THE STATE OF PAKISTAN'S ECONOMY

2021-22

First Quarterly Report of the Board of Directors

State Bank of Pakistan

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First Quarterly Report
for the year 2021-22 of the
Board of Directors of State Bank of Pakistan

State Bank of Pakistan

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LETTER OF TRANSMITTAL

State Bank of Pakistan
Karachi.
March 17, 2022

Dear Mr. Chairman,

In compliance with the earlier provisions of the State Bank of Pakistan Act, 1956, the First Quarterly Report of the Board of Directors of the State Bank of Pakistan on the State of the Economy for the quarter ending September 2021, is hereby enclosed for submission to the Majlis-e-Shoora (Parliament).

Yours sincerely,

(Dr. Reza Baqir)
Governor
Chairman Board of Directors

Muhammad Sadiq Sanjrani
Chairman
Senate
Islamabad

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Yours sincerely,

(Dr. Reza Baqir)
Governor
Chairman Board of Directors

Asad Qaiser
Speaker
National Assembly
Islamabad

Acknowledgements

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The feedback from Financial Stability, Monetary Policy, Research and Statistics & Data Warehouse Departments; and logistic supports by Office of the Corporate Secretary and External Relations Department are also appreciated.

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The analysis and projections presented in this report were prepared on data outturns for the first quarter of FY22 and finalized in November 2021, using data available as of then. As such, the report did not incorporate the rebasing of the large-scale manufacturing and GDP in January 2022.

1 Overview

Pakistan's economy maintained the growth momentum of FY21 in the first quarter of FY22 (**Table 1.1**). Broad-based expansion in large-scale manufacturing (LSM) and improved *kharif* crop outcomes reflected the favorable supply side dynamics. The demand side remained buoyant, as the trends in sales of fast-moving consumer goods and cars, import volumes, energy consumption, and consumer financing were all strong. The pick-up in economic activity also contributed to higher tax revenues, with positive implications for the fiscal position. However, in the face of a substantial increase in the global commodity prices, the growth recovery was accompanied by a build-up in inflationary pressures and a widening current account deficit.

This presented a challenging environment for the policymakers. The primary concern was to avoid disrupting the ongoing economic momentum, especially given the heightened uncertainty created by the spread of the Delta variant-driven Covid-19 wave globally and in the country during the quarter (**Figure 1.1**). Some targeted, micro lockdowns were also imposed.

Nonetheless, economic activity continued broadly uninterrupted. On the fiscal side, there was a renewed policy focus on achieving a higher growth outcome, as outlined via the spending priorities in the Budget FY22. Also, monetary conditions remained accommodative. The policy rate was kept unchanged at low, post-outbreak levels during most of the quarter; whereas the Export Finance Scheme (EFS) and the Long-Term Financing Facility (LTFF), continued to be in place to support firms' working capital and fixed investment needs. In addition to ensuring that the growth recovery remained on track in the face of the uncertainty created by the Delta variant, this policy support also provided some cushion

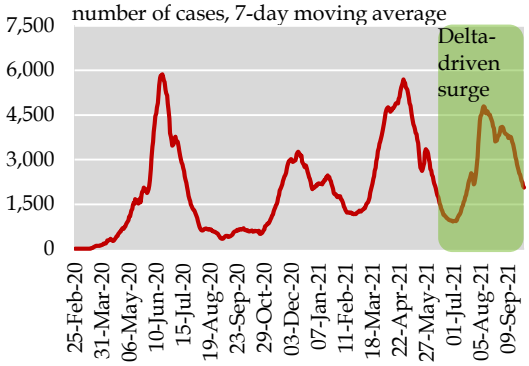
Selected Economic Indicators **Table 1.1**

	Q1	
	FY21	**FY22**
Growth rate (percent)		
LSM [a]	4.5	5.1
National CPI [1 a]	8.8	8.6
Private sector credit [b]	-1.1	3.0
Money supply (M2) [b]	1.2	0.6
Exports [b]	-10.7	35.1
Imports [b]	-5.7	64.4
Workers' remittances [b]	31	12.5
Exchange rate [2 b]	1.4	-7.7
Tax revenue –FBR [c]	4.8	38.3
Policy rate [3 b]	7.0	7.25
billion US Dollars		
SBP's FX reserves [3 b]	12.2	19.3
Current account balance [b]	0.9	-3.4
percent of GDP		
Fiscal balance [c]	-1.0	-0.8
Primary balance [c]	0.5	0.3
Current account balance [b]	1.2	-4.2

[1] period average [2] app. (+)/dep. (-) in percent during period [3] end period

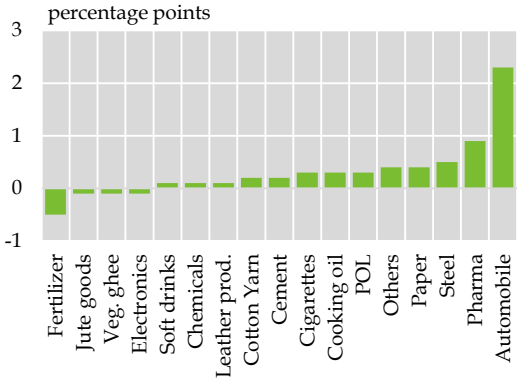
Sources: [a] Pakistan Bureau of Statistics; [b] State Bank of Pakistan; [c] Ministry of Finance

Trend in Daily Covid-19 Cases Detected in Pakistan **Figure 1.1**



Source: World Health Organization

Sectoral Contribution to YoY LSM Growth in Q1-FY22 **Figure 1.2**



Source: Pakistan Bureau of Statistics

to firms facing rising input costs amidst the sizable uptick in global commodity prices.

The industrial sector was a major beneficiary of this policy support, with supply-side dynamics improving, as reflected by LSM growing at a higher rate than last year. Industries that benefited directly from the fiscal support – such as automobiles (tax reduction on sales and imported inputs) and construction-allied sectors (lower taxes on cement sales) – were among those with higher output growth during the quarter (**Figure 1.2**). Also, preliminary estimates for the three major *kharif* crops – rice, sugarcane and cotton – indicated encouraging agricultural activity. Higher market prices, favorable weather conditions and better crop management practices all contributed to the improved agricultural output.

On the demand side, there was a sustained increase in consumption during the quarter. High frequency economic indicators – such as sales of cars and fast-moving consumer goods, consumer financing and POL products – continued to record strong, double-digit YoY growth. Energy consumption, as captured by power generation, also surged from last year's levels. While a deceleration was noted in the growth of these indicators from the previous quarter owing to waning base effects, the activity was still at elevated levels.

The availability of affordable credit played a major role in propping up industrial activity. This support proved instrumental in meeting the eligible firms' higher working capital requirements, amidst rising input costs. This was especially the case with the export-oriented textile firms, which were faced with higher external demand and rising imported cotton prices. At the same time, capacity expansion in textiles and telecommunications sectors largely drove the offtake of fixed investment loans, with LTFF and the Temporary Economic Refinance Facility (TERF) accounting for a large share of the textile firms' long-term borrowing during the quarter.

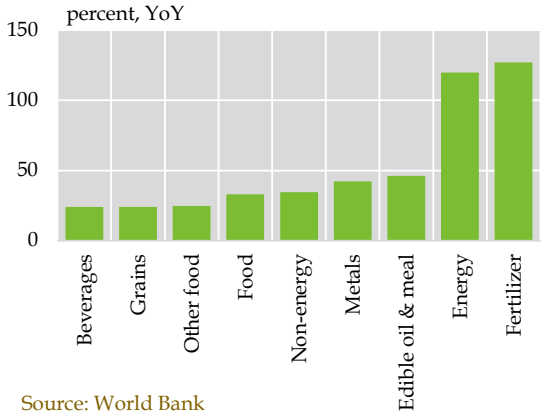
The increased economic activity and rising imports had favorable implications for tax revenues, which helped maintain fiscal consolidation despite a growth-oriented budget. Non-interest expenditures rose substantially in the quarter, amidst higher development spending, purchase of Covid-19 vaccines, and power sector subsidies. The fiscal space to undertake this spending was partly available from a sizable rise in the FBR tax collection. The fiscal position also materially benefited from the reduction in interest payments during the quarter, which reflected lower payments on domestic debt via lower rates on both short- and long-term instruments. Interest payments on foreign debt declined amidst the continuation of the Debt Service Suspension Initiative (DSSI), along with low levels of global interest rate benchmarks, such as LIBOR.

As a result, the primary balance continued to remain in surplus, although the magnitude of the surplus was lower than last year. In particular, the fiscal deficit reduced to 0.8 percent of GDP from 1.0 percent last year. Notwithstanding the lower financing needs, the public debt increased during the quarter, mainly due to revaluation losses.

Nonetheless, these macroeconomic gains were tested by the significant upswing in global commodity prices and shipping costs (**Figure 1.3**). At the same time, domestic demand pressures also became evident.

For Pakistan, despite some deceleration from last year, CPI inflation remained at an elevated level of 8.6 percent during Q1-FY22, with major contribution coming from higher

Growth in Global Commodity Prices during Q1-FY22 **Figure 1.3**



Source: World Bank

global commodity prices, especially of food and energy items. The food group remained the top contributor to the headline inflation, on the back of a strong increase in the prices of edible oil, poultry, wheat and sugar. That said, some relief came from the perishables group (such as fresh vegetables), in the wake of higher domestic production as well as imports. Higher global oil prices contributed to higher energy inflation readings in the quarter, despite the government's decision to partially absorb the price hike by lowering the sales tax rate and the petroleum development levy. Meanwhile, the economic momentum, coupled with higher global commodity prices, also began to reflect in core inflation, which inched up in urban areas during the quarter.

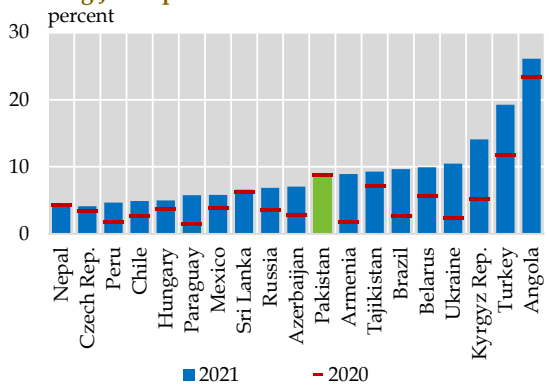
The surge in global commodity prices also played an important role in exerting pressures on the external account during Q1-FY22, by significantly pushing up import payments. This occurred at a time when the country's import demand for energy as well

as non-energy products was already elevated amidst strong industrial activity. Further upside pressures emerged from the imports of capital equipment. Despite the sizable increase in export receipts – which crossed the US$ 7 billion mark – the rise in import payments was large enough to significantly increase the merchandize trade deficit. This deficit was partially financed by the growth in workers' remittances (which continued to exceed US$ 2 billion in each month of the quarter). As a result, the current account deficit widened to US$ 3.4 billion in Q1-FY22, against a surplus of US$ 0.9 billion in the same period last year. These payment pressures in the current account were also reflected in the market-based exchange rate, which depreciated by 7.7 percent against the US Dollar during the quarter.

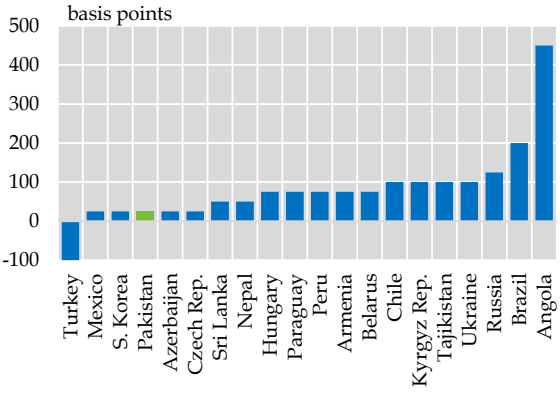
Despite the widening current account gap, the country's external buffers remained intact during the quarter. This was largely due to the availability of substantially higher external financing, especially from the additional Statutory Drawing Rights (SDR) allocation (US$ 2.8 billion) and tap issuance of Eurobonds for US$ 1.0 billion. Consequently, the SBP's FX reserves increased by US$ 2.0 billion and reached US$ 19.3 billion by end-September 2021.

While the reserves position improved, the payment pressures in the current account, along with expectations of higher inflation readings going forward, necessitated a reorienting of the policy and regulatory levers to consolidate the macroeconomic gains achieved since the outbreak of Covid-19 in March 2020. In response to the emerging pressures, the SBP's Monetary Policy Committee decided to increase the policy rate by 25 basis points in its September 2021 meeting. However, it is worth noting that Pakistan is not the only emerging market (EM) to begin monetary tightening in response to rising inflationary pressures (**Figure 1.4a**); several other EM central banks have also responded by raising interest rates (**Figure 1.4b**).

Inflation Rates Across EMs during Jul-Sep 2021 **Figure 1.4a**



Change in Policy Rate of EMs during Jul-Sep 2021 **Figure 1.4b**

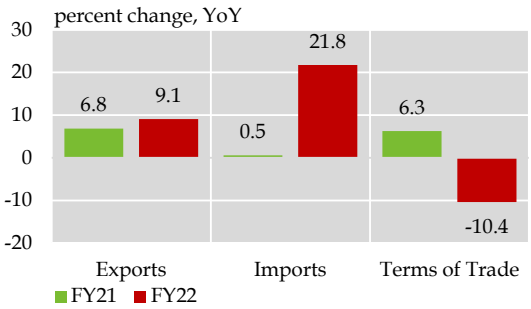


Source: Haver Analytics

In addition to raising the policy rate, the SBP also undertook regulatory measures to restrain the import momentum. These included the imposition of 100 percent cash margin requirement on 114 non-essential import items (bringing the total number of items attracting the restrictions to 525); and changes in prudential regulations to tighten auto and consumer financing.

The developments in the first quarter of the current fiscal year clearly highlight Pakistan's susceptibility to global commodity price shocks, partly due to the country's limited export base. While textile exports benefitted from rising global cotton prices, Pakistan could not capitalize on the surging global prices of items that it used to export – wheat and sugar – and instead had to import them to stabilize domestic prices and ensure local market availability. On the other hand, as mentioned before, higher prices of energy commodities, edible oil and steel, have contributed significantly to widening import payments. As a result, the commodity price pressures had a largely negative impact on the trade balance, as evident by the worsening in Pakistan's terms of trade during the quarter (**Figure 1.5**).

Change in Pakistan's Terms of Trade and Unit Prices of Exports & Imports in Jul-Sep* **Figure 1.5**



*YoY change in index levels
Source: Pakistan Bureau of Statistics

Apart from pursuing reforms to attain macroeconomic stability that were outlined in detail in the SBP's Annual Report for FY21, there is also a need for consistent and coherent policies at the sectoral level. One industry that requires a long-term policy focus is edible oil. Around 86 percent of the country's edible oil consumption comes from imports. Given the serious implications of the surging global palm and soybean oil prices on the external account and inflation dynamics, this report contains a Special Section on the domestic oilseed sector in Pakistan. The section highlights that while reference to domestic oilseed development can be found as far back as in the first Five-Year Plan (1955-60), the absence of an overarching policy and a dedicated and functional implementation agency over the years has gradually but steadily increased the country's reliance on imports. While the section finds that palm plantation does not have much potential in Pakistan in the short to medium term, soybean can be produced at a large scale in the medium term, if policy support is provided.

Economic Outlook

Real GDP growth is projected within the previously announced range of 4-5 percent for FY22, in line with the government's target of 4.8 percent and higher than last year's provisional growth of 3.9 percent. Better-than-expected agricultural output and

growing industrial activity, with positive spillover on services sector, are projected to contribute to the higher growth outcome.

The reversal in the monetary policy stance from September onwards, which has resulted in a 175 bps increase in the policy rate (until November), and other policy measures – such as revisions in prudential regulations for auto and consumer financing, and a 1 percentage point increase in the cash reserve requirement for commercial banks –are projected to lead to a slight slowdown in industrial growth compared to earlier expectations. Furthermore, overall credit conditions are expected to somewhat tighten in the wake of the policy rate hike. However, the major export-oriented industries, especially textiles and rice, would be largely shielded from the impact by their continued access to the SBP's concessionary refinance schemes; despite the rise in the policy rate, mark-up rates on these refinance schemes are still unchanged at low levels. The slight slowdown in industrial activity is expected to be more than offset by the encouraging agricultural performance, based on output estimates of major *kharif* crops so far, along with the assumption that the higher target for wheat set by the government, from an already record-high output last season, will be met.

The government is targeting to reduce the fiscal deficit to 6.3 percent in FY22 from 7.1 percent in FY21, by increasing revenues via expansion in the tax net and the ongoing growth momentum, which would contribute to tax collection. Recent proposed cuts to development spending, imposition of additional duties on automobiles and luxury goods, and the withdrawal of a wide range of tax exemptions, are all expected to further improve the fiscal position. Meanwhile, downside risks to the fiscal outlook include a slowdown in economic activity, which would impact tax revenues.

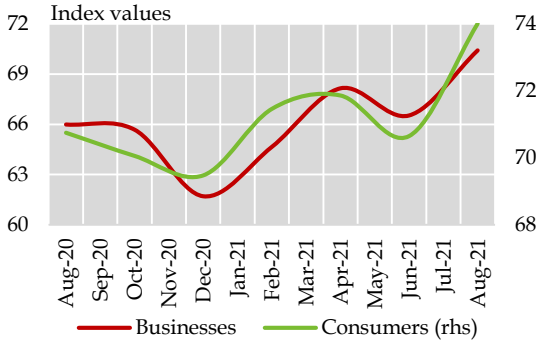
It is also worth noting that there is uncertainty with regards to the economic outlook. A major reason is the emergence of new Covid variants, which have direct implications for global commodity prices; the policy rate path in the advanced economies; demand dynamics in major export markets; the longevity of supply chain disruptions; and international travel by Pakistani residents, which could impact the current account. Oil prices have appeared particularly prone to downward movements following the discovery of new Covid variants, including Delta and now Omicron.[1] In addition, the evolving situation in Afghanistan is another source of uncertainty.

For the full-year FY22, the SBP is projecting headline CPI inflation to remain higher than FY21's reading of 8.9 percent. The risks are tilted towards the upside, mainly due to the higher-than-expected increase in global

[1] After reaching US$ 86.1 per barrel on November 9, 2021, Arab Light crude oil prices fell to as low as US$ 71.7 (on December 2, 2021), before recovering slightly. The sharp drop was mainly due to concerns over the emergence of the Omicron Covid variant in southern Africa, which was initially deemed to be more contagious than the Delta variant.

prices of commodities imported by Pakistan, including energy (oil, coal and LNG) and non-energy items (edible oil, cotton and steel, among others). Further impetus has come from the likely upward adjustments in administered prices, including power tariffs and taxes on transport fuels (GST and petroleum development levy), as well as the pass-through of PKR depreciation so far. These pressures have also begun to seep into pricing expectations of consumers and businesses, as gauged from the SBP's Consumer and Business Confidence Surveys (**Figure 1.6**). In contrast, prominent downside risks to the inflation outlook include a sharp drop in oil prices and higher-than-expected moderation in industrial activity amidst normalization of monetary and fiscal policies.

Inflation Expectations of Businesses and Consumers **Figure 1.6**



*expectations over the next 6 months

Source: State Bank of Pakistan

In the external sector, the current account deficit is also projected to exceed last year's level of 0.6 percent of GDP by a wide margin, mainly due to a higher-than-accounted for trade deficit, stemming from the rising trend in worldwide commodity prices. While the recent adjustment in the policy rate would somewhat constrain import demand, import payment pressures are expected from capital goods imports and from the continued need to import Covid-19 vaccines. While export receipts are also projected to rise, they are not likely to offset the rise in import payments. On the other hand, downside risks to the current account gap mainly relate to a sharp drop in global commodity prices and freight costs. Nonetheless, the external account is expected to remain manageable, given that the automatically stabilizing PKR is now complemented by the necessary monetary policy tightening.

Furthermore, the country's financing requirements – i.e. the expected current account gap and the upcoming debt repayments – are projected to be fully met by the available financial flows. The approval of the staff-level agreement by the IMF Board in H2-FY22 would unlock around US$ 1.0 billion from direct Fund financing, and facilitate continued engagement with other multilaterals. In addition to the US$ 3 billion deposits from the Saudi Fund for Development, a planned sovereign Sukuk by the government would further help build the SBP's FX reserves.

2 Real Sector

A conducive policy environment, smart lockdowns, and the government's vaccination drive enabled broad-based growth across all sectors of the economy during Q1-FY22. In agriculture, favorable weather conditions and higher output prices contributed to higher crop sector output during the kharif season as compared to last year. Large scale manufacturing also grew at a faster pace during the first quarter on a YoY basis, supported by tax relief measures, accommodative monetary policy, the construction package, and higher PSDP spending. The services sector benefitted from notable growth in the commodity-producing sector, as gauged from proxy indicators such as import growth and FMCG sales. Labor market indicators remained largely stable as the industrial sector added more jobs while the business community's sentiments about employment remained broadly positive.

2.1 Economic Growth

The economic recovery that began in FY21 continued to strengthen during the first quarter of FY22. With the Covid threat still present, the government ramped up its country-wide vaccination drive, which – coupled with the strategy of smart lockdowns in affected areas – facilitated growth during the review period. Estimates suggest that important *kharif* crops, such as sugarcane and rice, remained on track to achieve record output, whereas cotton production also rebounded strongly compared to last year. The industrial sector continued to gain traction during Q1-FY22, spurred by a supportive policy environment. Meanwhile, expansion in the commodity-producing sector and significant imports aided growth in the services sector, as visible from proxy indicators. The labor market also improved during the review period.

In the agriculture sector, the three important *kharif* crops – namely cotton, rice and sugarcane – are estimated to surpass last year's production levels. The increase in rice and sugarcane harvests is largely driven by increase in area under cultivation and their production is estimated to reach record levels this year. Meanwhile, cotton production increased on the back of significant increase in yields, which more than offset the decrease in area under the crop. Better crop sector performance was mainly attributed to higher market prices of the commodities and favorable weather conditions, especially for cotton.

