufacturing (for e.g. cotton fabric and light engineering).¹⁵² This prevents growth in work opportunities for youth in highly productive areas and constrains the growth in per capita income.

In recent years, the developments in the country's Information and communication

technology (ICT) industry are promising, with growth in ICT exports, domestic e-commerce industry, technology start-ups alongside an expansion in call centers, and business process outsourcing. However, a policy focus on building the right skill set holds the key.¹⁵³ The trends in the labour market are evolving and the global demand is following high cognitive and technical skills including analytical thinking, adaptability, and creativity. Upgrading of workers' skills along these lines will play an instrumental role in increasing productivity.¹⁵⁴

The fourth key challenge revolves around skilled and productive labour. Pakistan's labour productivity is weak compared to peer economies and has been growing at a slow pace (**Figure 7.34**). In addition to insufficient educational attainment (as discussed earlier),



Note: GDP constant 2017 international \$ at PPP

Source: International Labour Organization

¹⁴⁵ ILO (2017). *Pakistan Hidden Workers: Wages and Conditions of the Home-based Workers and the Informal Economy*. Geneva: ILO

¹⁴⁶ Pakistan Bureau of Statistics (2021). *Labour Force Survey*. Islamabad: PBS

¹⁴⁷ Asian Development Bank (2020). *Pakistan, 2021-2025: Lifting Growth, Building Resilience, Increasing Competitiveness*. Country Partnership Strategy. Philippines: ADB

¹⁴⁸ UN Women (2020). *Status Report: Young Women in Pakistan*. New York: United Nations

¹⁴⁹ M. Ali Choudhary, S. Mahmood, and G. Zoega (2016). *Informal Labour Markets in Pakistan*. SBP Working Paper No .75. Karachi: SBP

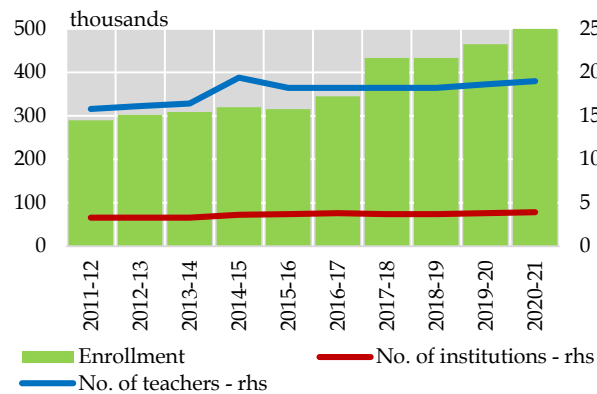
¹⁵⁰ Source: World Development Indicators, World Bank.

¹⁵¹ State Bank of Pakistan (2019). *Factors Constraining Investments in Pakistan: Beyond the Macroeconomics*. Annual Report on the State of Pakistan's Economy. Karachi: SBP

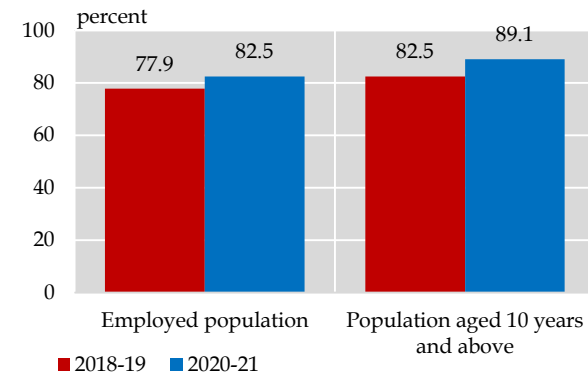
¹⁵² State Bank of Pakistan (2020). *Global Value Chains – Implications for Pakistan*. First Quarterly Report on the State of Pakistan's Economy. Karachi: SBP

¹⁵³ State Bank of Pakistan (2019). *Performance of ICT Exports of Pakistan*. First Quarterly Report on the State of Pakistan's Economy. Karachi: SBP

¹⁵⁴ World Economic Forum. (2020, October). *The Future of Jobs Report*. Geneva, Switzerland: World Economic Forum.