Industrial sector activities as gauged by large-scale manufacturing (LSM) showed broad-based growth during Q1-FY22. Specifically, 12 out of 15 sectors registered growth during the quarter, compared to just eight in the same period last year. The automobile and pharmaceutical sectors were major contributors to this performance. Continued fiscal support in the form of construction and energy packages and higher PSDP spending and accommodative monetary policy facilitated this growth. While LSM growth moderated to 1.6 percent in September 2021, this was mainly due to a high base effect and some supply chain disruptions.

Indicators of wholesale and retail trade, transport, communication, and financial sector showed expansion in these industries. The pickup in services sector activities was further substantiated by Google mobility data.

There was an improvement in the labor market during Q1-FY22. The industrial sector in Punjab and Sindh, especially the export-oriented industries, added more jobs. Wages and incomes in the

construction and services industries continued to grow. The SBP's August 2021 Business Confidence Survey (BCS) and September 2021 Consumer Confidence Survey (CCS) highlighted improvements in business and consumer expectations about the job market. However, the positivity in sentiment moderated slightly in the latest BCS and CCS waves as compared to preceding surveys.

2.2 Agriculture

Preliminary estimates for the major *kharif* crops – cotton, sugarcane and rice - depicted broad-based improvement in output over last year. Higher market prices, favorable weather conditions and better crop management practices had a positive impact on agricultural output.[1] Area under cultivation for rice and sugarcane expanded, while cotton gained in yields.

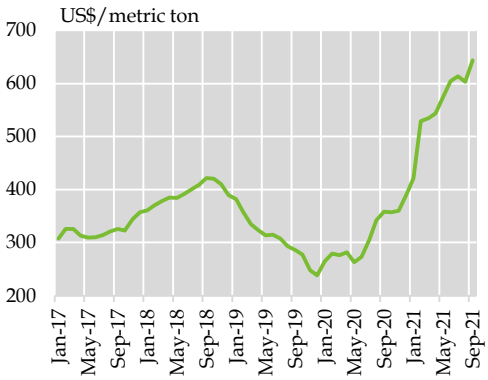
Inputs

Fertilizer offtake showed a mixed trend during current *kharif* season. Urea offtake increased by 2.2 percent compared to an increase of 5.5 percent last season. In contrast, offtake of Diammonium Phosphate (DAP) dipped by 24.0 percent during current season compared to an increase of 19.0 percent last year.

The significant decline in DAP offtake was mainly due to a notable rise in its local prices, in line with surging global prices (**Figure 2.1**).[2] Unlike FY21, absence of government support package for agriculture during Q1-FY22 also contributed to the increase in price of domestic DAP.

The deviation in urea and DAP offtake reflects the farmers' inclination for lower priced urea compared to the costlier DAP.[3]

Global DAP Prices **Figure 2.1**



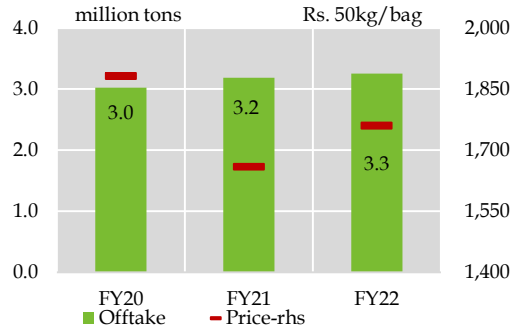
Source: World Bank

[1] Better crop management broadly refers to a set of agricultural practices that improve productivity, such as soil testing, cover crops, proper water, irrigation and pesticide management and protection from weeds.

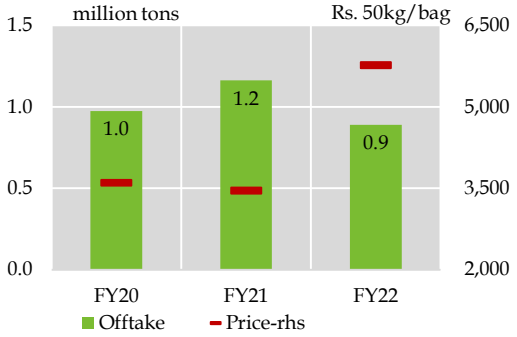
[2] On the supply side, global DAP prices were higher, owing to rising cost of raw materials including ammonia and sulfur. Meanwhile, on the demand side, fiscal support packages for agriculture and healthy farm incomes in the key crop-growing regions, such as Brazil and the US, spurred use of DAP and hence drove up its price. Moreover, there was strong demand from China, as it was rebuilding its hog herd following an outbreak of African swine fever.

[3] DAP is a price-sensitive product compared to urea. While urea is sufficiently produced locally relative to its demand, DAP is predominantly imported to meet domestic requirement. The global DAP prices directly impact the domestic prices (source: Fertilizer Sector - An Overview, January 2021, Pakistan Credit Rating Agency Limited). Increase in international prices contributed to domestic prices rising from

Urea Offtake and Price during *Kharif* (Apr-Sep) **Figure 2.2a**



DAP Offtake and Price during *Kharif* (Apr-Sep) **Figure 2.2b**



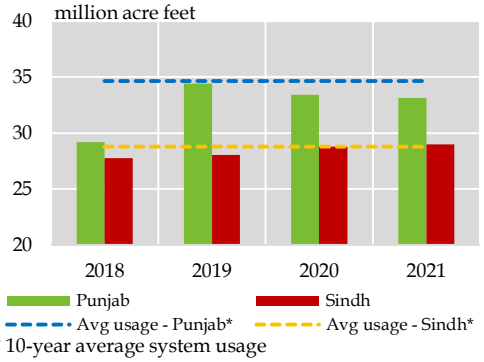
Source: National Fertilizer Development Centre

Although, urea prices rose by 6.1 percent during *kharif* FY22 as compared to decline of 12.0 percent last year, they remained three times cheaper than DAP prices (**Figure 2.2a and Figure 2.2b**).

The canal water availability during *kharif* FY22 remained almost similar to last year (**Figure 2.3**). Moreover, the irrigation water releases in Punjab and Sindh were also close to the long-term average. At the start of the season, canal water supply was relatively lower compared to last year; however, the situation gradually improved in the later months.

On the credit side, disbursements to agriculture sector grew by 14.7 percent during Q1-FY22 compared to a decline of

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



* 10-year average system usage

Source: Indus River System Authority

Agriculture Credit Disbursements in Q1 **Table 2.1**

billion Rupees

	FY21	FY22
Farm sector		
A. Production	113.8	136.3
B. Development	5.6	8.1
Tractor	0.6	1.7
C. Total farm sector (A+B)	119.4	144.4
Non-farm sector		
Livestock/dairy	71.2	81.7
Poultry	49.5	55.3
Other	14.4	10.5
D. Total non-farm sector	135.1	147.5
Total agri credit (C+D)	254.6	291.9

Source: State Bank of Pakistan

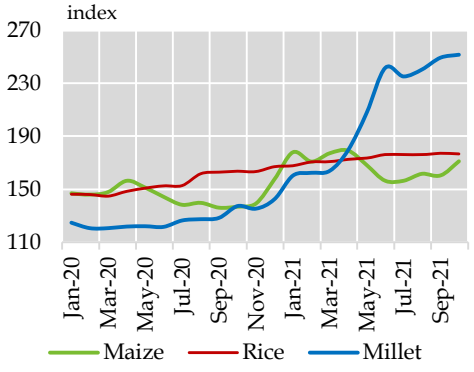
around Rs 3,500 in FY21 to Rs 5,800 per 50kg bag in FY22 in the domestic market (source: National Fertilizer Development Center).

3.3 percent in the corresponding period of last year **(Table 2.1**).

Within farm sector, disbursements for production-related activities registered growth of 19.8 percent in Q1-FY22, compared to growth of 9.6 percent last year. Besides higher crop outcomes, the credit growth could be attributed to the higher input prices of fertilizer, farm machinery and diesel. The loans for the purchase of tractors also picked up, as farmers utilized financing under *Kamyab Jawan Kamyab Kisan Tractor Loan Scheme* launched by the government in January 2021.[4] As per Pakistan Automotive Manufacturers Association (PAMA), tractor sales grew by 12.1 percent during Q1-FY22 compared to a growth of 14.2 percent same period last year.

Similarly, credit to the non-farm sector rose by 9.2 percent during Q1-FY22 compared to a decline of 10 percent last year. Particularly, disbursements to the livestock, dairy and poultry segments registered a double digit growth in Q1, in tandem with an increase in input prices especially of millet, maize and broken rice (**Figure 2.4**). Also, the average price of day old chicks rose by more than 50 percent to Rs 42.5 per chick during Q1-FY22, from Rs 26.8 last year.[5]

Agri. Wholesale Price Index **Figure 2.4**



Source: Pakistan Bureau of Statistics

Output

Cotton

According to provisional estimates, cotton crop production in FY22 is projected at 9.4 million bales; showing a significant increase of 33.1 percent over last year (**Table 2.2**).

It is pertinent to mention that the overall area under cotton cultivation continues to decline. Average cotton cultivation area dropped to 2.6 million hectare during FY13 to FY22, from an average of 3.0 million hectares between FY03 to FY12.

During FY22, area under cotton crop cultivation declined to 1.9 million hectares from 2.1 million hectares last year. The reduction in area was mainly in Punjab, which declined by 17.3 percent to 1.3 million hectares. On the other hand, area in Sindh recorded an increase of 21.1 percent to 0.6 million hectares.

In Punjab, a shift to competing cash crops, such as rice, maize and sugarcane contributed to a decline in cotton cultivation (**Box 2.1**). The switch towards the water-intensive sugarcane crop appears

[4] Under this scheme, tractor loans were provided for 8-year period at 3 percent mark-up rate without any condition of mortgage. Farmers cultivating land on contract basis were also eligible for the scheme.

[5] Source: Agrarian Brothers Group (Agbro) – Broiler Market Prices (www.agbro.com).

Second Estimates of Cotton Crop **Table 2.2**

		FY22		Growth (percent)	
	FY21	Target	FY22[P]	FY21	FY22
Area (million hectares)					
Punjab	1.5	1.6	1.3	-17.8	-17.3
Sindh	0.5	0.6	0.6	-20.7	21.1
Pakistan	2.1	2.3	1.9	-17.5	-7.7
Production (million bales)					
Punjab	5.0	6.1	5.4	-20.0	7.9
Sindh	1.9	4.0	3.5	-32.2	88.0
Pakistan	7.1	10.5	9.4	-22.8	32.7
Yield (Kg/hectares)					
Punjab	555	641	723	-2.7	30.3
Sindh	666	1,062	1,035	-14.6	55.4
Pakistan	578	769	831	-6.5	43.9

p: provisional

Sources: Ministry of National Food Security and Research and Pakistan Central Cotton Committee (PCCC)

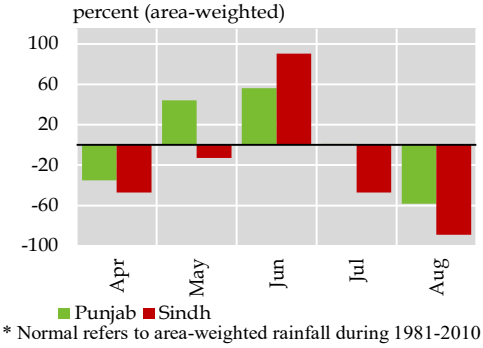
to be more prominent in Punjab, where groundwater of adequate quality is more widely available, in addition to canal water. Moreover, the average maize yield in Punjab is almost 6 times that in Sindh.[6]

Meanwhile, province-wise breakdown shows that cotton yield in Sindh grew by 55.4 percent compared to 14.6 percent decline recorded last year. In Punjab, the yield increased by 30.3 percent, against a decrease of 2.7 percent last year.

The significant improvement in yields was attributed to conducive weather conditions, better crop management practices and favorable cotton prices in the market.[7] In addition, pest attacks were reported in only a few areas in Punjab; last year, heavy rainfalls and high humidity had caused widespread pest infestations.[8]

The weather conditions during *kharif* FY22 generally remained favorable for the cotton crop especially due to timely rainfalls. Sindh received 89 percent below normal average rainfall in August 2021, making the environment conducive for cotton (**Figure 2.5**). Picking of cotton in parts of Sindh usually starts in August and rainfall is not conducive around this time, as it can damage the standing cotton crop at this stage. Also, the mean daily Relative Humidity (R.H) remained in the *normal to below* range.[9]

Departure of Rainfall from Normal* during *Kharif* 2021 **Figure 2.5**



* Normal refers to area-weighted rainfall during 1981-2010

Source: Pakistan Meteorological Department

[6] Source: Pakistan Economic Survey 2020-21, Ministry of Finance

[7] Cotton and Products update report, November 08, 2021, Foreign Agriculture Services, USDA

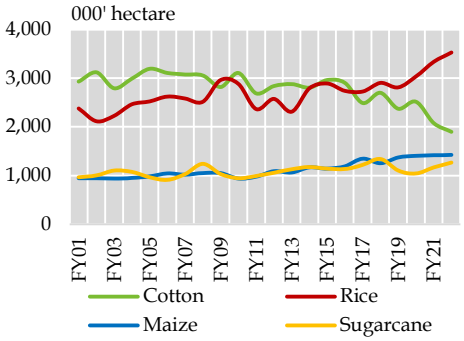
[8] Pak-SCMS bulletin, Volume XI, Issue 09, Serial no. 129, September 01, 2021. SUPARCO

[9] Monthly Agromet Bulletin, National Agromet Centre, Pakistan Meteorological Department. August 2021.

Box 2.1: Area under Cultivation of Cotton Crop in Pakistan

The area under cotton cultivation in Pakistan has recorded secular decline over the past decade. This decrease is partially owed to increase in area under cultivation of competing *khairf* crops, such as rice, sugarcane and maize (**Figure 2.1.1**). The declining trend in cotton crop is a cause for concern, as cotton is a critical input for the textile industry, which contributes around 60 percent to total exports.

Area under Major *Kharif* Crops in Pakistan **Figure: 2.1.1**

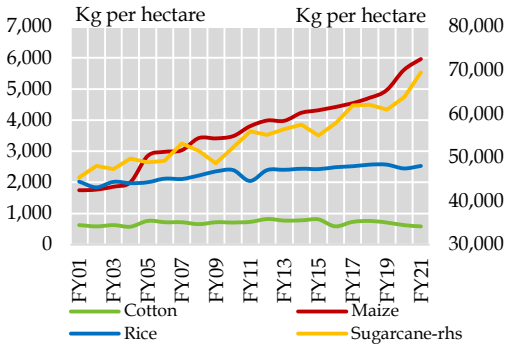


Source: Pakistan Bureau of Statistics

There could be multiple factors at play due to which farmers are substituting cotton with other *kharif* crops.

1. **Low productivity:** The long-term analysis indicates that cotton productivity in the country has remained stagnant. In contrast, the output per hectare for competing crops, such as maize, sugarcane and rice, has risen over the years (**Figure 2.1.2**). In fact, the yield of maize has improved by more than threefold from FY01 levels. Similarly, sugarcane and rice yields have increased significantly over the past two decades. The stagnancy in cotton yield is mainly due to unavailability of quality and certified seeds. The reliance on the old generation BT cotton poses challenges for farmers due to its ineffectiveness against bollworms and other pests.[10] Moreover, according to market experts, around 45 percent of seeds are provided by the registered seed corporations, while remaining 55 percent seeds are sourced from unauthenticated vendors. In contrast, the increased use of hybrid rice and maize seeds has led to improvement in per hectare yields.

Long-term Yield Pattern of Major *Kharif* Crops **Figure 2.1.2**



Source: Pakistan Bureau of Statistics

2. **Low Profitability:** Decline in area under cotton can also be attributed to lower profitability compared to other cash crops such as sugarcane, maize and rice. For instance, overall returns to investment in Punjab were Rs 237 and Rs 225 per day for sugarcane and rice, against Rs 209 for cotton. In Sindh,

[10] Pink bollworm and cotton leaf curl virus (CLCV) attacks have been growing in recent years. CLCV, pink bollworm, and other diseases/insects cause huge losses every year in hot spot areas like Multan, Vehari and other nearby regions in South Punjab. (Source: *Causes Of Low Cotton Yield During Cotton Crop Season 2015*, Report Of Committee Constituted By Agriculture Department, University of Agriculture, Faisalabad)

sugarcane farmers received Rs 237 per day of crop duration, compared to Rs 205 for cotton.[11] Furthermore, as per Crop Reporting Service (CRS), the Punjab government, during *kharif* FY21 the estimated per acre profit at farm gate was around Rs 63,000, 30,500, 40,000 and 29,000 for sugarcane, maize, rice and cotton respectively.

3. **Changing climatic conditions:** Another important factor that has resulted in reduced cotton area is changing climatic conditions. Pakistan is among the countries that are most vulnerable to the effects of climate change. Fluctuating weather conditions, such as unexpected rainfalls (especially in the monsoon season) and temperature variations at critical stages of crop growth, can lead to pest attacks that adversely affect cotton crop productivity.[12] On the other hand, sugarcane is not only more resilient against extreme weather conditions, but it also has the least probability of a pest attack amongst competing crops.[13]

In order to attract growers towards the cotton crop again, the government has offered various incentives. The announcement of an indicative price for cotton is expected to provide some relief to the cotton growers.[14] In another step, the government is gearing up its drive to ensure timely availability of certified seeds at the time of sowing. Moreover, the government is providing technical knowledge about best crop management practices to achieve higher yields through its cotton research center.[15] These efforts may have played a role in increasing the yields during FY22, and may also help arrest the decline in area under cotton.

The higher returns helped farmers in better pest management.[16] Furthermore, the government's announcement of an intervention price enhanced the growers' confidence.[17] To improve cotton production and bring price stability in the domestic market, the Economic Coordination Committee (ECC) approved Rs 5,000/40kg intervention price for the cotton crop for FY22. Under the mechanism, if prices fall below this level, the state-run Trading Corporation of Pakistan (TCP) would buy the crop from farmers at the support price. Nonetheless, the domestic price of cotton remained significantly above the intervention price during this *kharif* season.

Anecdotal evidence also suggest that provincial governments campaigned aggressively to guide farmers to avoid non-optimal application of fertilizers and pesticides, which may have also resulted in better crop output.

[11] Rana, A. W., Ejaz, A., & Shikoh, S. H. (2020). Cotton crop: A situational analysis of Pakistan. Pakistan Agricultural capacity Enhancement Program (PACE) and International Food Policy Research Institute – Pakistan (IFPRI), working paper, April 2020.
[12] Cotton and Products Annual Report, Report Number: PK2021-0004, April 02, 2021 , Foreign Agriculture Services, USDA
[13] The Sugar Industry of Pakistan—Understanding Structural and Regulatory Underpinnings of the Current Sugar Crisis. PIDE Knowledge Brief no. 2020:12, July 14 2020.
[14] Source: Ministry of Finance, Press Release 593 dated August 27, 2021
[15] Source: Central Cotton Research Institute, Multan (http://www.ccri.gov.pk/news.html).
[16] The average cotton price in the domestic market during this *kharif* season was Rs 12,490/maund, up a sizable 46.6 percent over last year.
[17] Source: Ministry of Finance, press release no. 569, dated July 28, 2021.

Estimates of Sugarcane Crop **Table 2.3**

		FY22		Growth (percent)	
	FY21	Target	FY22P	FY21	FY22
Area ('000 hectares)					
Punjab	777	761	869	21	11.8
Sindh	279.7	310	289.5	-2.2	3.5
Pakistan	1,165.0	1,182.1	1,266.0	12.0	8.7
Production ('000 tons)					
Punjab	57,000.0	50,000.0	63,000.0	31.5	10.5
Sindh	18,335.5	19,000.0	18,974.0	6.4	3.5
Pakistan	81,009.3	74,847.0	87,672.0	22.0	8.2
Yield (kg/hectare)					
Punjab	73,359.1	65,703.0	72,497.1	8.8	-1.2
Sindh	65,556.6	61,290.0	65,532.7	8.8	-0.04
Pakistan	69,533.0	63,315.7	69,247.8	8.9	-0.4

P: provisional

Source: Ministry of National Food Security and Research

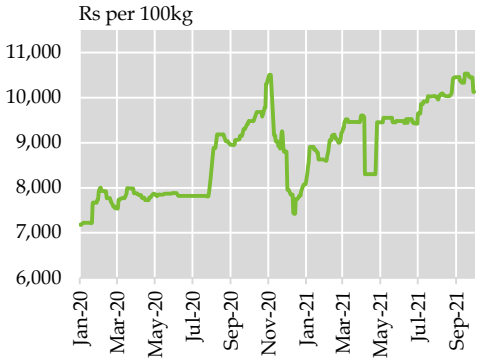
Sugarcane

As per latest estimates, a bumper sugarcane crop is expected during FY22. The output stood at 87.7 million tons, up 8.2 percent over last year, while exceeding the target by 17.1 percent. The increase in cultivated area largely explains the gain in production, as yields remained largely unchanged (**Table 2.3**).

The higher domestic sugar price and better sugarcane procurement price incentivized growers to dedicate more area to sugarcane (**Figure 2.6**).[18] Moreover, the government also supported farmers by directing sugar mills to clear their outstanding dues to farmers.[19]

Beside these factors, anecdotal evidence suggests that on the back of rise in sugar prices, sugar mill owners provided credit support to farmers to get more sugar volumes with better sucrose content.[20]

Average Domestic Sugar Price **Figure 2.6**



Source: Akbari Mandi, Lahore (Whole Sale Market)

[18] Pak-SCMS bulletin, Volume XI, Issue 09, Serial no. 129, September 01, 2021. SUPARCO

[19] In 2020, Punjab government replaced the Sugar Factories Control Act 1950 and promulgated the Sugar Factories Amendment Ordinance of 2020, to allow for mill forfeiture, imprisonment and fines for sugar mill owners for delaying payment to sugarcane producers as well as for delaying the start of the crushing season.

[20] Source: Pakistan: Sugar Annual Report, April 27, 2021, Foreign Agriculture Service, US Department of Agriculture USDA.

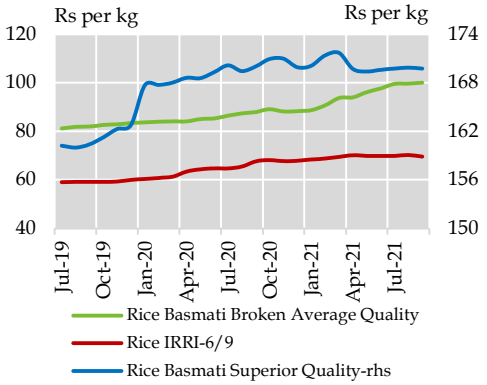
Rice

Rice production stood at 8.8 million tons during FY22 *kharif* season, higher than the target of 8.2 million tons and 5.0 percent more than last years's production. Similar to sugarcane, the increase in cultivation area explains the growth in rice production, as yield remained similar to the previous season (**Table 2.4**).

For the last couple of years, area under rice cultivation is witnessing rising trend, especially in Punjab. Rice has become a promising crop for the farming community due to higher domestic prices (F**igure 2.7**) and strong external demand.

The higher demand for Pakistan's rice in export markets amid competitive unit prices made the rice crop a profitable investment for growers (**Chapter 5**).[21] As domestic rice production exceeds the annual requirement of 3.7 million tons, the country often has exportable surplus. [22] [23] Therefore, global rice demand and prices play important part in determining the rice production.

Domestic Price of Rice **Figure 2.7**



Source: Pakistan Bureau of Statistics

Rice Crop Performance **Table 2.4**

		FY22		Growth (percent)	
	FY21	Target	FY22[P]	FY21	FY22
Area ('000 hectares)					
Punjab	2,395	2,023.00	2,555	18.0	6.7
Sindh	709	800	750	-8.6	5.8
Pakistan	3,336.1	3,069.5	3,529.4	9.9	5.8
Production ('000 tons)					
Punjab	5,301.0	4,480.0	5,645.0	28	6.5
Sindh	2,416.1	3,000.0	2,509.0	-6.2	3.9
Pakistan	8,419.3	8,200.9	8,836.8	13.6	5.0
Yield (kg/hectare)					
Punjab	2,213.4	2,214.5	2,209.4	8.4	-0.2
Sindh	3,407.8	3,750	3,346.4	2.6	-1.8
Pakistan	2,523.7	2,671.7	2,503.7	3.3	-0.8

p:provisional

Source: Ministry of National Food Security and Research

[21] Rice exports rose by 17.5 percent to US$ 423 million in Q1-FY22.

[22] Pakistan's per capita rice consumption of 18 kilograms per annum is among the lowest in the region (source: USDA).

[23] Grain and Feed Annual Report dated June 24, 2021, Foreign Agriculture Service, USDA.

2.3 Large-Scale Manufacturing

Large-scale manufacturing (LSM) output grew by 5.3 percent during Q1-FY22, compared to 4.5 percent in the same period last year (**Table 2.5).** The expansion was broad-based, with 12 out of 15 sectors registering positive growth during the review period, compared to eight sectors in Q1-FY21.

The *automobiles*, *pharmaceuticals*, *food, beverages and tobacco*, and construction-allied sectors made notable contributions to LSM growth during Q1-FY22. Policy support in the form of tax relief, accommodative monetary policy, construction package, and higher PSDP spending had a significant bearing on LSM performance, particularly for automobile, cement and steel sectors.

On monthly basis, LSM witnessed some moderation towards the close of the first quarter. Specifically, YoY growth subsided to 1.6 percent during September 2021, compared to 7.7 percent in September 2020 (**Figure 2.8**). [24] This was mainly attributed to a high base effect and some global supply chain issues.

Growth in LSM in Q1 **Table 2.5**

growth in percent, contribution in percentage points

		YoY Growth		Cont. in Growth	
	wt.	FY21	FY22	FY21	FY22
LSM	**70.3**	**4.5**	**5.3**		
of which					
Textile	**20.9**	**2.2**	**1.1**	**0.6**	**0.3**
Cotton yarn	13.0	0.1	0.8	0.0	0.2
Cotton cloth	7.2	-0.1	0.4	0.0	0.0
Jute goods	0.3	10.7	-29.0	0.0	-0.1
Food, beverages & tobacco	**12.4**	**13.7**	**5.8**	**2.0**	**0.9**
Cigarettes	2.1	31.3	16.6	0.5	0.3
Vegetable ghee	1.1	-3.5	-5.3	-0.1	-0.1
Cooking oil	2.2	3.4	7.4	0.1	0.3
Soft drinks	0.9	-8.6	3.0	0.3	0.1
Coke & petroleum products	**5.5**	**2.4**	**4.7**	**0.1**	**0.3**
Iron and steel products	**5.4**	**-8.1**	**13.8**	**-0.4**	**0.5**
Non-metallic mineral products	**5.4**	**22.2**	**1.7**	**2.6**	**0.2**
Cement	5.3	22.8	1.7	2.7	0.2
Automobiles	**4.6**	**-5.9**	**44.0**	**-0.3**	**2.3**
Jeeps and cars	2.8	-21.1	89.4	-0.6	1.9
Fertilizer	**4.4**	**2.0**	**-7.4**	**0.1**	**-0.5**
Pharmaceuticals	**3.6**	**14.4**	**11.4**	**1.1**	**0.9**
Paper and board	**2.3**	**-2.2**	**11.4**	**-0.1**	**0.4**
Electronics	**2.0**	**-20.4**	**-4.5**	**-0.9**	**-0.1**
Chemicals	**1.7**	**10.8**	**4.6**	**0.3**	**0.1**
Caustic soda	0.4	2.4	-7.0	0.0	-0.1
Leather products	**0.9**	**-44.5**	**14.3**	**-0.7**	**0.1**

Source: Pakistan Bureau of Statistics

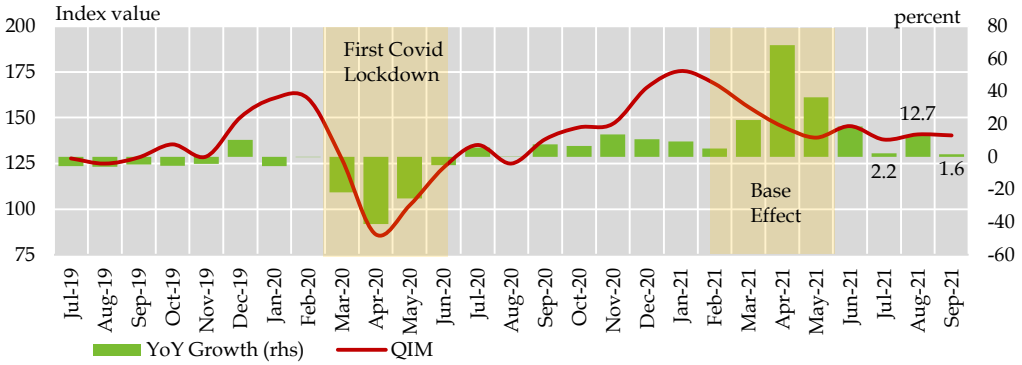
Automobile

The output of the automobile sector expanded by 44.0 percent during Q1-FY22, compared to a 5.9 percent contraction in the same period last year. The pickup in economic activities, tax incentives in the FY22 budget, accommodative monetary policy, improved farm incomes, and introduction of new models contributed to the higher output.

The government introduced tax relief measures in the FY22 budget with the aim of reviving demand and production of automobiles through a reduction in prices. Specifically, it reduced the federal excise duty (FED) on vehicles upto 3,000cc by 2.5 percent, cut the general sales tax for vehicles up to 1,000cc to 12.5 percent from 17 percent, and also allowed locally

[24] It is worth mentioning that 10 out of 15 sectors posted a decline in the month of September 2021, compared to only three in the preceding month. Industries that posted decline during the month included textile, food-beverages-&-tobacco and cement.

Monthly Quantum Index of Manufacturing (QIM) **Figure 2.8**



Source: Pakistan Bureau of Statistics

manufactured cars of 850cc or less to be exempted from value-added tax (VAT).

The *car and jeep* segment responded accordingly and made the most noticeable contribution to automobile sector growth. In particular, cars up to 1,000cc showed an impressive recovery during Q1-FY22 compared to the contraction seen in the same period last year, facilitated in part by the tax relief (**Table 2.6**).

Automobile Production in Q1 **Table 2.6**

			Growth (percent)	
	FY21	FY22	FY21	FY22
All Cars	27,574	51,750	-23.8	87.7
<800 cc	5,789	15,792	-61.1	172.8
800-1,000 cc	5,335	13,698	-44.0	156.8
>1,000cc	16,450	22,260	39.6	35.3
Jeeps/SUVs	1,655	3,619	90.9	118.7
LCVs	3,708	6,790	-32.5	83.1
Trucks	769	1516	-5.9	97.1
Buses	125	116	-20.4	-7.2
Tractors	11,258	12,533	17.4	11.3
2/3 wheelers	449,306	452,648	21.2	0.7

Source: Pakistan Automotive Manufacturers Association

The impact of accommodative monetary policy was also evident from the increase in bank loans for purchase of vehicles. Specifically, auto financing rose by Rs 30.1 billion during Q1-FY22 and touched a record high of Rs 338.2 billion by end-September 2021.

At the same time, it is worth noting that a few domestic auto firms were affected by the global shortage of semi-conductor chips. This contributed to delayed vehicle deliveries and suspension of bookings for some models during Q1-FY22.

Construction-allied Industry

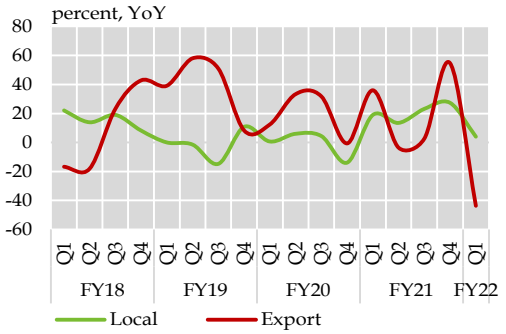
Sectors associated with the construction industry performed reasonably during Q1-FY22, enabled primarily by the government's incentive package for construction initiatives, efforts to enhance the outreach of the *Mera Pakistan Mera Ghar* scheme, and the SBP's directive for banks to increase their housing and finance construction portfolio to at least 5 percent of their private sector advances by December 2021. The elevated level of private sector construction activity was

reflected in the Rs 14.9 billion flow of housebuilding finance during Q1-FY22, compared to Rs 0.9 billion in the same period last year; it may also have contributed to an uptick in residential property prices.[25] Moreover, a 74 percent YoY increase in federal PSDP spending during Q1-FY22 also shored up the construction activities.

Cement

Overall cement production grew by 1.7 percent during Q1-FY22, compared to 22.8 percent in the same period last year. The demand for cement stemmed largely from ongoing domestic construction activities, whereas foreign demand for the commodity declined sharply during the review period.

Growth in Cement Dispatches- Local vs Exports **Figure 2.9**



Source: All Pakistan Cement Manufacturers Association

Local cement dispatches grew by 3.9 percent during Q1-FY22 on YoY basis, against a 19.0 percent expansion in the same period last year (**Figure 2.9**). Cement producers faced headwinds in the form of rising global prices of inputs such as coal, which experienced a two- to three-fold YoY increase.[26] According to some listed firms' financial reports, the moderation in growth partly stemmed from the emergence of macroeconomic pressures during the quarter, such as exchange rate depreciation.[27]

On the other hand, cement exports declined by 43.6 percent YoY during the first quarter, mainly due to a 54.3 percent drop in clinker exports, amidst a spike in international shipping freight costs.[28] Also, exports to Afghanistan declined by 36.0 percent during Q1-FY21, mainly owing to the disruption in the country's construction sector.

Steel

The steel sector's output grew by 13.8 percent during Q1-FY22, compared to a decline of 8.1 percent during Q1-FY21.

[25] According to Zameen.com's *Pakistan Residential Property Price Index*, property prices in the country grew by 22.8 percent, on average, during Q1-FY22, compared to 5.2 percent in the same period last year.
[26] Specifically, the price of South African coal rose from US$ 57.2 per MT during Q1-FY21 to US$ 135.4 MT in Q1-FY22, while the price of Australian coal increased from US$ 52.1 per MT to US$ 169.1 per MT (source: World Bank). Domestic firms, which primarily rely on imported coal as an energy source, were exposed to global price fluctuations and PKR depreciation.
[27] Sources: Cherat Cement Company Limited - Un-audited Accounts for first quarter ended September 30, 2021; D.G. Khan Cement Company Limited – First Quarter Report, September 30, 2021.
[28] For instance, the Federal Reserve Economic Data (FRED's) Producer Price Index for deep-sea freight transportation services rose by 13.8 percent on YoY basis during Q1-FY22, compared to decline of 6.2 percent in the same period last year.

Both long steel and flat steel contributed significantly to the higher output this year. Within long steel, billet production grew by 14.9 percent, adding on to 26.0 percent growth last year (**Figure 2.10a)**. Long steel is primarily used in construction, and its sustained demand reflects the continuing momentum of the construction sector.

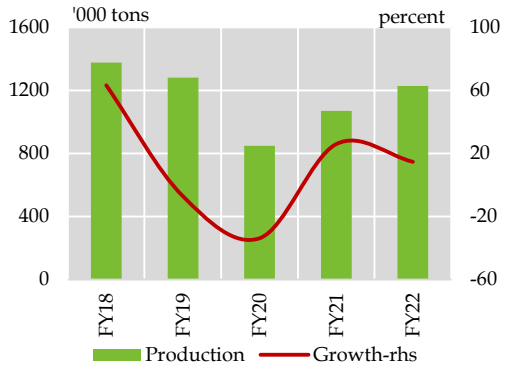
In flat steel, the production of hot-rolled steel expanded by 12.5 percent during Q1-FY22, which represented a rebound from a contraction of 30.1 percent in Q1-FY21 (**Figure 2.10b)**. This was mainly attributed to strong demand for products such as automobiles and domestic appliances.

Textile

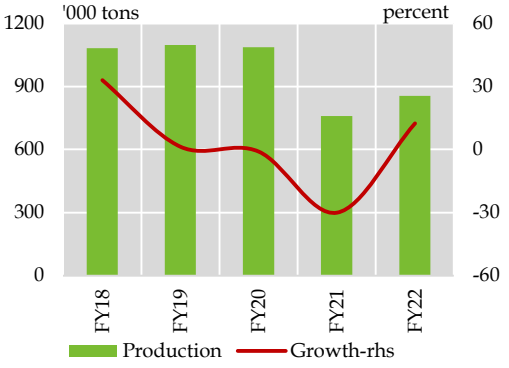
Textile output- as captured in LSM- rose by 1.1 percent during Q1-FY22, compared to 2.2 percent growth in the same period last year. However, since the LSM coverage of the textile sector is mainly limited to primary goods, it did not fully capture the impact of sizable fixed investment and capacity expansion in the sector, and the growth in textile exports.[29]

Specifically, the imports of textile machinery have grown by 146.6 percent and 144.5 percent during Q4-FY21 and Q1-FY22 respectively – the highest quarterly YoY growth in nearly 11 years (**Figure 2.11**). [30] Textile firms have also actively availed the SBP's concessionary financing, for fixed investment under the Temporary Economic Refinance Facility (TERF), as reported previously in the SBP's FY21 Annual Report. Specifically, out of the total financing of Rs 434.7 billion approved under TERF as of 1st April, 2021, approximately Rs 179.9 billion (i.e. 41 percent) was approved for the textile sector.

Long Steel Production, Q1 **Figure 2.10a**



Flat Steel Production, Q1 **Figure 2.10b**

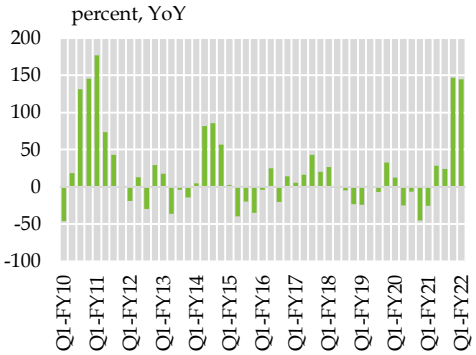


Source: Pakistan Bureau of Statistics

[29] Textile exports rose by 27.4 percent in Q1-FY22, indicating the level of activity in the sector. High value-added items contributed heavily to the growth in textile exports.

[30] According to APTMA, the textile industry has recently invested to set up 100 new units in the value-added sector as it gears up to achieve a target of US$ 20 billion in textile exports during FY22. Source: www.aptma.org.pk/critical-importance-of-competitive-energy-rates-across-textile-value-chain/

Growth in Textile Machinery Imports **Figure 2.11**



Source: Pakistan Bureau of Statistics

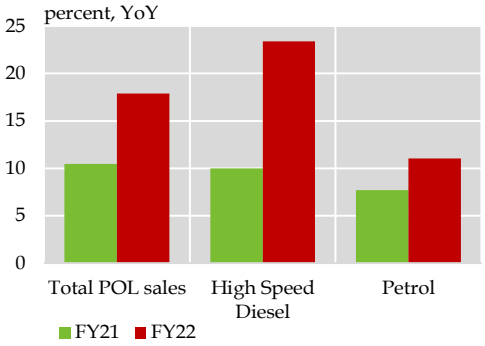
Petroleum

Growth in the POL sector accelerated to 4.7 percent during Q1-FY22, compared to 2.4 percent in the same period last year. This was mainly attributed to pick-up in economic activities, growth in automobile sales, and increase in furnace-oil based electricity generation.

POL sales rose by 17.9 percent during Q1-FY22, compared to 10.5 percent growth in the same period last year (**Figure 2.12**). The sales of high speed diesel and petrol rose by 23.4 percent and 11.0 percent, compared to 10.0 percent and 7.7 percent last year respectively.

From the demand perspective, POL sales to the transport sector increased by 17.0 percent to 4.4 million metric tons (MT) from 3.7 million MT last year (**Figure 2.13**). This was consistent with the increase in transport-related activity, as captured by Google Covid-19 Community Mobility Reports. Moreover, sales to the power sector grew by 33.4 percent to 1.1 million MT during the first quarter, compared to

Growth in HSD and Petrol Sales in Q1 **Figure 2.12**



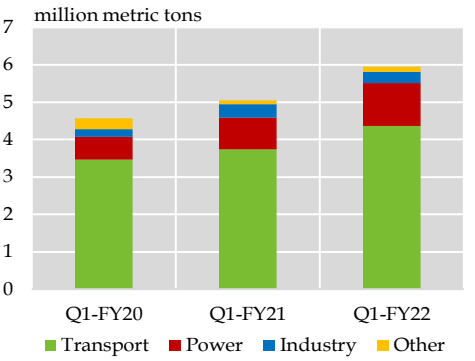
Source: Oil Companies Advisory Council

0.9 million MT last year. In particular, electricity generation through furnace oil grew by 75.5 percent, at a time when FO was a relatively cheaper alternative than LNG, whose price was escalating globally during the review period.

Pharmaceutical

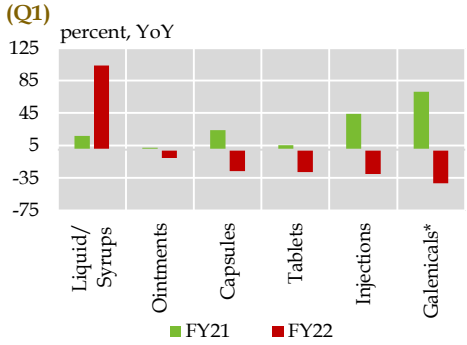
The pharmaceutical sector grew by 11.4 percent during Q1-FY22, compared to 14.4 percent in the same period last year.

Sector-wise POL Sales **Figure 2.13**



Source: Oil Companies Advisory Council

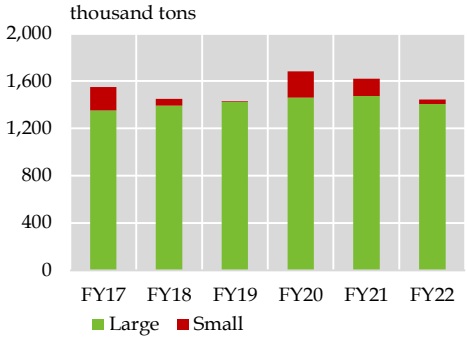
Growth in Pharma Sub-sectors (Q1) **Figure 2.14**



* medicines made of natural components, eg. herbs

Source: Pakistan Bureau of Statistics

Urea Production by Large and Small Units (Q1) **Figure 2.15**



Source: National Fertilizer Development Center

In particular, the production of liquids and syrups expanded by 103.7 percent during Q1-FY22, compared to 16.9 percent in the same period last year (**Figure 2.14**). This may partly be attributed to the increased demand for nutritional supplements and pain management medicines.[31] Anecdotal evidence suggests that consumer efforts to boost immunity and mitigate the adverse impact of Covid on health contributed to the notable pick-up in demand.

Fertilizer

Fertilizer output dropped 7.4 percent during Q1-FY22, compared to a 2.0 percent increase in the comparable period last year. Among urea producers, the production of large-scale units declined by 4.4 percent, compared to 0.8 percent growth in the same period last year (**Figure 2.15**).[32] This primarily owed to suspended production at a major fertilizer plant during the period.[33]

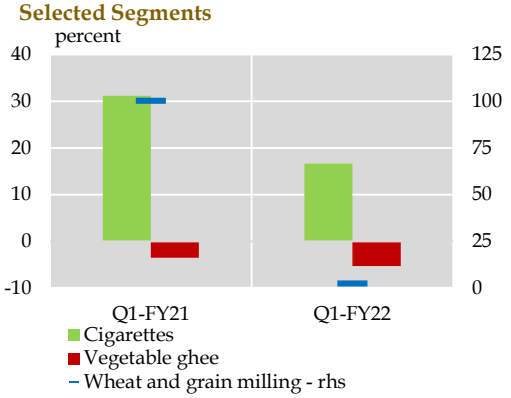
Moreover, the curtailment of gas supply to two small-scale fertilizer plants halted their production during July-August 2021. As a result, overall production of small urea firms declined from 147,629 MT during Q1-FY21 to 35,135 MT in Q1-FY22.