Technical and Vocational Education in Pakistan**Figure 7.35a**

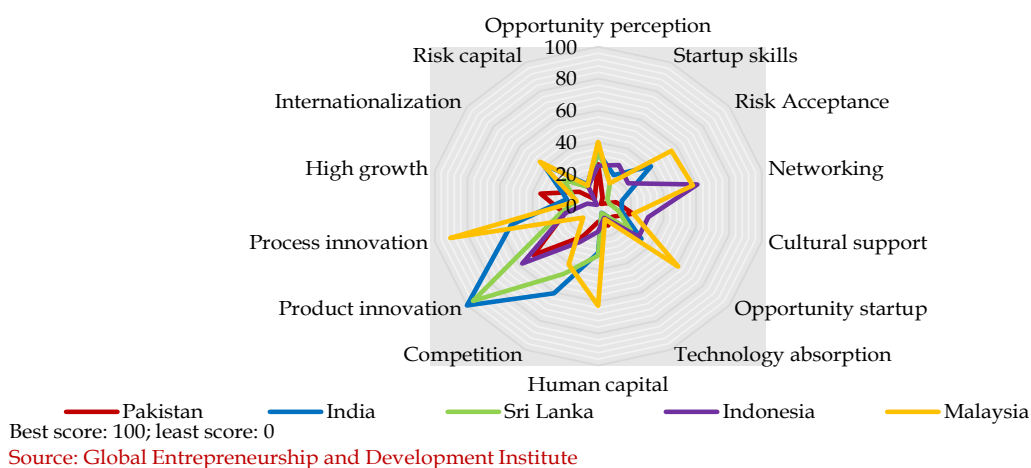
Source: Pakistan Economic Survey (various issues)

Percentage of Population who Have Not Received Technical and Vocational Education**Figure 7.35b**

Source: Labour Force Survey 2020-21.

another key factor behind the trend in Pakistan's labour productivity is the gap in technical and vocational training (TVET) and life-long learning (LLL) systems. Although there is sufficient evidence that labour training helps increase worker productivity, the TVET system in Pakistan faces a myriad of challenges including supply-demand mismatch, inadequate geographic coverage, and shortage of TVET teacher and facilities (Figure 7.35a). In addition, technology at TVET centres is out of date, and the system is marked by ineffective coordination between the formal TVET sector and industry players.¹⁵⁵

In order to train an estimated youth cohort of about 6 million each year, to help materialize the country's demographic dividend potential, there is a need of a minimum 45,000 training institutes and 200,000 TVET teachers as an addition to the existing system. In contrast, slightly more than 0.4 million registered training seats are currently available in 3,740 training institutes with total staff strength of 18,207 trained teachers in the formal TVET sector.¹⁵⁶ According to LFS, around 83 percent of the employed population has not received any sort of technical or vocational training (Figure 7.35b).

Enabling Factors of Entrepreneurship (2018)**Figure 7.36**

Source: Global Entrepreneurship and Development Institute

¹⁵⁵ State Bank of Pakistan (2020). *Technical and Vocational Education and Training (TVET) in Pakistan: Issues and Challenges for Productivity Enhancement*. Third Quarterly Report on the State of Pakistan's Economy. Karachi: SBP

¹⁵⁶ International Labor Organization (2019). *State of Skills – Pakistan (1919-2019)*. Geneva: ILO

This necessitates increased public and private investment in skill development. However, interventions in vocational training should not be construed as a substitute for academic education. Indeed, evidence suggests that substituting academic schooling with vocational schooling may in fact have negative consequences on the development of human capital,¹⁵⁷ whereas labour market returns for TVET graduates also depend on the type of individuals targeted by these programs, such as their level of prior education, the degree of TVET certification, and the qualification of teachers.¹⁵⁸

The fifth challenge relates to entrepreneurship which is a prime stimulator for improving the labour market and job creation.¹⁵⁹ In this context, weak culture of entrepreneurship in Pakistan needs to be turned around. At the one end, the government's engagement in business needs to be rationalized. Since entrepreneurship is understood as the combination of risk taking and innovation, the intervening role of government in the country inhibits the growth of entrepreneurship.¹⁶⁰ At the other end, the environment ought to be made suitable for young entrepreneurs. In 2019, the Global Entrepreneurship Index ranked Pakistan 109th out of 137 economies, where in terms of enabling factors for entrepreneurship, such as startup skills, cultural support, product and process innovation, technology absorption and so forth, Pakistan ranks lower than its peer economies (Figure 7.36).¹⁶¹