Food, beverages, and tobacco

The food, beverages, and tobacco sector grew by 5.8 percent during Q1-FY22, compared to 13.7 percent last year. The slowdown mainly stemmed from apparent moderation in growth of wheat and grain-milling, as reported in LSM. During the first quarter last year, this sector had reported sharp growth due to a one-off increase in the number of reporting units in the LSM survey.[34]

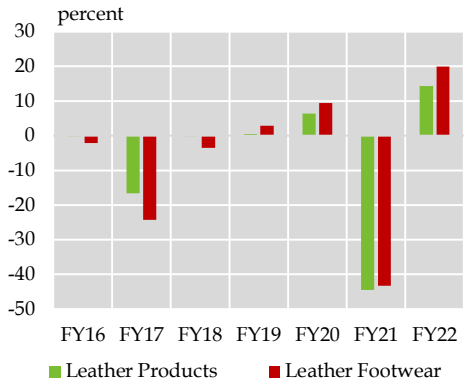
[31] Source: Abbott Pakistan's Unaudited Financial Statements for the Quarter and Nine Months Ended September 30, 2021; Glaxosmithkline Consumer Healthcare Pakistan Limited's 3rd Quarterly Report 2021.
[32] Specifically, the production of large urea units was 1.409 million tons during Q1-FY22, compared to 1.474 million tons during Q1-FY21.
[33] Source: Engro Fertilizers Third Quarter Report 2021.
[34] Specifically, the wheat and grain milling segment of LSM grew by 2.6 percent during Q1-FY22, compared to 100.3 percent in Q1-FY21.

Food Sector - Growth in Selected Segments **Figure 2.16**



Source: Pakistan Bureau of Statistics

Growth in Leather Sector (Q1) **Figure 2.17**



Source: Pakistan Bureau of Statistics

Vegetable ghee production declined by 5.3 percent during the first quarter, compared to a reduction of 3.5 percent last year (**Figure 2.16**). This occurred in tandem with a steep rise in global palm oil prices and a 14.8 percent quantum decline in imports during Q1-FY22. Moreover, cigarette production moderated to 16.6 percent during Q1-FY22, compared to 31.3 percent growth last year. Tobacco firms reported rising inflation as a challenge during the review period, given its impact on consumers' purchasing power and their tendency to opt for lower priced, illicit cigarette brands.[35]

Leather

The leather sector posted 14.3 percent growth during Q1-FY22, compared to a 44.5 percent decline in the same period last year. This was a promising development, given that the sector had posted a first quarter decline of 9.1 percent (on average) between FY16-FY21 (**Figure 2.17**).

Leather footwear has the greatest weight within the sector.[36] Thus, a rebound in production of leather footwear explained the overall improvement. Specifically, the 19.9 percent growth in leather footwear was the fastest Q1 growth since FY11.

In addition to the broader increase in domestic economic activity, the impact of recovering foreign demand was also evident from the growth in Pakistan's leather exports during the review period. The country's exports of leather manufactures (including garments and gloves) increased by 6.0 percent during Q1-FY22, while leather footwear exports

[35] Source: Philip Morris Pakistan Limited – Quarterly Report for the third quarter ended September 30, 2021; Pakistan Tobacco Company – Condensed Interim Financial Statements for the nine months period ended September 30, 2021.

[36] Leather products have a weight of 0.86 in LSM. They comprise leather footwear (0.47), upper leather (0.39), and sole leather (0.00004).

recorded 9.8 percent growth during the same period. [37]

2.3 Services

Proxy indicators for the services sector indicated continuation of the growth momentum during Q1-FY22, on the back of growth in the commodity producing sectors and goods imports (**Table 2.7**).

In terms of impetus to the services sector, output of important *kharif* crops is expected to be better than last year, and LSM continued to grow as well. Meanwhile, merchandize imports rose by 66.1 percent during Q1-FY22 compared to 0.8 percent last year. The expansion in activities in these sectors had a positive impact on wholesale & retail trade and transport sectors during the review period.

Services Sector Indicators during Q1 **Table 2.7**

	FY21	FY22
Wholesale and Retail Trade (18.8%)		
Sectoral credit offtake*- flow (billion Rs)	17.7	21.5
Wholesale - food, beverages and tobacco	0.2	1.8
Wholesale - petroleum products[1]	17.6	7.3
Retail - non specialized stores [2]	0.0	2.3
Others	-0.1	10.0
Imports (billion US$, PBS)	11.3	18.7
LSM (YoY growth)	4.5	5.1
Agriculture credit (disbursements – billion Rs)	254.6	291.9
Transport, Storage and Communication (12.2%)		
POL sales to transport sector (million MT)	3.8	4.3
Commercial vehicle sales (units)	6,618	12,330
Cellular teledensity (%, end period)	79.6	86.2
Broadband users (million, end period)	87.0	107.6
Finance and Insurance (3.7%)		
Assets (billion Rs)*	23,808	28,790
Deposits (billion Rs)*	17,543	20,516
ROA (percent)	1.1	0.9
ROE (percent)	14.8	13.7
Profit after tax (billion Rs)	68.7	68.7
Infection ratio	9.9	8.8
General Government Services (8.2%)		
Expenses on general government & defense** (billion Rs)	313.4	351.2

Note: Values in brackets are sectoral shares in GDP, as of FY21.
[1] Solid, liquid, gaseous fuels and related products [2] Construction materials, hardware, plumbing and heating equipment and supplies
* Stocks, as of end-September 2021 **Only federal government (running of civil government and defense)
Sources: State Bank of Pakistan, Pakistan Bureau of Statistics, Oil Companies Advisory Council , Pakistan Automotive Manufacturers Association , Pakistan Telecommunication Authority and Ministry of Finance

[37] Pakistan's exports of leather manufactures (including garments and gloves) and leather footwear increased to US$ 154.5 million and US$ 32.2 million in Q1-FY22, from US$ 145.7 million and US$ 29.3 million respectively.

Analysis of financial accounts of various fast moving consumer goods (FMCG) firms also indicates expansion in revenues. Sales of FMCG firms rose by 21.0 percent during Q1-FY22 compared to 23.7 percent growth last year.[38]

Another gauge of services activity level is the demand for credit by services firms. Private sector credit data shows net disbursements to firms in the wholesale and retail trade sector increased from Rs 17.7 billion in Q1-FY21 to Rs 21.5 billion in Q1-FY22. Whereas last year's credit offtake was solely driven by petroleum group, credit disbursement during Q1-FY22 pattern was broad-based. The increase in credit to *wholesale and retail* vendors of food and general store sector was impressive, and can largely be attributed to pickup in activity in the crop sector and the food processing industry.

The transport sector indicators also pointed towards growth during Q1-FY22. Consumption of petrol and diesel for transportation rose during the period, while quantum of imported petroleum products also witnessed double digit growth. Meanwhile, there was considerable increase in sales of commercial vehicles, indicative of uptick in transport sector. Additionally, the revival of the tourism industry continued, which may also have aided recovery in the transport sector. The aviation sub-sector received a boost from increase in flight to scenic destinations, such as Gilgit and Skardu. Additionally, resumption of international flights operations by both national and foreign airlines had a positive impact on the aviation industry.

Telecommunication indicators point to improvement in activity in the industry. Teledensity and number of broadband users rose sharply during Q1-FY22. Cellular subscribers rose from 184.3 million to 186.4 million during the period. Additionally, analysis of financial statements of the big 3 telecom firms reveals that cumulative revenue increased by 12.2 percent during the period, driven largely by the increase in the customer base.[39]

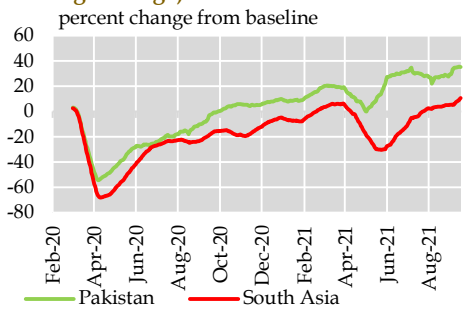
Additionally, exports of IT and IT-enabled services grew substantially to US$ 498.0 million in Q1-FY22 from US$ 307.1 million a year ago (**Chapter 5**). The acceleration in export growth in the sector can be traced to computer (software consultancy in particular) and telecom services.

Indicators of the banking industry also point to sustained activity during Q1-FY22. Bank assets surged during the review period. Meanwhile, the continued drop in infection ratio pointed towards further improvement in asset quality.

Google's Covid-19 Community Mobility Reports also serve as valuable measure for activity level in the services sector. Data on visits to grocery & pharmacy stores, retail and recreation outlets, workplaces, and transit stations are loosely associated with the services industry. For Pakistan, the aggregate data shows that visits to these places have increased considerably during the period under review (**Figure 2.18**).

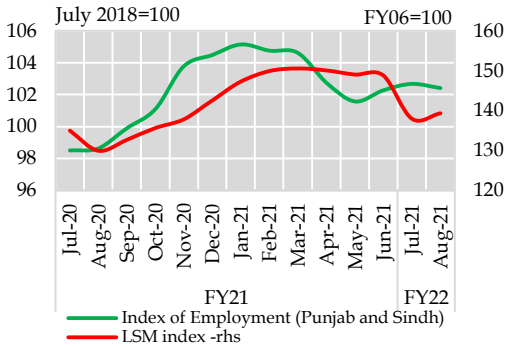
[38] Based on a sample of 26 FMCG firms in the country.
[39] Source: Pakistan Telecommunication Authority

Mobility Trends in Pakistan vis-a-vis South Asia (30-days Moving Average) **Figure 2.18**



Source: Google Covid-19 Community Mobility Report

Combined Punjab and Sindh Industrial Employment and LSM **Figure 2.19**



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

Moreover, in comparison to other South Asian countries (Bangladesh, India, Nepal and Sri Lanka), mobility in Pakistan had recovered more strongly from the baseline level.[40]

2.4 Labor Market

Labor market activity, as gauged by various economic indicators, showed relatively persistent trend during Q1-FY22. Industrial employment in Sindh and Punjab rose during Jul-Aug FY22 compared to last year.[41] Sentiments about employment in both industrial and services sector remained largely positive in the latest waves of the SBP Business Confidence Survey (BCS) and Consumer Confidence Survey (CCS). However, slight weakening in positivity was observed in the future employment expectations. Wages in the construction sector and fees/income in the various other segments of the services sector also increased in Q1-FY22.

Employment

The employment index for the industrial sectors in Sindh and Punjab rose by 4.0 percent during Jul-Aug FY22 compared to a contraction of 0.8 percent last year (**Figure 2.19**).[42] Increase in employment was more pronounced in Sindh compared to Punjab. Overall, the pharmaceutical sector hired the most workers during Q1-FY22, followed by the textile industry.

[40] While this is a favorable observation, it must be pointed that Pakistan's economic growth was relatively lower during the baseline period of Google mobility data.

[41] The analysis of industrial employment in Sindh excludes the steel industry due to reporting issues. For details, see Chapter 2 in the SBP Second Quarterly Report of FY21.

[42] In every Monthly Survey of Industrial Production and Employment (MIPE), there are a few non-reporting firms, for which the data is estimated based on past trends. Due to disruptions caused by the Covid pandemic during FY20 and FY21, increased usage of estimates for gauging employment numbers and non-reporting of data by firms may lead to abrupt growth/contraction in the industrial labor market indicators during FY22.

Punjab

Industrial employment, as measured by *Monthly Survey of Industrial Production & Employment in Punjab* for August 2021, showed an increase of 1.3 percent in new jobs compared to end June 2021. Additionally, in comparison to Jul-Aug FY21 last year, there was a growth of 2 percent in industrial employment. This increase was mainly driven by export-oriented sectors of cotton textiles and leather footwear (**Table 2.8**).

The increase in employment in the textile sector reflects the developments in the industry. Significant increase in textile exports helps explain the growth in employment in this sector. Textile exports rose sharply by 27.4 percent during Q1-FY22 against 2.9 percent last year. This was largely driven by hosiery and ready-to-wear apparel. The increase in foreign demand for textile goods led to increase in production activities, which in turn led to job creation in the textile industry. Significant increase in uptake of fixed investment loans (under TERF and LTFF schemes) in the preceding quarters by the textile sector and subsequent increase in import of textile machinery point to expansions in the sector, which is also creating new job opportunities.

Similarly, increase in demand for leather footwear led to increase in employment level in this sector. Output of the leather processing industry expanded by 13.9 percent during Q1-FY22 compared to 44.5 percent contraction last year (**Table 2.5**). The rebound is partly attributed to revival in footwear exports, which increased by 9.1 percent in quantum terms during Q1-FY22. Resultantly, there was an increase of 24.9 percent in jobs on average during Jul-Aug FY22 in this sector, compared to a drop of 11.5 percent last year.

Wheat milling was another industry that witnessed employment creation during Q1-FY22 which is in line with increase in output levels. Production of wheat products rose by 23.5 percent during Jul-Aug FY22, on the back of inclusion of new firms in the sample dataset of LSM. The increase in activity level created 17.5 percent more jobs in Punjab during Jul-Aug FY22 compared to 14.2 percent last year.

Average Number of Industrial Workers Hired /Fired during Jul-Aug **Table 2.8**

	FY21	FY22
Punjab	**-833**	**5,534**
Cotton textiles	241	1,555
Wheat milling	1,061	1,493
Sugar	2,060	-1,236
Leather footwear	-1,200	2,294
Cement	-886	382
Pharmaceutical	494	138
Sindh*	**-2,274**	**10,355**
Cotton textiles	-1,422	2,095
Sugar	-2,778	3,413
Leather tanning	1,107	-161
Cement	130	-2,842
Pharmaceutical	19	8,986

*Excluding the steel industry

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

Sindh

The August 2021 *Monthly Survey of Industrial Production & Employment in Sindh* shows a growth of 8.8 percent in average industrial employment for the Jul-Aug FY22 period, compared to a decline of 1.9 percent last year.

The increase in employees during Jul-Aug FY22 can largely be attributed to pickup in activity in the pharmaceutical sector (**Table 2.8**). The industry contributed 86.8 percent to the total workers added during the period. This is in line with double-digit growth in production of pharmaceutical industry during Q1-FY22 (**Table 2.5**). Moreover, increase in foreign demand for pharmaceutical products also helps explain growth in production and consequently increased hiring by the firms. Pharma exports rose by 7.4 percent in Q1-FY22 in value terms, on top of 23.0 percent growth seen last year.

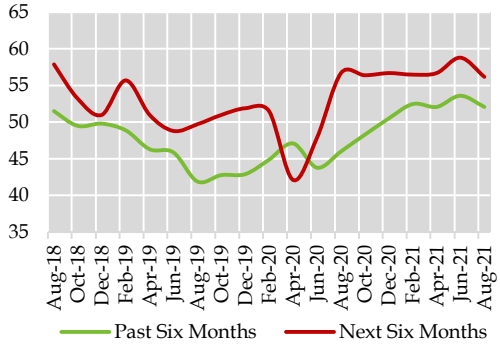
The sugar industry in Sindh also hired more workers during Q1-FY22. This may be explained by the early start of the sugarcane crushing season compared to Punjab, which laid off workers. Meanwhile, the estimated production of sugarcane is expected to increase by a further 3.5 percent in the province, which may also have led to higher demand for workers in the industry.

In contrast to Punjab, workers in the cement industry in Sindh lost jobs during Q1-FY22. Significant drop in overseas shipments, in particular to Bangladesh, affected production activities in Sindh, which may have hampered job market in this industry.[43]

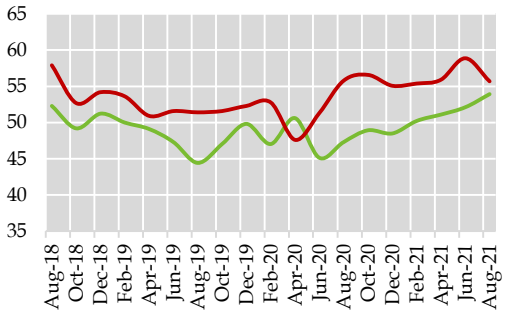
Confidence Surveys

The SBP Business Confidence Index shows slight dip in the current and future employment index (past six months) between June 2021 and August 2021, which suggests weakening optimism in the industrial sector. The employment index for the industrial sector fell by 1.5 points - the biggest fall since the June 2020 wave (**Figure 2.20a**). The next-6-month index of industrial employment also went down by 2.6 points in August 2021 against increase of 2.1 points in the previous survey. Increase in inflationary pressures and PKR depreciation may have played a role in

BCS Unemployment Index for Industrial Sector **Figure 2.20a**



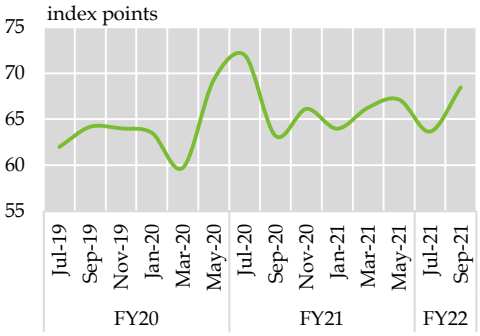
BCS Unemployment Index for Services Sector **Figure 2.20b**



Source: State Bank of Pakistan

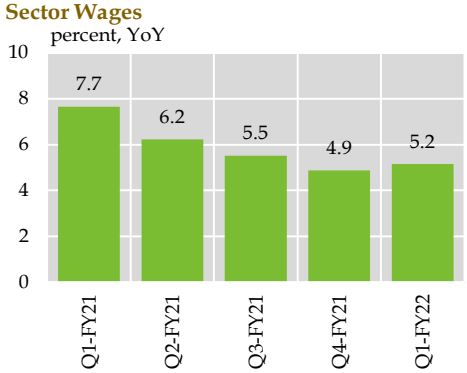
[43] Due to lower transportation costs, cement exporters in the country's south are better placed to ship to foreign destinations.

CCS Future Unemployment Index (Next Six Months) **Figure 2.21**



Source: State Bank of Pakistan

Growth in Construction Sector Wages **Figure 2.22**



Source: Pakistan Bureau of Statistics

weakening some of the earlier optimism in the industrial sector.

On the other hand, respondents from the services industry remained upbeat about employment creation in the past six months (**Figure 2.20b**). The index showed an increase of 1.8 points in August 2021 over the preceding wave (June 2021).[44] However, similar to prospects of industrial employment, the next-6-month index of employment for the services sector fell by 3.2 points, which reflects some weakening expectations about job creation. That said, despite the dip in all the indices, the levels remained above the threshold of 50, which indicates that majority of the respondents from both the industrial and services sectors remained hopeful about job growth in the economy.

The CCS also highlights the decreasing optimism within the labor market, as the unemployment index rose by 4.8 points, its biggest jump since May 2020 (**Figure 2.21**). The change in unemployment index in the CCS from the preceding July 2021 wave highlights concern about rising energy prices and their subsequent second-round impacts.

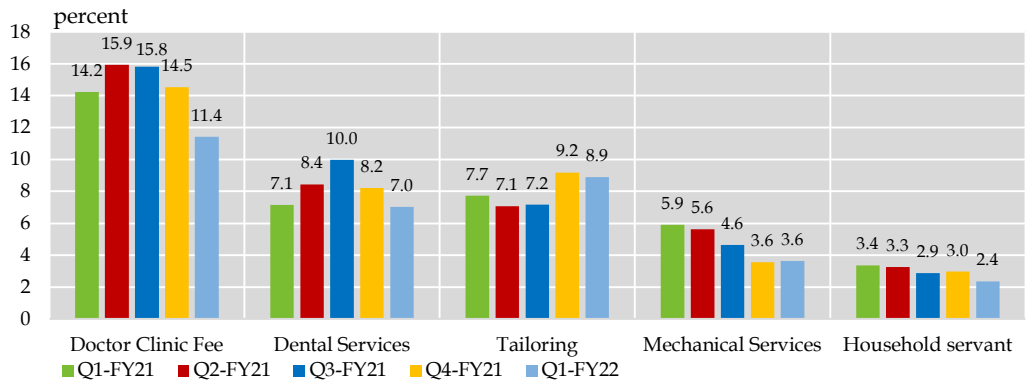
Wages

The wages in the construction industry and incomes/fees in the services sector decelerated during Q1-FY22 as compared to last year. The wage rate index for the construction sector in the CPI dataset showed 5.2 percent growth in Q1-FY22 compared to 7.7 percent growth last year (**Figure 2.22**). Likewise, incomes of various segments of services sector also grew at a lower rate during the period on YoY basis (**Figure 2.23**).

The deceleration in construction wages contrasted with the increase in overall inflation during the review period (**Figure 2.24**). This shows that purchasing power of

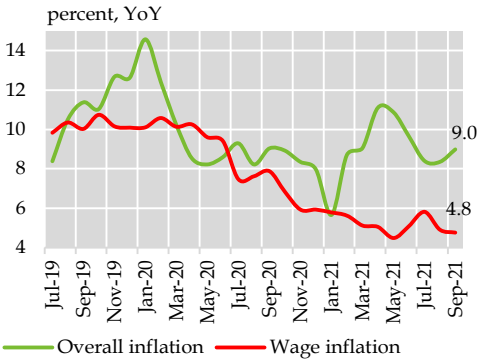
[44] The survey results of BCS and CCS are presented in Diffusion Index (DI) format, which varies between 0 and 100. The DI can be interpreted as follows: DI < 50 indicates that positive views regarding credit/ availability of funds/ borrowing cost are less than the negative views; DI = 50 shows that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

Growth in Earnings - Services Sector Occupations **Figure 2.23**



Source: Pakistan Bureau of Statistics

Trend in Overall and Wage Inflation **Figure 2.24**



Source: Pakistan Bureau of Statistics

the construction laborers deteriorated in real terms. Ever since the onset of the Covid pandemic, wage growth has predominantly remained below the inflation rate. The impact on construction sector laborers was not commensurate with the increase in output of the construction sector and its allied industries, despite the incentives given to the industry. This may point to excess supply of labor in the construction sector. This can be partially attributed to slowdown in global demand for migrant workers during the ongoing pandemic amid mobility restrictions.[45] Moreover, increased mechanization in the construction industry may also have contributed to slow growth in wages for the construction sector labor. For instance, increased use of ready-mix concrete, tower cranes and excavation equipment may have adversely affected the demand for low-skilled laborers in the construction industry.

Within the services sector, growth in incomes of mechanical and household servants remained rather lackluster in Q1-FY22, while tailoring and dental services remained broadly at par with inflation rate. On the other hand, doctor consultation fees continued to increase in real terms, albeit some deceleration was observed during Q1-FY22.

The low rise in incomes of household servants and mechanical services may

[45] According to data from the Bureau of Emigration and Overseas Employment, 81.6 percent fewer people left Pakistan for job opportunities abroad in Q1-FY22 as compared to Q1-FY20. The comparison is made with Q1-FY20 instead of Q1-FY21, because of strict air travel restrictions last year amidst the pandemic.

indicate influx of more workers in the job market for these segments, as they require little prior skills or education. The low-income growth trajectory may be attributed to easy entry and exit, coupled with low demand in the aftermath of the Covid pandemic. For skilled professionals like doctors, persistent increase in real wage rate suggests demand in the medical services is outstripping supply, partly in response to Covid pandemic.

In addition to the aforementioned indicators of the labor market in Q1-FY22, the Pakistan Bureau of Statistics published results of the Labor Force Survey FY19. Increase in unemployment during FY19 had coincided with the slowdown in economic activity during the period. More importantly, the impact of the slowdown on the workforce was asymmetric across various segments of the society (**Box 2.2**).

Box 2.2: Key Insights from the Labor Force Survey 2018-19

The Labor Force Survey (LFS) is an important periodic document, published by Pakistan Bureau of Statistics (PBS). It provides key insights into socio-demographics, employment status, provincial and sector-wise distribution of the labor market. The PBS recently published its 35th Pakistan Labor Force

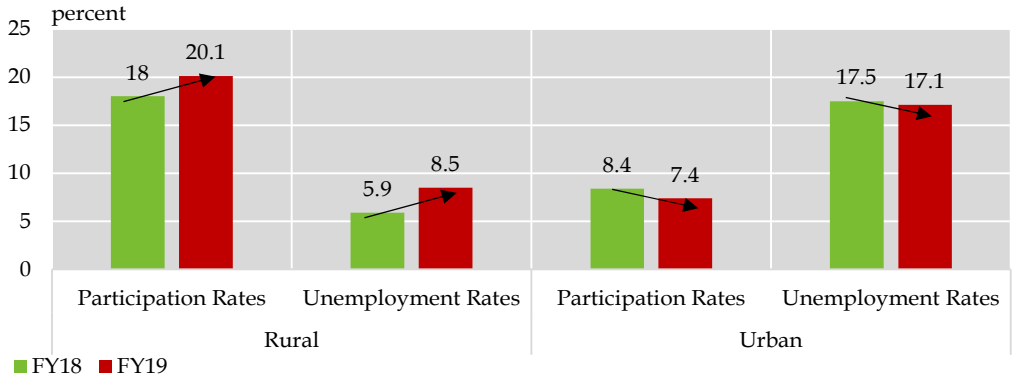
Labor Force Indicators FY11-19 **Table 2.2.1**

	FY11	FY13	FY14	FY15	FY18	FY19
Unemployment Rates (percent)						
Total	6.0	6.2	6.0	5.9	5.8	6.9
Male	5.1	5.4	5.1	5.0	5.1	5.9
Female	8.9	9.0	8.7	9.0	8.3	10.0
Employment by Sector (percent of labor force)						
Agriculture	45.1	43.7	43.5	42.3	38.5	39.2
Industry	20.7	23.4	21.5	22.6	23.7	23.0
Manufacturing	13.7	14.5	14.2	15.3	16.1	15.0
Construction	7.0	8.9	7.3	7.3	7.6	8.0
Services*	34.2	34.8	35.0	35.1	37.8	37.8
Wholesale and retail	16.2	14.4	14.6	14.6	14.9	14.5
Transport, storage and communication	5.1	5.5	5.5	5.4	6.2	6.2
Community/social & personal services	10.8	13.3	13.1	13.2	14.7	14.9
Others	2.1	1.6	1.8	1.9	2.0	2.2
Activity status (percent of labor force)						
Formal	26.2	26.4	26.4	27.4	28.0	27.6
Informal	73.8	73.6	73.6	72.6	72.0	72.4
Employment status (percent of labor force)						
Employers	1.4	1.3	1.1	1.4	1.4	1.5
Own account workers	34.9	33.6	35.4	36.1	34.8	35.8
Contributing family workers	27.7	26.3	24.4	23.8	21.4	22.9
Employees	36.0	38.8	39.1	38.7	42.4	39.8

*For LFS FY11-14, 'Others' category has been included in services sector for consistency with later publications

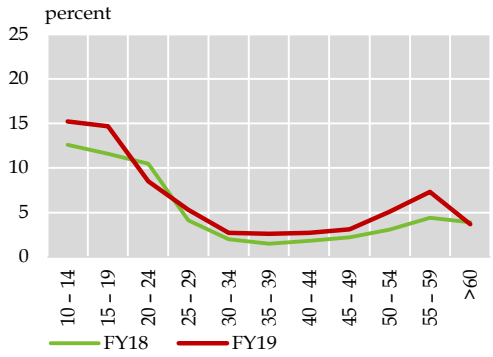
Source: Pakistan Labour Force Survey 2018-19, Pakistan Bureau of Statistics

Women Labor Force Participation and Unemployment: Urban vs Rural **Figure 2.2.1**

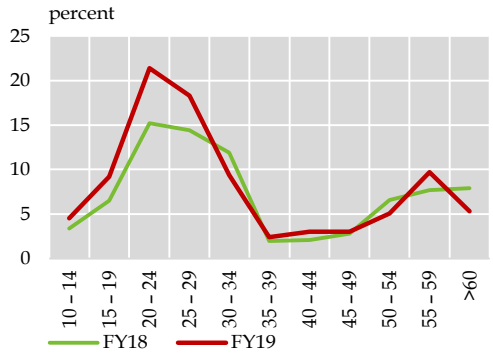


Source: Pakistan Labour Force Survey 2018-19, Pakistan Bureau of Statistics

Male Unemployment by Age **Figure 2.2.2a**



Female Unemployment by Age **Figure 2.2.2b**



Source: Pakistan Labour Force Survey 2018-19, Pakistan Bureau of Statistics

Survey (LFS) 2018-19 with a lag of two years. Some of the important findings of the report are presented below:

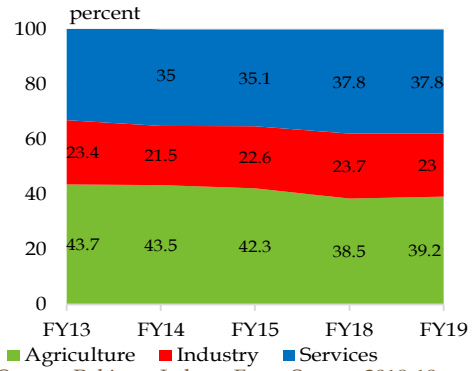
1. Unemployment rose by 1.1 percentage point to 6.9 percent in FY19 over the previous year (**Table 2.2.1**). The impact was more pronounced on women. Female unemployment increased from 8.3 percent in FY18 to 10.0 percent in FY19, whereas male joblessness rose from 5.1 percent to 5.9 percent.

2. Analysis of the unemployment data by geography indicates increase in unemployed rural workers was more pronounced in females (8.5 percent in FY19 compared to 5.9 percent in FY18) compared to males (5.5 percent in FY19 compared to 5.1 percent in FY18). At the same time, the share of women in rural labor force rose by 2.1 percentage points to 20.1 percent in FY19 (**Figure 2.2.1**). It is worth noting that while more women in rural areas were looking for jobs, it was relatively harder for them to get jobs. This contrasts with female workers in urban areas, which saw a decline in the

participation rate (7.4 percent from 8.4 percent) and a decrease in unemployment rate (17.1 percent from 17.5 percent).

3. Joblessness among youth showed a sizeable increase in FY19. Overall unemployment in the 25-29 age group increased by 2.1 percentage points to 8.6 percent. Unemployment in young women -which was already high - increased further. Unemployment among young men also rose in FY19 compared to preceding year, though the increase was not as large as for women (**Figures 2.2.2a and 2.2.2b**). Meanwhile, the unemployment rate for 30+ age group remained almost static in FY19.

Labor Force: Sectoral Share **Figure 2.2.3**



Source: Pakistan Labour Force Survey 2018-19, Pakistan Bureau of Statistics

4. Sectoral analysis shows that the share of employment in the agriculture sector rose for the first time in a decade (**Figure 2.2.3**). On the other hand, share of labor force in the industrial sector declined.

Summing up, the results of the report put into perspective the need for some reforms in the domestic labor market. First, focus on women economic empowerment is crucial for achieving higher economic growth. More female participation in the labor force boosts productivity, increases economic diversification, and leads to income equality.[46] Second, special emphasis must be placed on creating job opportunities for the youth, since unemployment in this group has long-term impact on their economic well-being.[47] In particular, conducive policies may be designed for unemployed female workforce in rural areas. Third, the reversal in movement of labor force from the industrial sector to agriculture sector ought to be a cause for concern for policymakers. From an economic standpoint, value added per worker is predominantly higher in the non-agricultural sector than in agriculture in developing countries.[48]. Considering the results of the report, labor market reforms should focus on increasing women participation, enhancing job opportunities for the youth, and incentivizing non-agricultural workers.

[46] *Pursuing Women's Economic Empowerment* (2018). International Monetary Fund. Washington DC, United States.

[47] T.A. Mroz and T.H. Savage (2006). *The Long-Term Effects of Youth Unemployment*. The Journal of Human Resources Spring, 2006, Vol. 41, No. 2, pp. 259-293, University of Wisconsin Press. Wisconsin, United States.

[48] D. Gollin, D. Lagakos and M.E. Waugh (2013). *The Agricultural Productivity Gap*. National Bureau of Economic Research, Working Paper 19628. Massachusetts, United States.

3 Monetary Policy and Inflation

In response to the recovery in domestic demand, emerging inflationary pressures, and a widening current account deficit, SBP increased the policy rate by 25 basis points to 7.25 percent in Q1-FY22. This proactive policy approach was aimed at ensuring the sustainability of growth and keeping inflation expectations anchored. Meanwhile, credit to the private sector increased during Q1-FY22, compared to net retirements during the same period last year. Despite seasonal loan retirements in sugar and rice processing sectors, the overall demand for working capital loans increased, mainly due to the rising input costs, revival in economic activity and recovery in business confidence. Furthermore, SBP's TERF scheme drove up fixed investment loans, whereas consumer financing continued to accelerate with major impetus from automobile and housing segments. On the inflation front, YoY CPI inflation that was declining since May 2021, inched up by end-Q1-FY22, though on aggregate basis, it weakened slightly in Q1-FY22 over Q1-FY21. While core inflation remained broadly stable and energy inflation was higher, the ease in the headline number was mainly due to stable food inflation. Inflation expectations, which were broadly anchored in July 2021, drifted up in September 2021.

3.1 Policy Review

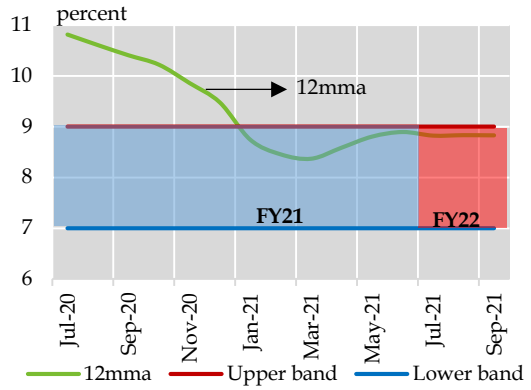
Monetary policy in Pakistan shifted gears in Q1-FY22. With an increase in the policy rate of 25 basis points, the 14-month long spell of unchanged monetary policy settings ended during the review period. Though the outlook at the start of the fiscal year appeared encouraging, pressures emerged on various fronts by the end of the quarter. In particular, rising domestic demand, external sector vulnerabilities and upside risks to inflation had become more prominent. Higher inflation outturns were also expected later in the fiscal year mainly due to higher imported inflation driven by rising global commodity prices.

By the start of FY22, the macroeconomic rebound from the Covid-led downturn strengthened further. High-frequency demand indicators continued to show robust growth. For instance, sales of Fast Moving Consumer Goods (FMCGs) and domestic cement sales registered significant increase in FY21 as compared to the last year.[1,2] Similarly, import and local production of steel also increased. Energy demand also remained strong, reflecting the continued recovery in economic activity.[3] Similarly, large-scale manufacturing (LSM) continued to maintain strong growth, reflective of the ongoing positive momentum in the economic activity.[4]

By the time MPC met in July 2021, inflation, although at an elevated level, had declined from 11.1 percent in April 2021 to 9.7 percent in June 2021. For the first time in June 2021, since January 2021, food prices fell on account of the government's administrative measures and relatively better production of wheat and sugar. Moreover, core inflation remained stable in both urban and rural areas, indicating that the energy and food-driven inflation had not seeped into general

[1] The cumulative sales of 26 listed FMCG companies grew by 22.7 percent in FY21 compared to 6.8 percent a year ago.
[2] Cement sales rose by 20.4 percent in FY21 compared to 0.9 percent decline last year.
[3] POL sales registered an increase of 16.3 percent during FY21 compared to 11.7 percent decline last year.
[4] LSM rose by 14.9 percent in FY21 compared to 9.8 percent decline last year.

CPI Inflation Projection and 12MMA **Figure 3.1**



Source: Pakistan Bureau of Statistics and State Bank of Pakistan staff estimates

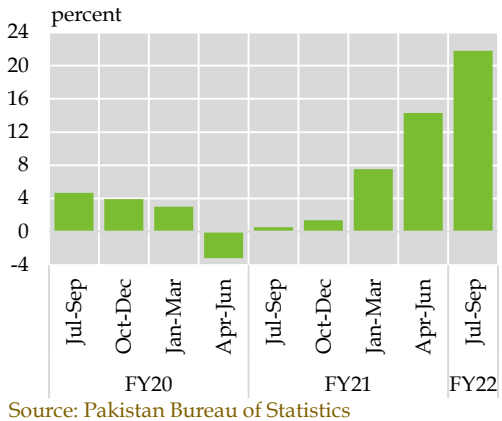
prices. In addition, inflation expectations fell in July 2021. Keeping in view these developments, the inflation forecast was announced at 7-9 percent for FY22, subject to both downward and upward risks (**Figure 3.1**).[5] Moreover, despite the surge in international oil prices, downward adjustments in the Petroleum Development Levy (PDL) by the government helped arrest the domestic pass-through.

In view of the continued domestic recovery and improved inflation outlook following the decline in food and core inflation, the MPC decided to keep the policy rate unchanged at 7 percent in its July 2021 decision. However, the MPC stated that monetary policy would begin to normalize if signs of demand-led pressures on inflation or vulnerabilities in the current account appeared.

As the quarter progressed, the pressures on current account deficit and inflation began to emerge, causing a reassessment of the outlook and also the policy stance, by the time MPC met in September 2021. Two factors particularly fed into the decision to raise interest rates: (i) current account deficit increased to US$ 0.8 billion and US$ 1.5 billion in July 2021 and August 2021 respectively, mirroring both increasing domestic demand and elevated global commodity prices; (ii) though YoY inflation declined in July 2021 and August 2021, the momentum of rising prices remained relatively higher with month-on-month rise of 1.3 percent and 0.6 percent respectively. Moreover, inflation expectations of both households and businesses had inched-up compared to the earlier survey iteration. In addition, wage inflation also picked up in July 2021 as the economic recovery strengthened. Going forward, higher inflation outturns were expected on account of imported inflation amid pass through of global commodity prices into domestic prices, particularly of energy, and the path of domestic demand (**Figure 3.2**).

With the changed economic outlook, the MPC unanimously decided to increase the

Growth in Unit Value Index of Imports **Figure 3.2**



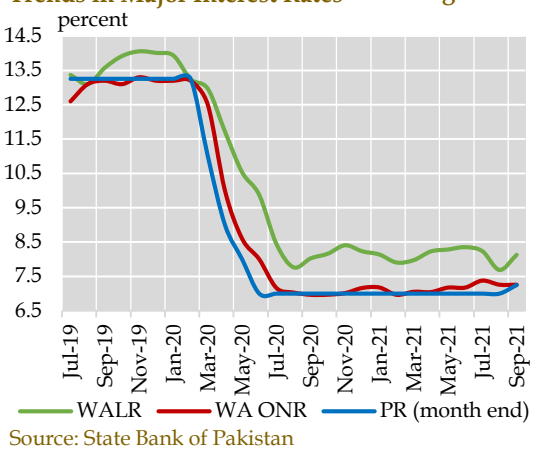
Source: Pakistan Bureau of Statistics

[5] The downside risk was associated with resurgence of Covid-19, whereas the upside risks include higher than expected increase in international commodity prices, rise in domestic energy tariffs, unfavorable exchange rate movement and unexpected fiscal expansion.

policy rate by 25 bps, to 7.25 percent. Nonetheless, as noted in the Monetary Policy Statement (MPS), the stance of monetary policy was still appropriate to support growth. In addition, it was reiterated that a greater emphasis was required on the appropriate policy mix to safeguard the durability of growth, keep inflation expectations anchored, and slow the growth in the current account deficit given reduced pandemic-related uncertainty in the economy.

Notwithstanding the policy decision of raising the rate took place by end-September 2021, an accommodative policy environment had persisted for most of the quarter: real interest rates remained negative on forward-looking basis and the availability of SBP's usual concessionary refinance schemes (LTFF, TERF) kept funding costs low reflecting conducive financial conditions for businesses (**Figure 3.3**). Consequently, overall private sector credit increased during Q1-FY22 despite the fact that first quarter of the year normally registers retirements on account of seasonal retirements by sugar and rice sectors. The accommodative policy environment and rebound in the economic activities, both domestic and exports, drove up fixed investment loans (under TERF), working capital requirements and consumer financing. In addition to the overall rise in economic activity and improvement in business confidence,[6] rising input costs (especially cotton and edible oil) also escalated the demand for working capital loans.

Trends in Major Interest Rates **Figure 3.3**



Source: State Bank of Pakistan

3.2 Monetary Aggregates

Broad money growth slowed to 0.6 percent during Q1-FY22 compared to an expansion of 1.2 percent during the same period last year. This expansion emanated from growth in the Net Domestic Assets (NDA) of the banking system, which was partly offset by the contraction in the Net Foreign Assets (NFA). Last year, conversely, money supply growth was driven entirely by the NFA's expansion (**Table 3.1**).

Monetary Aggregates (Q1)[P] **Table 3.1**

billion Rupees; growth in percent

	Change in Stock		Growth	
	FY21	FY22	FY21	FY22
M2 (A+B)	260.5	149.5	1.2	0.6
A. NFA	307.3	-32.9	59.5	-4.5
B. NDA	-46.8	182.4	-0.2	0.8
Bud. borrowing*	285.2	-33.5	2.1	-0.2
SBP	-281.9	-322.9	-4.3	-6.0
Sch. banks	567.1	289.5	7.9	2.9
Com. operations	-59.9	9.5	-7.4	1.1
Pvt. sector credit	-76.6	226.4	-1.1	3.0
PSEs	-11.9	11.6	-0.8	0.8
Other items net	-184.9	-31.3	-12.3	-1.7
Reserve money	-149.0	-195.9	-1.9	-2.3

P: provisional

*These numbers are based on accrual basis. They do not tally with the amount of bank financing on cash basis, as presented in Table 4.1 in Chapter 4.

Source: State Bank of Pakistan

[6] Please see Figure 3.8 for detailed analysis.

On the asset side, the NDA registered growth on the back of high private sector credit off-take, and increased lending to public sector enterprises and government commodity procurement agencies. Despite being a period of seasonal retirements, private sector credit recorded a sizable expansion of Rs 226.4 billion during Q1-FY21 compared to net retirements of Rs 76.6 billion in the same period last year. In contrast, there were net budgetary retirements to the banking system, mainly due to retirements made to the SBP.

With regards to NFA, amid ongoing increase in international commodity prices and as domestic economic recovery gained traction, rising imports put pressure on external sector. The main impact came from the contraction in the NFA of SBP. Debt servicing and FX operations combined more than offset the impact of inflows from issuance of Eurobonds and funds received through Roshan digital accounts during Q1-FY22. Meanwhile, the allocation of SDRs amounting to US$ 2.75 billion under IMF's general SDR allocation had no effect on the NFA of SBP. As a result, NFA of the banking system contracted Rs 32.9 billion, after expanding Rs 307.3 billion last year.

On the liability side, currency in circulation grew by 1.6 percent during Q1-FY22, compared to a decline of 0.7 percent during Q1-FY21, whereas deposit mobilization slowed to only 0.2 percent from 2.0 percent in the same period last year. This slowdown in deposit growth was partly due to high base effect of deposits at end-June 2021. [7] Besides this, private business deposits contracted by Rs 101.4 billion compared to an increase of Rs 104.8 billion in the same period last year. This reflects high liquidity needs of businesses on account of high input costs and a visible pick-up in domestic economic activity which were partly financed by deposit withdrawals.

Government Borrowings

Meanwhile, the government made net budgetary retirements of Rs 33.5 billion to the banking system during Q1-FY22, compared to borrowings of Rs 285.2 billion during Q1-FY21. A lower budget deficit compared to last year, availability of sizable external financing (higher than the budget deficit itself), and higher mobilization from the non-bank sector, cumulatively helped reduce the government's reliance on the domestic banking system for financing during Q1. Instead, the government made net-retirements to SBP to the tune of Rs 322.9 billion, adhering to its commitment of zero-borrowings from the central bank. Meanwhile, fresh borrowings of Rs 289.5 billion were made from commercial banks.

Primary Auctions

The government's pre-auction target remained skewed towards T-bills and floating rate PIBs on net-of-maturity basis. For fixed rate PIBs, the target for Q1-FY22 was Rs 603.0 billion less than the maturities due during the quarter, in anticipation of mobilizing higher funds from floaters and T-bills (**Table 3.2)**.

For T-bills, market participation relative to targets remained high. Especially for 3M and 6M T-bills, the offer-to-target ratio was 2.5 times and 3.0 times respectively. In comparison, the 12M paper attracted only half the amount of offers relative to the target

[7] During June 2021, the deposits increased by Rs 1.45 trillion on MoM basis compared to an increase of Rs 1.04 trillion in June 2020.