While there has been some improvement in this regard such as establishment of incubation centers in the country's leading educational institutions, a nationwide collaboration is needed to promote the culture of innovation and creative thinking given that the world is rapidly moving towards knowledge economy. Furthermore, without quality education, the promise of entrepreneurship seems implausible.¹⁶²

7.7 Final Remarks

Whilst recognizing that favourable demographic structure is not the only driver of accelerated economic growth and development, the foregoing discussion on the promise and challenge of Pakistan's demography prompts two main observations that warrant the attention of both public and private sector stakeholders of the economy.

The first relates to Pakistan's need to increase the pace of reduction in TFR. While each country is unique in its experience of demographic transition and achievement of demographic dividend, changing the age structure through a consistent decline in fertility rates is the first step towards achieving demographic dividend. Without a decline in TFR, the demographic window does not even open, according to the UN's approach discussed in section two. Ergo, the inability to reduce TFR in Pakistan will prevent youth dependency from falling to the level where more working-age adults support a relatively smaller population of children. In addition, if TFR does not decline at a fast pace

¹⁵⁷ P. Loyalka, X. Huang, L. Zhang, J. Wei, H. Yi, Y. Song, Y. Shi, and J. Chu (2016). "The Impact of Vocational Schooling on Human Capital Development in Developing Countries: Evidence from China." *World Bank Economic Review* 30(1):143-70.

¹⁵⁸ P. Loyalka, X. Huang, L. Zhang, J. Wei, H. Yi, Y. Song, Y. Shi, and J. Chu (2016). "The Impact of Vocational Schooling on Human Capital Development in Developing Countries: Evidence from China." *World Bank Economic Review* 30(1):143-70, and P. Vandenberg and J. Laranjo (2020). *The Impact of Vocational Training on Labor Market Outcomes in the Philippines*. Asian Development Bank (ADB) Economics Working Paper Series, NO. 621. Manila: ADB.

¹⁵⁹ R. Nallari, B. Griffith, Y. Wang, S. Andriamananjara, D.H. Chen, and R. Bhattacharya (2011). *Entrepreneurship, Growth, and Job Creation*. Washington D.C.: World Bank

¹⁶⁰ N. U. Haque (2007). *Entrepreneurship in Pakistan* (No. 22190). East Asian Bureau of Economic Research.

¹⁶¹ Global Entrepreneurship Research Association (2019). *Global Entrepreneurship Monitor*. London: GERA; Global Entrepreneurship and Development Institute (2018). *Global Entrepreneurial Index*. Washington D.C.: GEDI

¹⁶² A. Najam and F. Bari (2017). *Unleashing the potential of a young Pakistan*. United Nations Development Programme, Pakistan.

to help reap the demographic dividend, Pakistan may be at a long term risk of both high youth and old age dependency, as those currently in the working age grow past the age of 65.

To this end, family planning programmes need to be expanded and strengthened, particularly in socio-economic and geographic clusters that have high TFR. These may be explored in partnership with the private sector through various latest approaches, such as voucher schemes for a targeted approach,¹⁶³ and clubbed for programmes focusing on maternal, infant and child health for both ease of administration and wider acceptance.

Another approach worth considering is civil society engagement to increase awareness of the challenges brought to the fore by high TFR. The costs and benefits of fertility are not only internal to individual families; it imposes a burden and advantages on others in the economy. These externalities, negative or positive, are a legitimate basis for public deliberation on the subject.

Such deliberations, which can be facilitated through media and corporate social responsibility programmes, may dwell on modern realities where increasingly complex economies require an extended length of formal education for them to be productive. Whether these costs fall on private revenues and savings (e.g., parents) or public, the corollary of high TFR is high total spending on education, which may be spent elsewhere if TFR were to be lower. This realization, along with rising material aspirations and rational responses to market signals, is already making large families relatively less common in high-income segments in Pakistan. By implication, wealthy households may be quicker to reap the benefits of favourable working age compared to poor who have higher TFR, and

thus contributing to income and wealth inequalities.

Since demographic transition and ensuing the demographic dividend is a relatively long and slow process, it often escapes the attention of the public and policymakers. In recognition of this, annual reporting of input and output demographic indicators across the country; detailed assessments of various federal and provincial TFR-related programmes; and other ancillary affairs would help keep a spotlight on the country's population and TFR challenge. This would be in line with the recommendations of the National Task Force constituted by the Supreme Court of Pakistan,¹⁶⁴ subsequently approved by the Council of Common Interest, that emphasized the need for a national narrative to reach a consensus for TFR reduction. Such a consensus helped several other economies, such as Türkiye, Malaysia, Indonesia and Iran, to fast-track fertility transitions several decades ago.¹⁶⁵

The second main observation relates to the distinction between youth population and demographic dividend. There are two main aspects of this distinction. First, while the demographic window offers potential for fast-paced economic growth and development due to changes in population structure, a large youth population without the existence of a favourable age-structure does not automatically translate into accelerated economic growth. Second, even if the ratio of working-age population to dependent population is favourable, dividends from the demographic window are not harnessed without the necessary policies to improve the state of health and education of a country's population and to provide the workforce with necessary opportunities to prosper in productive areas of the economy.

¹⁶³ B. Bellows, M. Ali, A. M. Mir (2020). *Best Bets: Vouchers for Rights-based, Voluntary Family Planning*. Best Bets for Accelerating Family Planning in Pakistan. Islamabad: Population Council, Pakistan.

¹⁶⁴ Supreme Court of Pakistan, Judgment of Human Rights Case No.17599 OF 2018 on the subject of Pakistan's alarming high population growth rate, January 3, 2019, Available at www.supremecourt.gov.pk/downloads_judgements/H.R.C._17599_2018.pdf, accessed on August 05, 2022.

¹⁶⁵ UNFPA (2020). *National Narrative on Population Growth*. Islamabad: UNFPA Pakistan.

In this light, the following stylized facts mentioned in the preceding sections are important. The productivity of about 54 percent of the country's working age population in 2031 is at risk given the current estimates of illiteracy, and low levels of primary education attainment in both those that are currently in working age and those that will enter the workforce in ten years. Likewise, about 27 percent of 2033 working age population are projected to be those that were estimated to be suffering from stunting in their childhood years. Considering that the effects of stunting are not fully reversible, this impairs the prospects of fully harnessing the demographic potential.

These risks reinforce the argument for a substantial increase in investments in health and education, including technical and vocational education. These investments are needed to contribute to the decline in TFR, and to set the stage for workforce to take on more technical and higher-paying work opportunities. Delays to this effect or slow takeoff in investments on health and education put the prospects of demographic dividend at risk considering that health and education transitions take a long time to prepare a healthy, well-educated, well-trained workforce.

There is also a need to deepen financial markets, and encourage formal savings alongside growth in financial inclusion,

considering that higher savings is an important route to achieving demographic dividend. At the same time, an enabling economic environment created through sound economic and governance policies, including trade openness, rule of law and competitive markets, is necessary to capitalize on the demographic window. Indeed, the degree to which economies have been able to reap demographic dividend depends on their ability to create opportunities for jobs and entrepreneurship for the growing number of young people entering the workforce, particularly in new and emerging technology-oriented fields and other highly productive sectors of the economy that are expected to drive economic growth in the future. The rise of digital technology-led growth in agriculture, manufacturing and service sectors also implies that the education and training of the workforce are evolving and dynamic in nature.

Equally important is the need to reduce gender disparities in educational attainment, labour force participation and opportunities for jobs and entrepreneurship. Implementation of social and economic policies to this end is needed not only to reduce TFR, given the inverse relationship between female education and fertility rates but also to capitalize on the opportunity offered by the demographic window, given that female population is nearly half of total population.