Auction Summary **Table 3.2**

billion Rupees

	Target	Maturity	Offered*	Accepted
Treasury bills				
Q1-FY22	4,700.0	4,174.6	9,335.2	4,425.4
Q1-FY21	1,800.0	2,703.8	5,112.4	2,047.3
Pakistan Investment Bonds				
Fixed Rate				
Q1-FY22	450.0	1,053.0	943.9	399.6
Q1-FY21	420.0	101.4	448.9	249.2
Floating Rate				
Q1-FY22	525.0	0.0	1,330.6	916.8
Q1-FY21	830.0	0.0	1,970.4	870.6

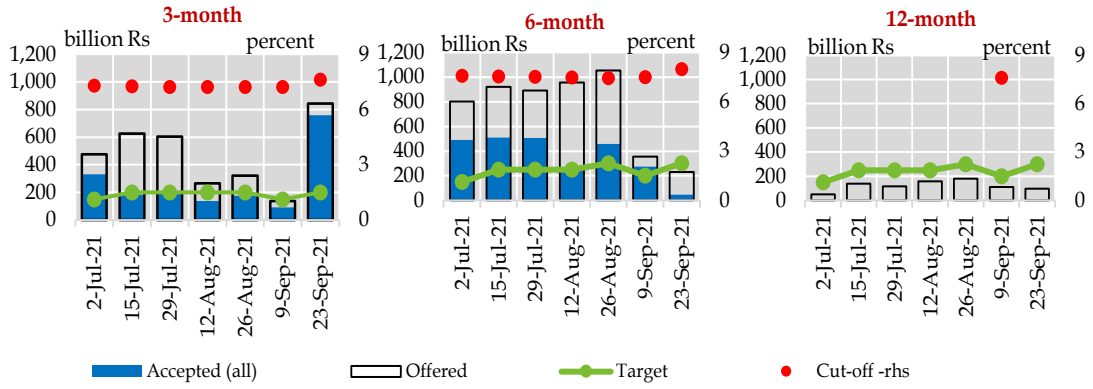
*competitive bids only

Source: State Bank of Pakistan

for Q1-FY22, indicating market's expectation of bottoming out of interest rates. In six auctions that were held before the policy rate hike, the government remained keen on not increasing the cut-off rates. In fact, the cut-off rates fell by 9 bps, 10 bps and 7 bps for 3M, 6M and 12M papers respectively from the last auction of June 2021 and before the announcement of the September 2021 monetary policy. The trend reversed in the last auction of the quarter, when the cut-off rates were increased subsequent to the MPC's announcement of a 25 bps increase in the policy rate (**Figure 3.4**).[8] As a result, the government was not able to meet the target assigned for T-bills. Additionally, the secondary market yields also followed a similar trend, and the yield curve shifted upwards only after the hike in the interest rates (**Figure 3.5**). Thereby indicating little or no expectations of a rate hike in the September 2021's monetary policy decision.

Within long-term bonds, the government remained inclined towards allocating higher targets to floating rate debt instruments. On net-of-maturity basis, the cumulative targets for floaters stood at Rs 525.0 billion, against net retirements of Rs 603.0 billion envisaged for fixed rate PIBs. Market offers for fixed rate PIBs stood at Rs 943.9 billion while for floaters the market offered Rs 1,330.6 billion. Keeping in view higher yields demanded by the market compared to the prevailing cut-offs, the government accepted only Rs 399.6 billion from fixed coupon PIBs. In this

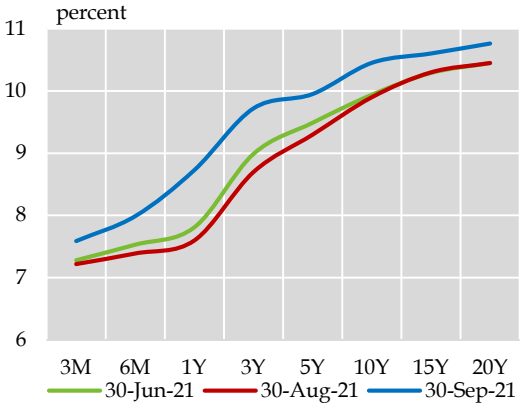
Bidding Pattern in T-bill Auctions during Q1-FY22 **Figure 3.4**



Source: State Bank of Pakistan

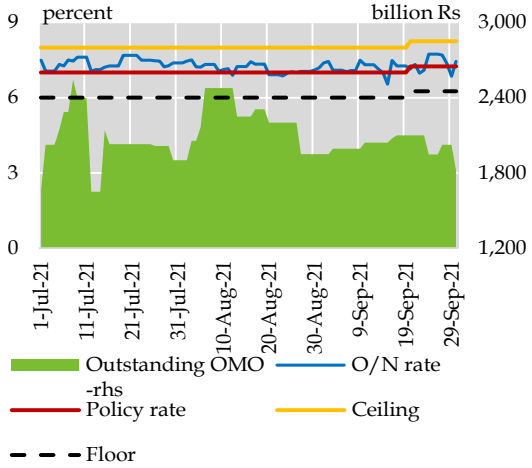
[8] In response to policy rate hike of 25 bps, the cut-off rates for 3M and 6M rose by 40 bps and 49 bps respectively.

Secondary Market Yields **Figure 3.5**



Source: Financial Markets Association of Pakistan

Overnight Repo Market **Figure 3.6**



Source: State Bank of Pakistan

backdrop, floaters helped the government to raise medium-to-long term debt while providing an alternative to the market to avoid building additional duration risk on their books.[9] Given these favorable traits of floaters, the government was able to raise Rs 916.8 billion via issuances of floating rate PIBs. Moreover, 3Y quarterly coupon PIBs remained the market's most favored instrument floaters.

Interbank Liquidity

Sizable private sector credit off-take, fresh budgetary borrowings from scheduled banks, and SBP's foreign exchange operations cumulatively augmented the Rupee liquidity requirements of commercial banks. Meanwhile, deposit mobilization was not sufficient to bridge this short-term liquidity gap. Keeping in view these pressures, the SBP stepped up its OMO injections (**Figure 3.6**). The outstanding net injections rose to an average of Rs 2.1 trillion during Q1-FY22 compared to Rs 1.1 trillion during the same period last year. On 80 days intermittingly the overnight rates remained higher than the policy rate, against 54 days during the same period last year. Moreover, the upside deviation of overnight rates from the policy rate also inched up. During these instances, the overnight rates remained on average 34 bps above the policy rate compared to 24 bps in the Q1-FY21.

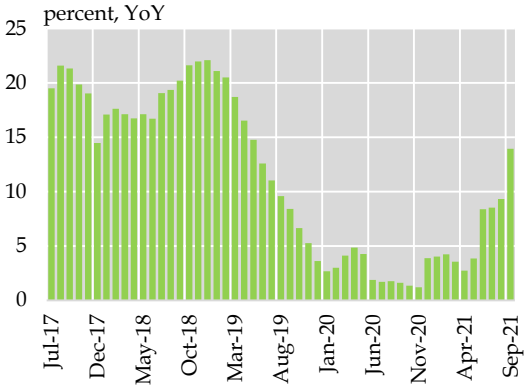
3.3 Credit to private sector

During most of Q1-FY22, the accommodative policy environment continued to prevail. Notably, low interest rates and SBP's concessionary financing schemes (mainly TERF) persisted during the quarter. Loans to private sector businesses rose by Rs 177.4 billion, compared to a net retirement of Rs 101.4 billion last year.

Usually the first quarter of fiscal year exhibits seasonal loan retirements, credit to private sector businesses posted net borrowings during Q1-FY22 **(Figure 3.7).**

[9] Duration is a measure of the sensitivity of a bond's price to changes in interest rates. Duration risk is simply the risk of a potential change in the value of debt instruments to a given change in the interest rates.

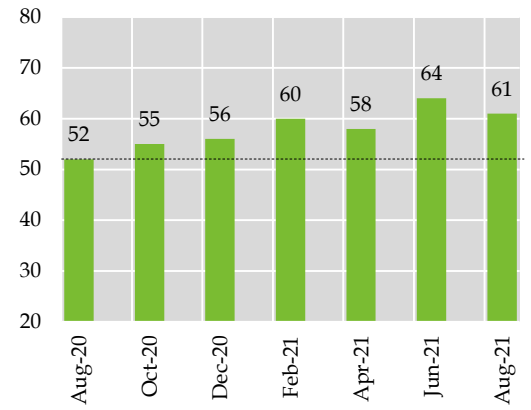
Change in Stock of Loans to Private Sector Businesses **Figure 3.7**



Source: State Bank of Pakistan

Besides, low interest rates and SBP's concessionary financing schemes, the credit increase can also be attributed to three main factors. First, the industrial activity gained further momentum, as LSM grew by 5.1 percent during Q1-FY22, compared to a growth of 4.5 percent last year. Second, the rising input costs (especially cotton and edible oil) led to an increase in the demand for working capital loans **(Box 3.1).** Finally, the overall business confidence improved during the quarter, as reflected by increase in the Business Confidence Index in August 2021, compared to August 2020. However, compared to the preceding survey in June 2021, the index slightly decelerated (**Figure 3.8).** Increase in inflationary pressures and PKR depreciation may have played a role in weakening some of the earlier optimism in the industrial sector (**Chapter 2**). Meanwhile, consumer financing continued to accelerate, owing to low interest rates, with major impetus from automobile and housing loans during the period under review.

Business Confidence Index **Figure 3.8**



Source: State Bank of Pakistan

Higher input costs raised the demand for working capital loans

Working capital loans rose by Rs 63.3 billion in Q1-FY22, compared to a net retirement of Rs 165.6 billion in the same period last year **(Table 3.3)**. Despite some seasonal retirements by sectors such as sugar and rice processing, the overall offtake remained higher this year, mainly due to a sharp rise in input prices. For instance, the impact of higher prices of key inputs (reflecting the global price trends) seems quite dominant in the increased borrowings by textile and edible oil businesses.

With regards to the textile, the 55 percent YoY increase in domestic cotton prices,[10] as well as continued strong export performance **(Chapter 5)**, both increased firms' demand for working capital loans, which grew by Rs 113.6 billion during Q1- FY22, in contrast to the net retirements of Rs 41.7 billion last year. Since most of the activity in the sector was export-centric, around a quarter of the borrowing was met from SBP's Export

[10] Source: Karachi Cotton Association

Loans to Private Sector Businesses (Q1) **Table 3.3**

(Flow in Rs billion)	Total loans*		Working Capital**		Fixed Investment	
	FY21	FY22	FY21	FY22	FY21	FY22
Private Sector Businesses	**-101.4**	**177.4**	**-165.6**	**63.3**	**59.6**	**89.2**
Manufacturing	-156.4	109.7	-196.0	60.2	39.3	44.9
Textile	-27.5	139.5	-41.7	113.6	14.2	23.5
Vegetable and animal oils and fats	-6.0	23.6	-8.3	21.5	2.3	2.1
Refined petroleum	-6.6	17.3	-6.7	14.3	0.0	3.0
Paper & paper products	2.0	9.6	-1.4	7.5	3.4	2.1
Motor vehicles	-16.5	4.1	-16.8	2.1	0.3	2.0
Basic iron and steel	2.8	3.8	2.5	1.9	0.3	1.9
Cement, lime & plaster	-10.3	2.5	-11.5	1.2	1.2	1.3
Basic pharmaceutical products	17.4	-7.8	3.6	-6.8	13.8	-1.3
Rice processing	-15.2	-13.7	-15.8	-15.1	0.5	1.3
Fertilizers	9.3	-16.0	12.8	-23.9	-3.5	7.9
Sugar	-82.3	-94.1	-82.7	-92.9	0.4	-1.3
Telecommunications	1.7	19.4	5.1	-9.6	-3.4	29.0
Power gen, trans & dist.	9.1	8.8	-9.3	-5.0	18.4	13.8
Mining & quarrying	-3.3	-5.7	-3.4	-8.6	0.1	2.9
Wholesale & retail trade	17.9	18.8	15.6	15.6	2.3	2.2
Agriculture, forestry & fishing	3.7	8.0	6.1	5.7	-2.4	1.3
Transportation & storage	0.6	4.4	3.1	4.0	-2.6	0.2
Real estate activities	1.1	0.9	-1.1	0.8	0.4	-0.9
Construction	2.3	8.7	1.5	0.2	-0.3	-5.4

*Total loans in Q1-FY21 and Q1-FY22 include construction financing of Rs 4.6 billion and Rs 24.9 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). ** Working capital includes trade financing.

Source: State Bank of Pakistan

Finance Scheme (EFS), offered at a subsidized rate of 3.0 percent. [11]

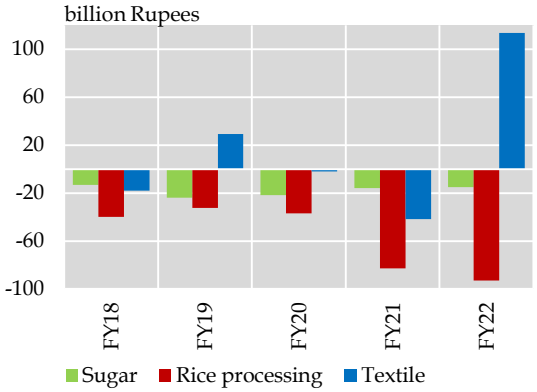
In addition to textile, vegetable oil and animal fats also took out short-term loans in Q1-FY22, compared to net retirements last year. The increase can be attributed to higher edible oil prices in the international market, which drove up the working capital needs of these firms. For instance, with a 60 percent YoY jump in international palm oil prices during Q1-FY22, its imports rose by 58 percent YoY during the review period, in rupee terms.

Meanwhile, the refined petroleum sector borrowed Rs 14.3 billion in Q1-FY22, compared to a net retirement of Rs 6.7 billion in the same period last year. Major oil refineries borrowed short-term loans mainly to meet the rising fuel demand amid accelerating economic activities in the country. This is in line with 17.9 percent YoY growth in POL sales during the review period.

In contrast, sugar and rice processing firms made seasonal loan retirements during Q1-

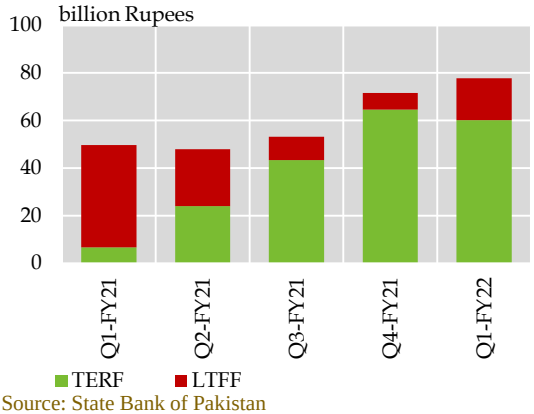
[11] Within working capital loans, export financing increased to Rs 33.7 billion during Q1-FY22, from Rs 5.1 billion last year.

Flow of Working Capital Loans to Major Sectors (Q1) **Figure 3.9**



Source: State Bank of Pakistan

Gross Disbursements under LTFF & TERF **Figure 3.10**



Source: State Bank of Pakistan

FY22, as shown in **Figure 3.9**. It is pertinent to mention that the second quarter of the fiscal year is typically a period of seasonal borrowings for both the *Kharif* crops (rice and sugarcane).[12] In case of fertilizer, better liquidity situation helped firms pay back their loans during the period. This is consistent with increased sales revenues of the sector during Q1-FY22 over last year, as reflected in the financial statements of major listed fertilizer businesses. With this comfort, the sector retired Rs 23.9 billion in Q1-FY22, compared to an increase of Rs 12.8 billion last year.

TERF drove up fixed investment loans

The borrowings under fixed investment loans were Rs 89.2 billion in Q1-FY22, compared to Rs 59.6 billion last year. Businesses took advantage of SBP concessionary financing schemes, particularly TERF. Out of the total approved amount of Rs 434.7 billion, Rs 198.8 billion (46 percent) have been cumulatively disbursed by end-September 2021. During Q1 specifically, TERF disbursements increased to Rs 60.2 billion, compared to only Rs 6.7 billion in the same period last year **(Figure 3.10).**

Within manufacturing segments, textile dominated the overall fixed investment loans with the sector borrowing Rs 23.5 billion during Q1-FY22, compared to Rs 14.2 billion last year. While benefitting from the SBP's subsidized financing schemes, textile businesses borrowed long-term loans mainly to import textile machinery and for capacity expansions. This is also consistent with the YoY growth in the import of textile machinery during the period under review.[13]

Meanwhile, fertilizer businesses borrowed Rs 7.9 billion in the long-term loans during Q1-FY22, compared to a net retirement of Rs 3.5 billion last year. As per the financial statements of a leading fertilizer manufacturer, it resorted to bank financing

[12] For details on seasonal borrowings and retirements, see Chapter 3 in the SBP's Second Quarterly Report for FY21 on the State of Pakistan's Economy.
[13] According to PBS, the import of textile machinery rose by 141.1 percent in Q1-FY22 compared to a decline of 20.9 percent in Q1-FY21.

mainly for the acquisition of majority shares in a renewable energy business.

Among non-manufacturing segments, borrowings by the telecommunications and electric power sectors were prominent. Telecom sector borrowed Rs 29.0 billion during Q1-FY22, compared to a net retirement of Rs 3.4 billion last year. Major telecom businesses borrowed fixed investment loans for capacity expansion and network upgradation. Meanwhile, power sector's borrowing increased, albeit lower than last year. This mainly represents borrowing by a major utility company in order to partially settle the parent company's loan owing to change of ownership.

Automobile and housing loans dominated consumer financing

Consumer financing picked up further and posted an increase of Rs 58.5 billion in Q1-FY22, compared to Rs 38.1 billion last year. Automobile loans continued to dominate banks' consumer portfolio, which is in line with 80.6 percent YoY growth in the sales of passenger cars and 132.6 percent YoY growth in the sales of jeeps during Q1-FY22.[14] Moreover, launching of new variants in passenger cars (1,300cc and above) by some auto assemblers played a significant role in driving up the demand for auto-financing.

Apart from auto loans, the expansion in consumer lending is largely explained by house building loans, which increased by Rs 14.9 billion, compared to only Rs 0.9 billion last year **(Table 3.4).** This increase is primarily attributed to the measures taken by government and SBP to promote housing and construction financing in the country. Notably, in July 2020, SBP mandated banks to increase their housing and construction finance portfolio to at least 5 percent of their domestic private sector advances by December 2021. Around 94 percent of the overall quarterly target set by SBP for September 30, 2021 has been met. As for the low cost housing finance, banks approved financing of Rs 72 billion under *Mera Pakistan Mera Ghar* (MPMG) as of September 30, 2021, out of which Rs 16.97 billion were disbursed. As a result, the outstanding stock of banks' housing and construction finance portfolio had increased to Rs 305 billion by end-September 2021, from Rs 166 billion a year earlier.

Consumer Financing (Q1) **Table 3.4**

(Flow in Rs billion)	FY21	FY22
Total Consumer Financing	**38.1**	**58.5**
Automobile loans	21.3	30.1
House building	0.9	14.9
Personal loans	12.5	7.4
Credit cards	6.1	3.8
Consumers durable	-2.6	2.3

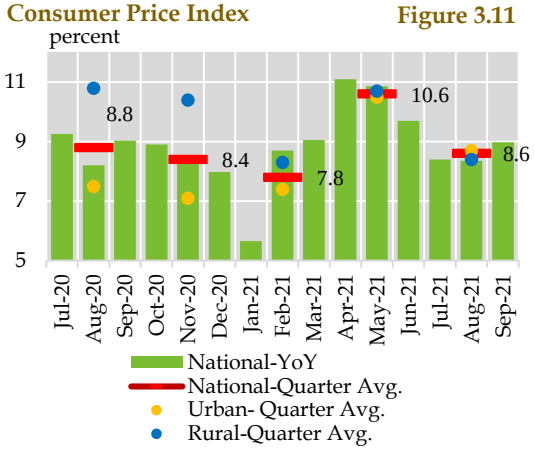
Source: State Bank of Pakistan

3.4 Inflation

National headline inflation remained 8.6 percent in Q1-FY22 compared to 8.8 percent in same period last year (**Figure 3.11**). The group-wise breakdown indicates that food inflation, non-perishable items in particular, remained the major contributor to headline inflation, followed by the Non Food Non Energy (NFNE) group (**Figure 3.12**). Although inflation remained stable on 12mma basis, the ongoing rise in international commodity prices (**Box 3.1**), revival in domestic demand and lagged impact of exchange rate depreciation contributed to buildup in price pressures in various sub-groups of core basket.

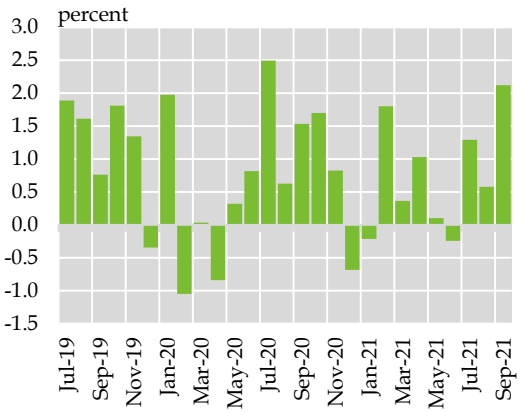
[14] Source: Pakistan Automotive Manufacturers Association.

Consumer Price Index **Figure 3.11**



Source: Pakistan Bureau of Statistics

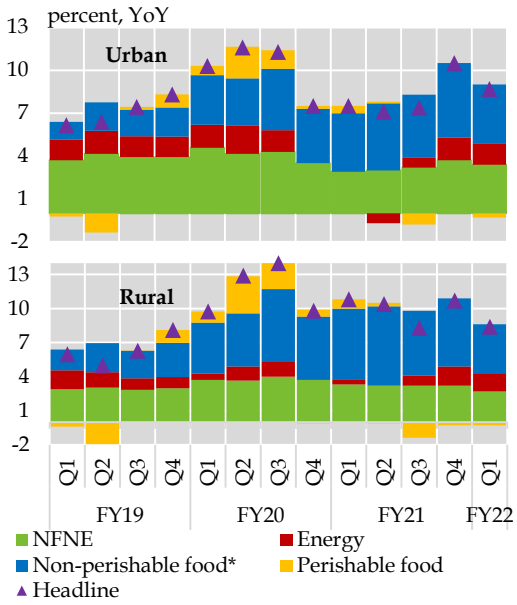
National CPI -MoM **Figure 3.13**



Source: Pakistan Bureau of Statistics

Meanwhile, contribution of energy inflation to overall inflation also surged on account of rising domestic fuel prices on the back of

Composition of CPI Inflation **Figure 3.12**



*Inclusive of alcohol beverages and readymade food

Source: Pakistan Bureau of Statistics

rising global prices. Moreover, the Wholesale Price Index (WPI) continued its upward trajectory, indicating persistent cost-push inflationary pressures in the economy.