Annexure A: Data Explanatory Notes

- 1) **GDP:** In case of an ongoing year, for which actual GDP data 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 does not use its own projections of GDP to calculate these ratios in order to ensure consistency, as these projections may vary across different quarters of the year, with changing economic conditions. Moreover, different analysts may have their own projections; if everyone uses a unique projected GDP as the denominator, the debate on economic issues would become very confusing. Hence, the use of a common number helps in meaningful debate on economic issues, and the number given by the Planning Commission better serves this purpose.
- 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:

$$\text{Period average inflation } (\square_{\text{Ht}}) = \left(\frac{\sum_{i=0}^{t-1} I_{t-i}}{\sum_{i=0}^{t-1} I_{t-12-i}} - 1 \right) \times 100$$

$$\text{YoY inflation } (\square_{\text{YoYt}}) = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

$$\text{Monthly inflation } (\square_{\text{MoMt}}) = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

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:

<http://www.pbs.gov.pk/content/methodology-2>

- 3) **Change in debt stock vs. financing of fiscal deficit:** The change in the 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, which affect the rupee value of external debt.
- 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: The federal government may borrow directly from SBP either through the “Ways and Means Advance” channel or through the purchase (by SBP) of Market Related Treasury Bills (MRTBs). Ways and Means Advance allows government to borrow up to Rs 100 million at a time in a year at an interest rate of 4 percent per annum;

higher amounts are realized through the purchase of 6-month MTBs by SBP at the weighted average yield determined in the most recent fortnightly auction of treasury bills.

Provincial governments and the Government of Azad Jammu & Kashmir (AJK) may also borrow directly from SBP by raising their debtor balances (overdrafts) within limits defined for them. The interest rate charged on the borrowings is the three month average yield of 6-month MTBs. If the overdraft limits are breached, the provinces are penalized by charging an incremental rate of 4 percent per annum. However, the Federal Government has taken over from the State Bank of Pakistan (SBP) the business of direct credit to provincial governments on 29th June 2020. In this regard, the federal government has executed tripartite agreements with four provincial governments and SBP (as executer) for extension of Ways and Means loans on account of Federal Government Central Account No.I (non-food) on 29th June 2020.

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 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 from scheduled banks.

(b) **Commodity finance:**

Both federal and provincial governments borrow from scheduled banks to finance their purchases of commodities e.g., wheat, sugar, etc. The proceeds from the sale of these commodities are subsequently used to retire commodity borrowing.

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 have been given below.

- (a) **Financing of budget deficit (numbers reported by MoF vs. SBP):** There is often a discrepancy in the financing numbers provided by MoF in its quarterly tables of fiscal operations and those reported by SBP in its monetary survey. This is because MoF reports government bank borrowing on a cash basis, while SBP's monetary survey is compiled on an accrual basis, i.e., by taking into account accrued interest payments on T-bills.
- (b) **Foreign trade (SBP vs PBS):** The trade figures reported by SBP in the *balance of payments* do not match with the information provided by the Pakistan Bureau of Statistics. This is because the trade statistics compiled by SBP are based on banking data, which depends on the actual receipt and payment of foreign exchange, whereas the PBS records data on the physical movement of goods (customs record).

Acronyms

A

ADB	Asian Development Bank
AE	Advanced Economies
AIIB	Asian Infrastructure Investment Bank
AJK	Azad Jammu and Kashmir
APCMA	All Pakistan Cement Manufacturers Association

B

bbl	Barrel
BCG	Bacille-Calmette-Guerin (Vaccine)
BCS	Business Confidence Survey
BISP	Benazir Income Support Program
BMC	BioMed Central
BOP	Balance of Payments
BPO	Business Processing Outsourcing
bps	Basis Points

C

CAB	Current Account Balance
CAD	Current Account Deficit
CAGR	Compound Annual Growth Rate
CBU	Completely Built Up Unit
CCS	Consumer Confidence Survey
CDDRL	Center on Democracy, Development and the Rule of Law
CDMP	Circular Debt Management Plan
CDNS	Central Directorate of National Savings
CIT	Corporate Income Tax
CKD	Completely Knocked Down
CMMI	Capability Maturity Model Integration
CoD	Collection on Demand
Covid-19	Coronavirus Disease 2019
CPEC	China Pakistan Economic Corridor
CPFTA	China Pakistan Free Trade Agreement
CPI	Consumer Price Index
CRR	Cash Reserve Requirement
CY	Calendar year

D

DAP	Di-Ammonium phosphate
DFI	Development Finance Institution
DHS	Demographic and Health Survey
DISCOs	Distribution Companies
DMMD	Domestic Market and Monetary Management Department
DPT	Diphtheria, Pertussis, and Tetanus (Vaccine)
DRAP	Drug Regulatory Authority of Pakistan
DSSI	Debt Service Suspension Initiative