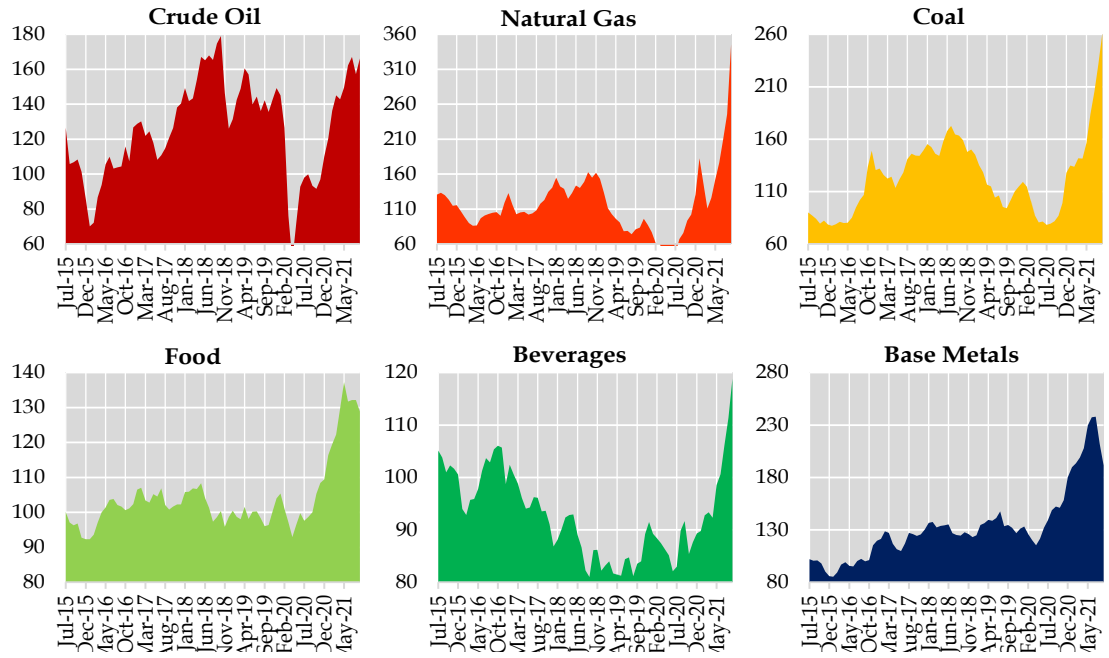
Monthly disaggregated data reveals that inflation outturns that were declining since May 2021, inched up in September 2021 at 9.0 percent, against 8.4 percent in both July 2021 and August 2021. Month-on-month readings also depicted intensifying inflationary pressures by end-quarter (**Figure 3.13**).

Box 3.1: Drivers of the Sharply Rising Global Commodity Prices: Shortages and Supply Constraints

Commodity prices have been surging globally since July 2020, amid revival in demand as economies started reopening in various parts of the world after easing of covid-related restrictions. However, these price pressures intensified since May 2021(**Figure 3.1.1**). In this backdrop, preliminary analysis of the drivers of global price hike highlights that, while demand for goods was already strong, multi-faceted supply-side limitations are also contributing significantly to the price pressures. Additional issues emanating from global logistics, transportation congestion in particular, are adding further stress to already swelling prices.

International Commodity Markets

International Commodity Indicies **Figure 3.1.1**



Source: International Monetary Fund

Most of the commodity prices in 2021 rose to or exceeded levels last seen in the commodity price spike witnessed back in 2011. Unfavorable weather conditions worsened the supply dynamics of many commodities, in addition to demand pick-up as well as supply chain disruptions amid Covid pandemic.

Energy Sector

Crude oil: Crude oil prices have increased sharply in Q1-FY22 on account of revival in demand, weather-related supply disturbances, and controlled production by OPEC+.[15] Oil production in the US was impacted by Hurricane Ida while OPEC and its partners produced below the committed quota due to maintenance and supply outages.[16] In addition, oil price hike have also been supported by higher natural gas prices, being the close substitute of the commodity.

Natural Gas: IMF index for natural gas rose by 324 percent during Q1-FY22. This surge is attributed to extreme weather conditions as extended drought state in Brazil forced it to shift from hydro to natural gas for power generation. At the same time, the global coal market experienced significant supply constraints. Consequently, natural gas demand rose for being substitutable commodity in some cases. Meanwhile, Europe faced drawdown in natural gas stocks on account of severe 2020-21 winter, which caused unusual stock building.

Coal: IMF's coal index rose by around 191 percent during Q1-FY22. Increase was primarily driven by strong demand from China as unfavorable weather conditions (a drought like situation earlier this year in

[15] Blogs.worldbank.com
[16] https://www.iea.org/reports/oil-market-report-september-2021

southern China) drained hydroelectric dams and increased demand for coal. Meanwhile, on the supply front, output from Indonesia was affected by unexpected rainfalls, while transportation bottlenecks delayed shipments. At the same time, price pressures further intensified when some firms in Japan and Europe started switching to coal amid increasing natural gas prices.

Metals and Cotton Market

Base Metals: Pick-up in demand due to reopening of economies, i.e. ease in travel restrictions, rebound in manufacturing industries as well as the release of pent-up demand from last year with some supply side constraints put upward pressure on metal prices, in general.

Steel and Aluminum: Steel prices started rising on account of China's decision to reduce steel production as it plans to reduce carbon emission from steel plants.[17] Similarly, aluminum prices has witnessed significant rise over uncertainty after a military takeover in Guinea, the world's second-largest producer of the ore, and a major supplier to China.

Cotton: Cotton prices increased by 44.6 percent during Q1-FY22, hitting almost 10-year high level. Squeezed global supplies are contributing to rising trend in prices as extreme weather conditions have affected cotton production in US significantly, one of the major exporters of the commodity. Meanwhile, demand for cotton from major textile exporters including China and Pakistan, was also quite strong.

Food and Beverages Group

Global food prices rose nearly 33 percent during Q1-FY22 over last year, hitting the highest level in over a decade. Robust demand and supply shortages, extreme weather conditions and supply chain disruptions are constantly pushing the prices.

Wheat: Tightening export availability amidst strong world demand contributed to higher wheat prices. Meanwhile, contraction in production, predominantly due to the prolonged drought conditions in North America as well as adverse weather in Kazakhstan and the Russian Federation, kept prices elevated (**Table 3.1.1**).[18]

Production by Major Producers **Table 3.1.1**

Million metric tons

	2020-21 (Preliminary Estimates)	2021-22 (Projection as of November 2021)
Wheat		
Russia	85.4	74.5
US	49.7	44.8
Sugar		
Brazil	42.1	36.0
Cotton		
China	29.5	26.7

Source: United States Department of Agriculture

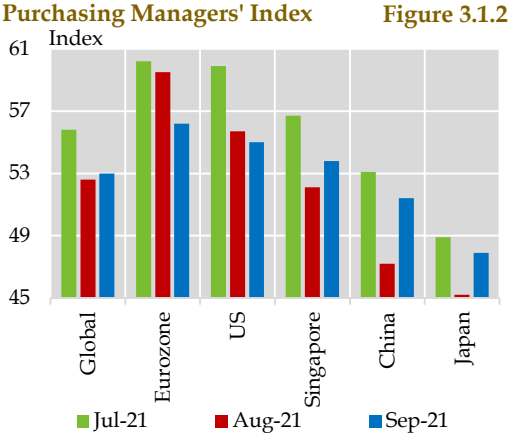
Sugar: Concerns over reduced output in Brazil, the world's largest sugar exporter, due to prolonged dry and freezing weather conditions, continued to strengthen the increase in world sugar prices.

Edible Oil*:* Price index of edible oil crops has grown significantly since March 2020 over growing demand for biodiesel and unsupportive weather patterns. Also, concerns over below-potential production of palm oil in Malaysia due to persisting migrant labor shortages are keeping the prices historically high.

Coffee*:* Coffee prices registered increase, sparked by the concerns over supply due to climate conditions in major producing countries and increasing freight costs. Concerns over the Brazilian crop, affected by the recent frosty weather, have led to high prices.

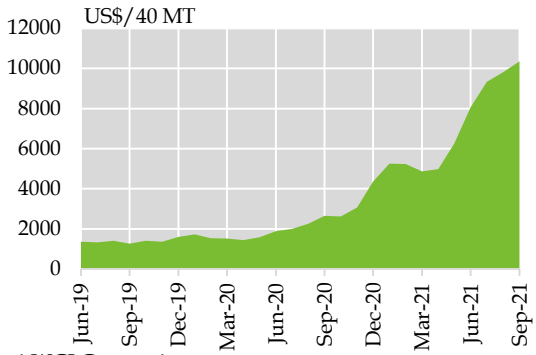
[17] Commodity Markets Outlook-October 2021 (World Bank)
[18] FAO Food Price Index-September 2021

Purchasing Managers' Index **Figure 3.1.2**



Source:tradingeconomies.com

Container Freight Benchmark Rate* **Figure 3.1.3**



* WCI Composite

Source: Bloomberg

Supply Chain Challenges

In addition to commodity related demand and supply dynamics, supply chain bottlenecks have further intensified price pressures that continued to seep into commodity prices and stoke inflation.[19] Freight charges, in particular, registered significant spike during Q1-FY22.

With the rapid recovery in world trade after the pandemic and reopening of economies following strict lockdowns, significant disruption to supply chains, with high congestion at ports, were experienced.[20] In addition to capacity constraints at ports, labor shortages continued to hamper routine operations. These supply chain challenges have led to lags in delivery times, particularly in sectors experiencing raw-material issues. This, in turn, affected economic activities for many economies as indicated by Purchasing Managers Index (PMI)[21] during Q1-FY22 (**Figure 3.1.2**). On average, suppliers' delivery times, a sub-index of PMI, [22] lengthened across the four major economies.[23] Consequently, freight rates accelerated significantly (**Figure 3.1.3**).

In short, soaring commodity prices amid surge in demand and weather-related supply constraints, in combination with rising transportation cost have intensified global price pressures during Q1-FY22 and elevated global inflation outturn.

Inflation expectations posed mixed picture

Taken together, the evidence from SBP-IBA Consumer Confidence Survey (CCS) conducted in the first half of July 2021 and Business Confidence Survey (BCS) in the second half of June 2021, inflation expectations appeared to be reasonably anchored at the start of FY22 as the results showed that both consumer and business

[19] IMF World Economic Outlook-October 2021

[20] According to industry experts, worst affected were the US west coast ports of Long Beach and Los Angeles, and Chinese terminals at Shanghai and Ningbo.

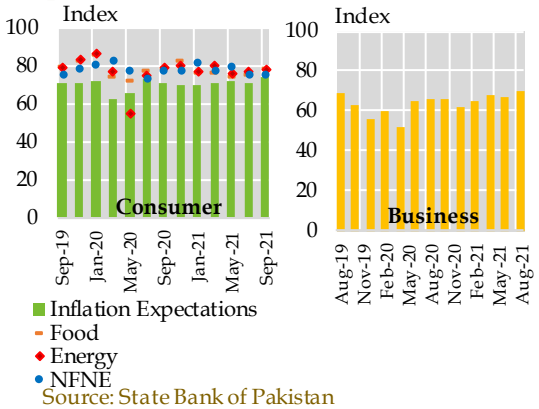
[21] PMI indicates prevailing direction of economic trends in manufacturing and services.

22 A widely used indicator of supply delays, capacity constraints and price pressures

[23] The US reported the highest degree of supply chain lengthening, followed closely by the UK and the Eurozone.

inflation expectations index declined. However, in September 2021, inflation expectations of both households and businesses drifted up (**Figure 3.14**). Increase in consumer inflation expectation index was observed on account of rise in all three categories (food, energy and NFNE); however, rising food prices played a major role in the overall increase in inflation expectations.

Inflation Expectations **Figure 3.14**

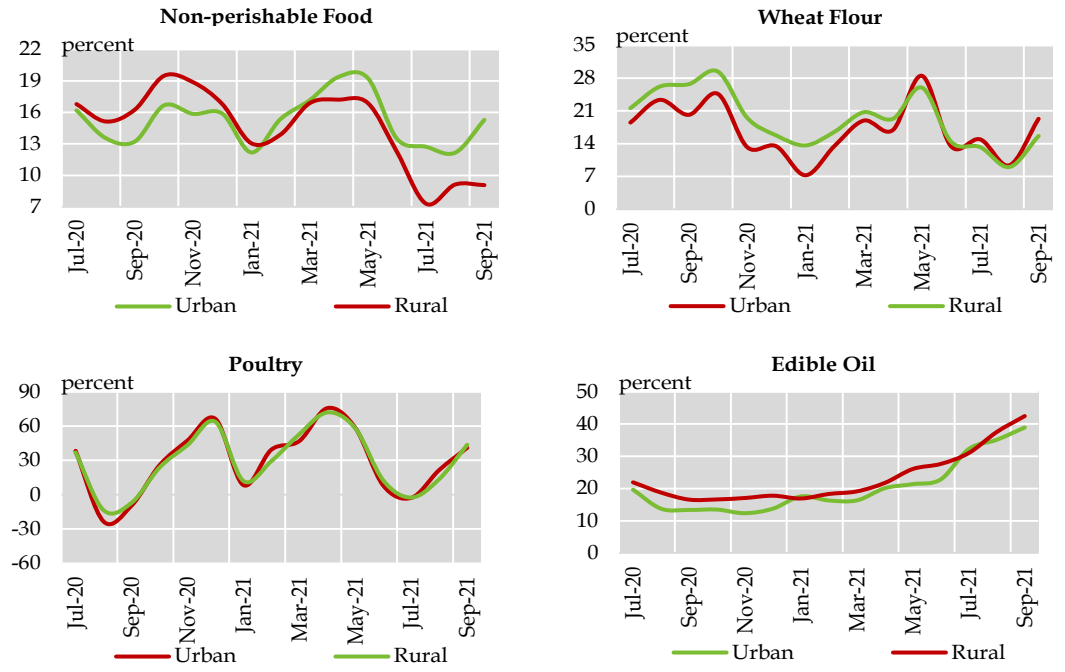


Source: State Bank of Pakistan

Food inflation remained major contributor to headline inflation

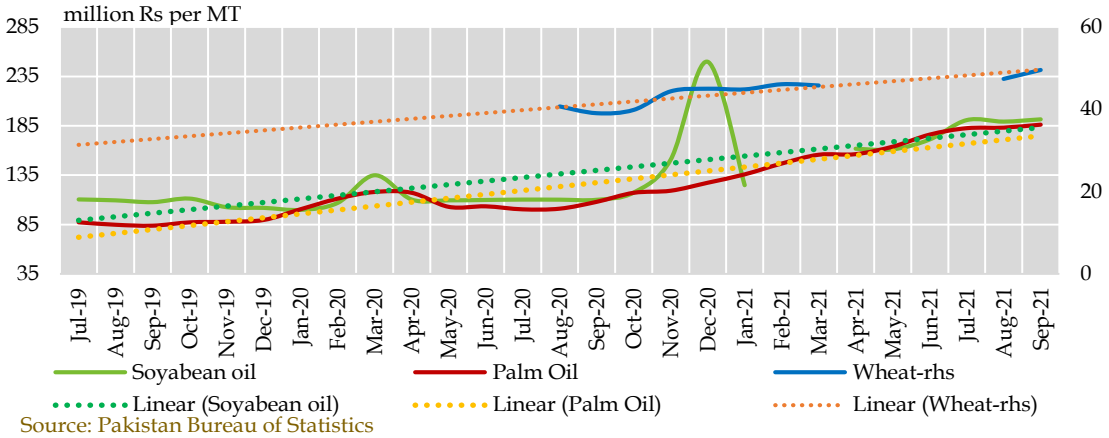
Food index rose by 10.1 percent and 8.5 percent in urban and rural areas respectively during Q1-FY22, compared to 12.9 percent and 15.7 percent increase in the same period last year. Despite decline in the pace, food group remained the major contributor to the overall inflation. Persistent increase in international food prices, in addition to lagged impact of exchange rate depreciation, continued to put upward pressures on food prices (**Figure 3.15**).

Non-Perishable Food Group Inflation **Figure 3.15**



Source: Pakistan Bureau of Statistics

Unit Value of Imports **Figure 3.16**



Source: Pakistan Bureau of Statistics

Item wise analysis suggests that inflation in edible oil and poultry segments rose significantly compared to the same period last year. In case of edible oil and ghee products, manufacturers has been struggling with rising international prices of palm oil and soybean since July 2020 (**Figure 3.16**). Unit prices of soybean and palm imports have risen more than 70 percent in Q1-FY22.

The poultry index (both for urban and rural areas) rose by around 14 percent during Q1-FY22 compared to decline in the same period last year. Rise in inflation mainly reflects price recovery, as chicken prices had crashed amid low demand after the imposition of strict as well as partial lockdowns last year.

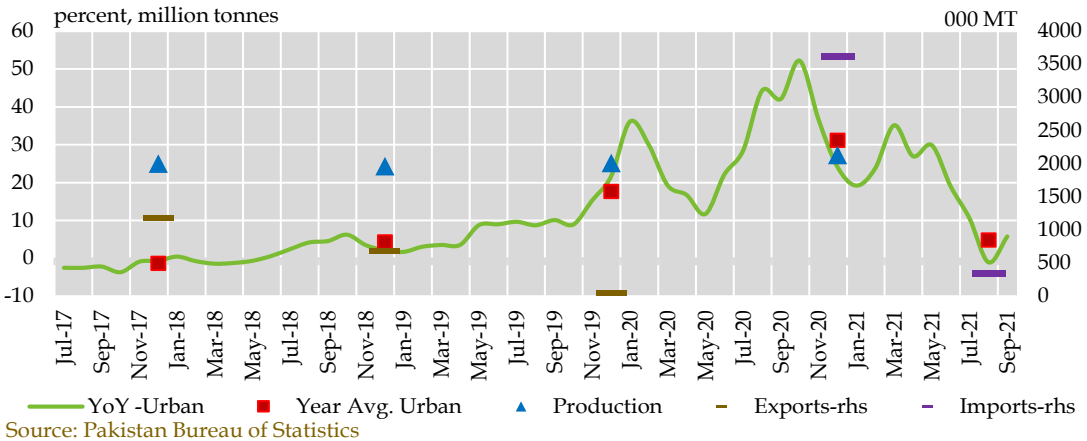
Readymade food group (cooked chicken, beef, biryani, bread and tea) prices recorded double-digit inflation during Q1-FY22. This reflects indirect rise in the prices of inputs, such as wheat, edible oil, chicken and transportation cost.

Although wheat inflation remained limited during the review period amid relatively better production (**Figure 3.17),** adequate wheat procurement (**Figure 3.18**) and imports, [24] inflation in wheat flour still remained elevated. Anecdotal evidence suggests that the increase can be attributed to rise in the minimum support price (MSP); [25] increase in wheat issue price by procuring agencies to flourmills;[26] and delay in announcement of release price as well as release of stocks by the procurement agencies by end-quarter.

For sugar, double-digit inflation was registered partially reflecting increase in the MSP for sugarcane in FY21.[27] However,

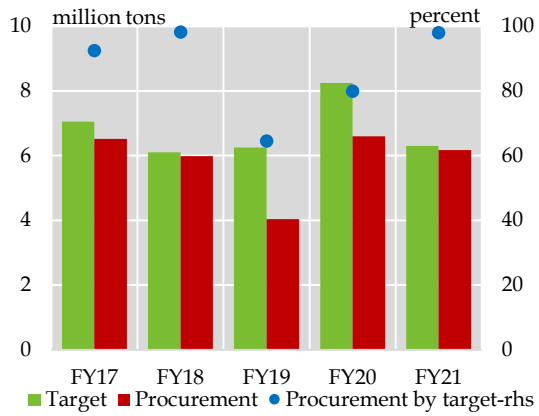
[24] Total availability of wheat was reported at 28.231 MMT by end-September 2021. This included production of 27.5 MMT and leftover stock of 0.731 MMT as compared to the national requirement of 30.27 MMT.
[25] The Economic Coordination Committee enhanced the MSP of wheat crop FY21 to Rs 1,800 per 40 Kg from 1400 per 40 kg previously. Sindh unilaterally increased it to Rs 2,000 per 40 Kg.
[26] Minimum release price was increased by 32 percent, from Rs 1,475 to Rs 1,950, in an attempt to withdraw subsidies.
[27] MSP was increased by Rs 10 to Rs 200 per 40 kg in Punjab, and to Rs 202 per 40kg in Sindh in FY21.

Wheat Inflation **Figure 3.17**



Source: Pakistan Bureau of Statistics

Public Sector Wheat Procurement **Figure 3.18**



Source: Provincial Food Departments

slowdown was observed compared to last year, which can be attributed to increased sugarcane production in FY21 along with higher imports during Q1-FY22.[28]

Some food items, on the other hand, registered a slowdown in inflation during the review period. For instance, in the case of pulses, improved production of various categories along with higher imports kept prices stable during the review period, despite a rise in unit prices of imported pulses on YoY basis.

In case of condiments and spices, inflationary pressures declined significantly compared to the same period last year, despite the rise in unit prices of imports. This can be attributed to improved domestic production, as target of chilies crop production was increased by around 4 percent for FY22.

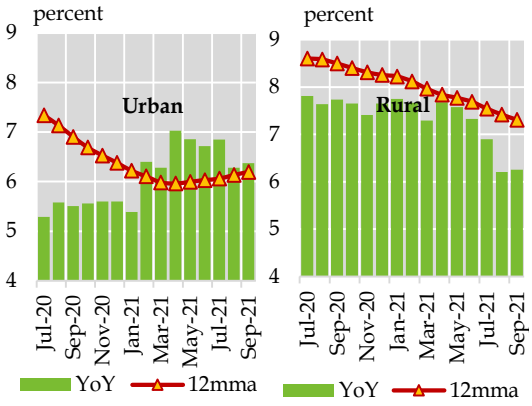
Supply of perishable food items have been largely adequate since October 2020. Resultantly, inflation in this group comprising fresh vegetables, fruits, tomatoes, potatoes and onions, is on declining trajectory since then. Improved local production and higher imports have kept the supply-demand gap in check at large during the review period.