E

ECC	Economic Coordination Committee
EFF	Extended Fund Facility
EFS	Export Finance Scheme
EMs	Emerging Markets
EMDEs	Emerging Market and Developing Economies
EOBI	Employees' Old-Age Benefits Institution
ESP	Economic Stimulus Package
EU	European Union

F

FAO	Food and Agriculture Organization
FASTER	Fully Automated Sales Tax e-Refund
FATA	Federally Administered Tribal Areas
FATF	Financial Action Task Force
FBR	Federal Board of Revenue
FCA	Fuel Cost Adjustment
FCY	Foreign Currency
FDI	Foreign Direct Investment
FED	Federal Excise Duty
FI	Fixed Investment
FMCG	Fast Moving Consumer Goods
FO	Furnace Oil
FOMC	Federal Open Market Committee
FPI	Foreign Portfolio Investment
FPP	Family Planning Program

	FRDLA	Fiscal Responsibility and Debt Limitation Act
	FX	Foreign Exchange
	FY	Fiscal Year
G		
	GCC	Gulf Cooperation Council
	GDP	Gross Domestic Product
	GEDI	Global Entrepreneurship and Development Institute
	GER	Gross Enrollment Ratio
	GERA	Global Entrepreneurship Research Association
	GIDC	Gas Infrastructure Development Cess
	GIS-FRR	Government of Pakistan Ijara Sukuk - Fixed Rental Rate
	GIS-VRR	Government of Pakistan Ijara Sukuk - Variable Rental Rate
	G-MSS	Government Markup Subsidy Scheme
	GST	General Sales Tax
	GVA	Gross Value Addition
H		
	HepB	Hepatitis B
	HESCO	Hyderabad Electric Supply Company
	HIB	Haemophilus Influenza, type B
	HS	Harmonized System
	HSD	High Speed Diesel
	H1	First Half
	H2	Second Half
I		
	IBA	Institute of Business Administration
	IBIs	Islamic Banking Institutions
	IBRD	International Bank for Reconstruction and Development
	ICT	Information and Communications Technology
	IDB	Islamic Development Bank
	IEA	International Association for the Evaluation of Educational Achievement
	IH&SMEFD	Infrastructure, Housing and Small and Medium Enterprises Finance Department
	IIPR	Institute of Insurance and Pension Research
	ILO	International Labour Organization
	IMF	International Monetary Fund

IPCC	Intergovernmental Panel on Climate Change
IPP	Independent Power Producers
ISP	Industrial Support Package
IT	Information Technology
ITC	International Trade Centre
ITeS	Information Technology Enabled Services
IVAC	International Vaccine Access Centre
K	
KP	Khyber Pakhtunkhwa
L	
LAYS	Learning Adjusted Years of Schooling
LCV	Light Commercial Vehicle
LFS	Labour Force Survey
LHW	Lady Health Worker
LIBOR	London Interbank Offer Rate
LLL	Life Long Learning
LMICs	Low and Middle Income Countries
LNG	Liquefied Natural Gas
LOC	Line of Control
LPG	Liquefied Petroleum Gas
LSM	Large Scale Manufacturing
LTFE	Long Term Financing Facility
M	
MAF	Million acre feet
MCH AIDS	Maternal and Child Health and AIDS
MENA	Middle East and North Africa
MFB	Microfinance Bank
MIT	Massachusetts Institute of Technology
MMT	Million Metric Ton
MNFSR	Ministry of National Food Security and Research
MoF	Ministry of Finance
MoM	Month on month
MPC	Monetary Policy Committee
MPIDR	Max Planck Institute for Demographic Research
MPMG	Mera Pakistan Mera Ghar

MRP	Maximum Retail Price
MSCI	Morgan Stanley Capital International
MSME	Micro, Small and Medium Enterprises
MSP	Minimum Support Price
MT	Metric Ton
MTBs	Market Treasury Bills
MW	Megawatts
N	
NBER	National Bureau of Economic Research
NCPI	National Consumer Price Index
NDA	Net Domestic Assets
NEER	Nominal Effective Exchange Rate
NEPRA	National Electric Power Regulatory Authority
NFA	Net Foreign Assets
NFDC	National Fertilizer Development Center
NFIS	National Financial Inclusion Strategy
NFNE	Non-Food Non-Energy
NFPP	National Family Planning Programs
NGO	Non-Governmental Organization
NHA	National Highway Authority
NHSR&C	National Health Services Regulation and Coordination
NIPS	National Institute of Population Studies
NPC	Naya Pakistan Certificate
NSER	Benazir National Socio-Economic Registry
NSS	National Saving Service
NTR	Non-tax Revenue
O	
OCAC	Oil Companies Advisory Council
OECD	Organization of Economic Cooperation and Development
OGDCL	Oil and Gas Development Company Limited
OMCs	Oil Marketing Companies
OMO	Open Market Operation
OOP	Out of Pocket
OPEC	Organization of the Petroleum Exporting Countries
OTEXA	The Office of Textiles and Apparel

P

PAMA	Pakistan Automotive Manufacturers Association
PBS	Pakistan Bureau of Statistics
PDHS	Pakistan Demographic and Health Survey
PDL	Petroleum Development Levy
PED	Public external debt
PFL	Floating Rate PIBs
PFM	Public Finance Management
PHPL	Power Holding Private Limited
PIA	Pakistan International Airlines
PIBs	Pakistan Investment Bonds
PIDE	Pakistan Institute of Development Economics
PIT	Personal Income Tax
PKR	Pakistani Rupee
PM	Prime Minister
PMRC	Pakistan Mortgage Refinance Company
POL	Petroleum, Oil, and Lubricants
POS	Point of Sales
PRA	Punjab Revenue Authority
PRB	Population Reference Bureau
PREP	Pandemic Response Effectiveness in Pakistan
PSDP	Public Sector Development Program
PSLM	Pakistan Social and Living Standards Measurement Survey
PSE	Public Sector Enterprise
PSW	Pakistan Single Window
PSX	Pakistan Stock Exchange
PTA	Pakistan Telecommunication Authority

Q

Q1	First Quarter
Q2	Second Quarter
Q3	Third Quarter
Q4	Fourth Quarter
QIM	Quantum Index of Manufacturing

R

RDA	Roshan Digital Account
-----	------------------------

	REER	Real Effective Exchange Rate
	REITs	Real Estate Investment Trusts
	RLNG	Regasified liquefied natural gas
S		
	SBP	State Bank of Pakistan
	SDGs	Sustainable Development Goals
	SDR	Special Drawing Rights
	SECP	Securities & Exchange Commission of Pakistan
	SEPCO	Sukkar Electric Supply Company
	SKD	Semi Knocked Down
	SLR	Statutory Liquidity Requirements
	SMEs	Small and Medium Enterprises
	SRB	Sindh Revenue Board
	SRO	Statutory Regulatory Orders
	STP	Software Technology Parks
T		
	TCP	Trading corporation of Pakistan
	TDL	Total external debt & liabilities
	TERF	Temporary Economic Refinance Facility
	TFC	Term Finance Certificate
	TFR	Total Fertility Rate
	TIMSS	Trends in International Mathematics and Science Study
	TOU	Time of Use
	TSA	Treasury Single Account
	TTS	Track and Trace System
	TVET	Technical and Vocational Education and Training
U		
	UAE	United Arab Emirates
	UCT	Unconditional Cash Transfer
	UK	United Kingdom
	UN	United Nations
	UNCTAD	United Nations Conference on Trade and Development
	UN DESA	United Nations Department of Economic and Social Affairs
	UNDP	United Nations Development Programme
	UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific

	UNESCO	United Nations Educational, Scientific, and Cultural Organization
	UNFPA	United Nations Population Fund
	UNICEF	United Nations Children’s Fund
	US	United States
	USAID	US Agency for International Development
	USD/US\$	United States Dollar
	USDA	United States Department of Agriculture
V		
	VAT	Value Added Tax
W		
	WA ONR	Weighted Average Overnight Rate
	WALR	Weighted Average Lending Rate
	WAPDA	Water and Power Development Authority
	WB	World Bank
	WC	Working Capital
	WEF	World Economic Forum
	WHT	With-holding Tax
	WHO	World Health Organization
	WPI	Wholesale Price Index
Y		
	YoY	Year on Year