Underlying inflation remained broadly stable

Moving average trend suggest that the course of NFNE inflation is broadly stable

[28] Sugarcane production rose to 81.0 million MT in FY21, compared to 66.4 million MT in FY20. Pakistan imported 157,800 MT of sugar in Q1-FY22, against minimal imports of 30,100 MT in the same period last year.

NFNE-YoY Growth **Figure 3.19**



Source: Pakistan Bureau of Statistics

(**Figure 3.19).** However, on YoY basis, it increased marginally in July 2021 for urban segment led by all three groups of house rent, goods and services. Similarly, quarter average rose by 100 basis points compared to last year same period.

The YoY increase in core inflation is attributed to multiple factors. They include: i) rise in domestic demand, as reflected by high frequency demand indicators; ii) rise in transportation cost amidst higher fuel prices; iii) revision in government service/tax charges for vehicles and postal services (which were kept unchanged in the previous budget on account of Covid-related relief); iv) ongoing adverse impact of the rise in the international metal prices; and v) lagged impact of exchange rate depreciation.

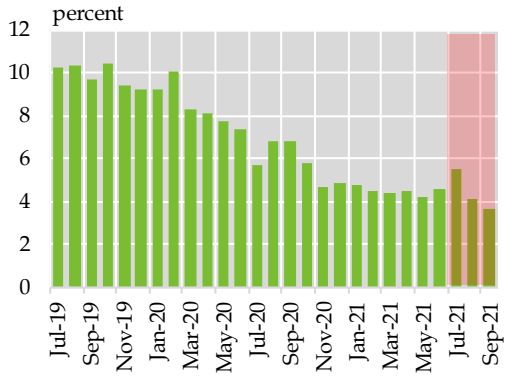
While core inflation picked up in urban areas, price pressures were more concentrated among goods as compared to services. Across goods, significant price raises were observed in clothing and footwear over last year. Prices of cotton, an important input for textile industry, observed unabated spike during Q1-FY22 as decline in production in FY21 continued to widen the demand-supply gap and were met via higher priced imports. Consequently, inflationary pressures remained high in cotton cloth and readymade garments.

Inflation in construction inputs rose significantly during Q1-FY22. Rise in iron bar prices, in particular, pushed-up the overall construction input index. In addition to rising construction activities, soaring international metal prices also contributed to the rising inflation.

Inflation of very few sub-groups, on the other hand, registered slowdown. For instance, inflation in motor vehicles group was influenced by the government's decision to reduce taxes on lower end cars. FED was eliminated on up to 850cc cars, whereas sales tax was reduced from 17 percent to 12.5 percent for up to 850cc cars. These taxation changes arrested the rising inflation trend in motor vehicle group. Also, deflation was recorded in personal use items, as gold; the precious metal's prices declined owing to decrease in international prices over revival in global activities.

In the services group, some of the rise in inflation reflects base effect, as prices are compared against the low levels that prevailed last year amid Covid-related relief provided by the government in the FY21 budget. For instance, motor vehicle tax and postal services fall in this particular category. In transport services, inflation grew amid high fuel prices, as previously transport fares were affected by low fuel cost amidst lower global oil prices last year. The impact of the re-opening of economy was also visible in recreation and cultural services, as inflation increased in the group. Pace of inflation also rose in house rents during the review period

YoY Inflation in Urban Construction Wages **Figure 3.20**



Source: Pakistan Bureau of Statistics

which was subdued last year after the onset of the pandemic.

Wage pressures remained contained during the quarter on YoY basis owing to higher base effect. However, monthly YoY data depicts building wage pressures since the start of FY22, as the inflation in construction wage rate inched up by 5.5 percent in July 2021 compared to full year average of 5.1 percent in FY21 reflecting wage recovery from last year's low level (**Figure 3.20**).

In contrast, NFNE inflation is declining on YoY basis in rural areas since the beginning of FY22, primarily reflecting base effect, [29] difference in imported inflation for rural segments, and basket differential.

Disaggregated data of goods category indicates that deceleration in inflation was concentrated in a few sub-groups, particularly on account of difference in consumption basket of rural areas and urban areas. For instance, a marked decline in inflation was observed in cotton cloth, footwear, household textiles and furniture and furnishing. Some branded and imported items in clothing and footwear category kept the inflation on higher side in the urban basket; whereas, the absence of such items in the rural basket kept rural inflation subdued.

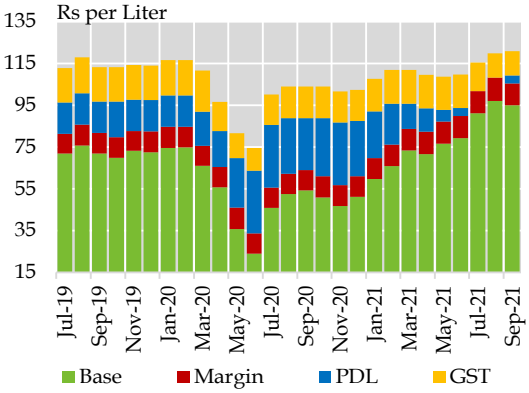
Energy inflation rose significantly

Energy inflation registered significant increase in both urban and rural areas in Q1-FY22. Barring gas index, all other sub-indices of the energy group rose sharply during the quarter.

In case of motor fuel, average inflation inched up by more than 15 percent during Q1-FY22 both in the urban and rural segments, compared to deflation in the same period last year. This was despite the government's decision to reduce the Petroleum Development Levy (PDL) and sales tax on petroleum products in order to contain the pass on of higher international prices to consumers (**Figure 3.21**). In fact, the surge in energy inflation is attributed to sustained increase in global oil prices, which climbed above USD 80 a barrel in September 2021, hitting their highest level in three years. (**Figure 3.22**).

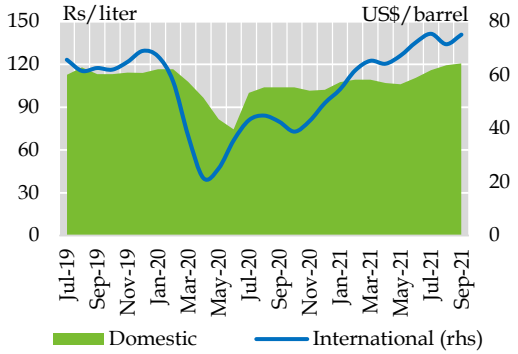
[29] Last year, rural core inflation was high in response to lower impact on economic activities in rural areas as compared to urban areas amid lockdowns. As Asian Development Bank survey suggests that at least one family member had returned from urban or other areas to rural areas after lockdowns. Meanwhile, urban core inflation had declined amid restricted economic activities and related subdued demand. Since April 2021, mobility data from Google for transit and station supports elevated activity in major cities, indicating increased movements from rural to urban areas. This implies a rebound in economic activities in urban areas, which is commensurate with the uptick in urban inflation. In contrast, inflation in rural areas decelerated.

Composition of Petrol Price **Figure 3.21**



Source: Oil and Gas Regulatory Authority

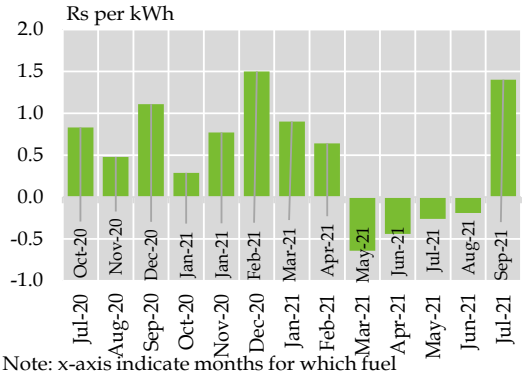
Fuel Prices **Figure 3.22**



Source:Pakistan Bureau of Statistics; State Bank of Pakistan and Bloomberg

Similarly, electricity charges inflation posted double-digit increase after witnessing moderate rise during the same period last year. This rise reflects increase in base tariff of Rs 1.95 per kWh of distribution companies (Discos) in February 2021 to address the circular debt, along with monthly fuel charge adjustments charged during Q1-FY22 (**Figure 3.23**).

Fuel Charge Adjustment **Figure 3.23**



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

Source: National Electric Power Regulatory Authority

In addition, category of Liquefied Hydrocarbons (LPG) remained a major contributor to the overall rise in energy inflation. Following the rising trend in international prices of propane and butane, major imported content, domestic LPG prices are under pressure since July 2021.

4 Fiscal Policy and Public Debt

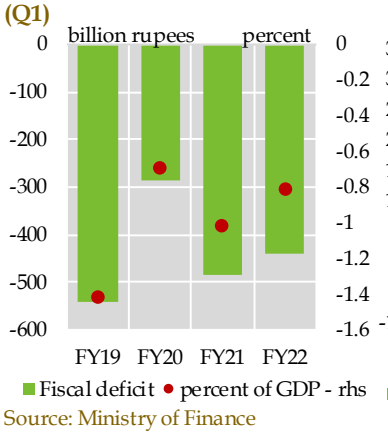
Strong growth in FBR tax collection, along with a decline in interest payments, helped improve the country's fiscal position during Q1-FY22. The fiscal deficit contracted to 0.8 percent of GDP, from 1.0 percent in the same period last year. The primary balance also recorded a surplus, despite a rise in non-interest spending, although lower than in the same period last year. Additional spending on grants for procuring Covid vaccines and for power subsidies and development outlays led to a sizeable expansion in non-interest spending. The financing space for this spending mainly originated from higher tax collection at both federal and provincial levels. Specifically, FBR taxes showed a record increase during Q1-FY22, which more than offset a decline in non-tax revenues. Interest payments contracted due to the low interest rate environment last year, as well as the debt relief under the G-20's Debt Service Suspension Initiative. Despite the lower financing needs, the pace of public debt accumulation increased during the quarter, mainly as a result of revaluation losses stemming from the PKR's depreciation against the US Dollar. External loans edged up during Q1-FY22 with the issuance of Eurobonds worth US$ 1.0 billion and disbursements by multilateral agencies. Domestic debt rose slightly, with the entire increase originating from short-term instruments.

4.1 Fiscal Trend and Policy Review

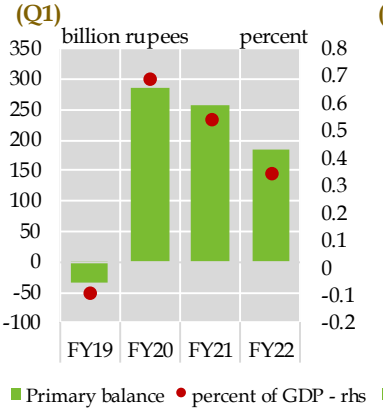
The fiscal deficit narrowed to 0.8 percent of GDP in Q1-FY22 from 1.0 percent in the same period last year (**Figure 4.1a**). The improvement largely stemmed from a record rebound in FBR tax collection during the quarter, which offset a sharp resurgence in non-interest spending. Importantly, interest payments also posted a notable decline during Q1-FY22, after showing a consistent increase in the past four years. Moreover, a Rs 276.9 billion provincial surplus further strengthened the fiscal outcome during the quarter.

The FY22 budget had a visible pro-growth tilt, as indicated by a sizeable 29.6 percent increase in development expenditures targeted for the year. In addition, the current spending was also planned to be upscaled, to cover: the partial settlement of power sector circular debt under the Circular Debt Management Plan (CDMP); increase in salaries and pensions of government employees; procurement of Covid vaccines;

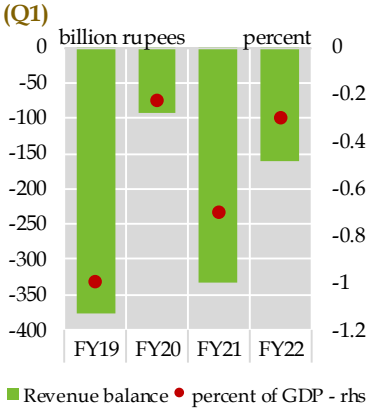
Fiscal Deficit (Q1) **Figure 4.1 a**



Primary Balance (Q1) **Figure 4.1 b**



Revenue Balance (Q1) **Figure 4.1 c**



Source: Ministry of Finance

and meet the sustained level of interest payments. These expenditures were targeted to be met via an even stronger revenue performance, so as to keep the fiscal deficit for FY22 in check.

In line with these budget estimates, improved collection at both federal and provincial levels contributed to a 36.6 percent increase in tax revenues during Q1-FY22, against a modest 5.0 percent increase in the same period last year (**Table 4.1**). FBR taxes grew by a sizable 38.3 percent during Q1-FY22, compared to 4.8 percent in the same period last year. Around two-thirds of the entire increase in FBR taxes stemmed from imports, aided by both higher volumes and higher international commodity prices. In addition, expansion in economic activity; withdrawal of Corporate Income Tax exemptions; increase in domestic price level; tax administration efforts and some budgetary measures also contributed to the higher FBR taxes. On the other hand, non-

Consolidated Fiscal Indicators **Table 4.1**

billion Rupees, growth in percent

	Q1			Growth in Q1 (YoY)	
	FY20	FY21	FY22	FY21	FY22
1. Total Revenue (a+b)	**1,489.1**	**1,478.7**	**1,808.5**	**-0.7**	**22.3**
(a) Tax revenue	1,068.9	1,122.4	1,532.8	5.0	36.6
Federal	964.4	1,010.6	1,398.0	4.8	38.3
Provincial	104.5	111.8	134.8	7.0	20.6
(b) Non-Tax	420.2	356.3	275.7	-15.2	-22.6
Federal	389.3	336.3	241.5	-13.6	-28.2
Provincial	30.9	20.0	34.2	-35.3	71.0
2. Total Expenditure (a+b+c)	**1,775.1**	**1,963.1**	**2,247.0**	**10.6**	**14.5**
(a) Current expenditure	1,582.2	1,812.6	1,968.2	14.6	8.6
Of which : Mark-up payments	571.7	742.1	622.7	29.8	-16.1
Non-markup expenditure	1,010.5	1,070.5	1,345.4	5.9	25.7
Defence	242.6	224.5	261.7	-7.5	16.6
(b) Development expenditure & net lending	147.2	215.2	264.7	46.2	23.0
(c) Statistical discrepancy	45.7	(64.7)	14.2	-241.5	-121.9
3.Overall budget balance	**(286.0)**	**(484.3)**	**(438.5)**	**69.3**	**-9.5**
percent of GDP	*(0.7)*	*(1.0)*	*(0.8)*		
4.Primary balance	**285.7**	**257.7**	**184.2**	**-9.8**	**-28.5**
percent of GDP	*0.7*	*0.5*	*0.3*		
5. Revenue balance	**(93.1)**	**(333.9)**	**(159.7)**	**258.6**	**-52.2**
percent of GDP	(0.2)	(0.7)	(0.3)		
6. Financing (a+b)	**286.0**	**484.3**	**438.5**	**69.3**	**-9.5**
(a) External (Net)	166.5	161.4	466.1	-3.1	188.9
(b) Domestic (Net)	119.5	323.0	(27.6)	170.2	-108.6
Non-Bank	242.5	92.1	108.0	-62.0	17.3
Bank	(123.0)	230.8	(135.7)	-287.7	-158.8

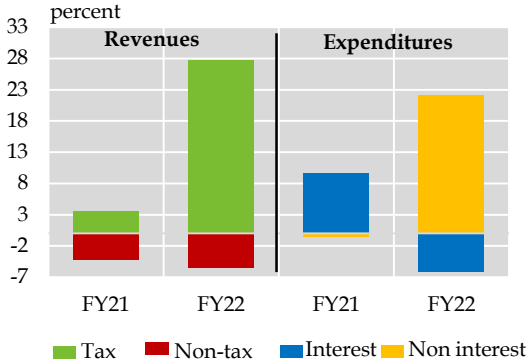
Source: Ministry of Finance

tax revenues (NTRs) fell sharply because of lower collection from Petroleum Development Levy (PDL) during Q1-FY22. This decline reflected the government's decision to significantly reduce the PDL rates amidst rising global oil prices, to provide relief to the consumers.[1]

The upsurge in tax revenues was instrumental in offsetting a strong expansion in non-interest expenditures leading to a primary surplus of 0.3 percent of GDP in Q1-FY22 **(Figure 4.2)**. Importantly, this was for the third consecutive year that the primary balance remained in surplus during the first quarter **(Figure 4.1b)**. However, a strong rebound in non-interest expenditures kept the level of surplus lower than last year. Similarly, the revenue balance also showed a slight improvement during the period, on the back of higher tax collection and lower interest payments, which contained the overall increase in current spending (**Figure 4.1c**).

As envisaged in the budget, additional spending on development outlays, grants for procuring Covid vaccines and power subsidies propelled the growth in non-interest spending to 33.0 percent during Q1-FY22, against a nominal 1.5 percent increase in the same period last year. However, a marked 16.1 percent decline in interest payments during Q1-FY22 pared the overall increase in spending during the period. This respite came from a reduction in the cost of borrowing amid the lower interest rate environment maintained throughout FY21. In addition, interest payment on external debt also declined, reflecting the impact of debt relief under the Debt Service

Breakdown of Revenues and Expenditure Growth during Q1 **Figure 4.2**



Source: Ministry of Finance

Suspension Initiative (DSSI) as well as lower global benchmark interest rates (such as LIBOR). With increased availability of forex inflows during the quarter, the financing needs of the deficit were met through external sources.

Despite the reduction in overall financing needs amidst a lower fiscal deficit, revaluation losses on external debt emerging from the PKR's depreciation against the US Dollar increased the public debt stock during Q1-FY22. Further expansion in public debt mostly originated from external sources, specifically Eurobonds and inflows from multilaterals (ADB and IDB). External liabilities of the central bank also went up after the receipt of US$ 2.8 billion from the IMF under the global Special Drawing Rights (SDRs) allocation. The pace of domestic debt accumulation slowed during Q1-FY22, with the entire increase coming from short-term instruments.

The government has shown its commitment to fiscal consolidation by showing consistent

[1] In the same vein, GST rates on POL product sales were also reduced during the quarter.

Budgeted Targets and Actual Collection **Table 4.2**

billion Rupees, growth in percent

	Budgeted Targets		Q1- Collection		Q1 - Growth		Q1 - Growth Cont.	
	FY21*	FY22	FY21	FY22	FY21	FY22	FY21	FY22
FBR taxes	4,691.0	5,829.0	1,010.6	1,398.0	4.8	38.3	3.1	26.2
Direct taxes	1,789.0	2,182.0	363.6	481.4	2.2	32.4	0.5	8.0
Indirect taxes	2,902.0	3,647.0	647.0	916.6	6.3	41.7	2.6	18.2
Non-tax revenue	1,704.4	2,080.0	356.3	275.7	-15.2	-22.6	-4.3	-5.5
Total revenue	**6,395.4**	**7,909.0**	**1,478.7**	**1,808.5**	**-0.7**	**22.3**	**-0.7**	**22.3**

* Revised estimates

Source: Ministry of Finance

primary balance surpluses. A surplus in the primary balance indicates the government's ability to stabilize the level of public debt. However, achieving a stable debt trajectory would require a meaningful and consistent expansion in the primary surplus over a number of years. Achieving this objective requires a sustained policy thrust on fiscal consolidation through prudent management of spending and efforts to increase the tax base.

4.2 *Revenues*

With the anticipation of continued economic growth momentum, higher imports and upward pressure on prices, the government targeted a high growth rate in revenue for FY22, which was mainly expected to come from tax revenues. The government targeted 24.0 percent growth in FBR taxes for FY22 to Rs 5.8 trillion, as compared to the revised estimates of last year (**Table 4.2**).[2] Specifically, the expansion in economic activity and tax policy and administrative measures are expected to lead to contribute an additional Rs 636 billion and Rs 493 billion respectively to tax revenues during FY22.[3] In the case of non-tax revenues, the growth target was set at 38.2 percent, which was mainly based on petroleum levy and Pakistan Telecommunications Authority (PTA) profits.[4] In terms of actual performance, the revenue collection surged by 22.3 percent during Q1-FY22, against a decline of 0.7 percent during Q1-FY21. The increase this year was driven by 36.6 percent rise in tax collections, which offset a 22.6 percent drop in non-tax revenues during the quarter.

FBR Taxes

The quarterly FBR collection target for Q1-FY22 envisaged a 25 percent growth in tax receipts. However, FBR tax collection surpassed the target and grew by a record 38.3 percent in Q1-FY22, compared to 4.8 percent last year **(Table 4.3 and Figure 4.3)**. Around two-thirds of the increase came from import-related taxes – i.e. GST on imports and customs duty – driven by both

[2] In terms of actual collection during FY21, the target for the current year is 22.4 percent higher on YoY basis.
[3] Source: Evidence-Based Revenue Forecasting FY2021-22, Federal Board of Revenue.
[4] The targeted growth from the revised budget estimate was set at 22 percent.

FBR Tax Collection **Table 4.3**

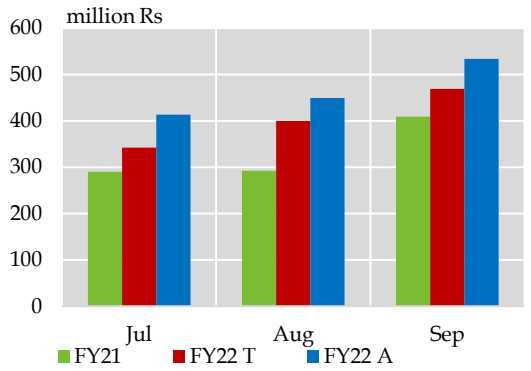
billion Rupees, growth in percent

	Targets		Q1-Collection		Q1-Growth		Q1-Growth Cont.	
	FY21*	FY22	FY21	FY22	FY21	FY22	FY21	FY22
Direct taxes	**1,789.0**	**2,182.0**	**362.7**	**481.4**	**2.0**	**32.7**	**0.7**	**11.8**
Indirect taxes	**2,902.0**	**3,647.0**	**647.6**	**915.0**	**6.4**	**41.3**	**4.0**	**26.5**
Customs duty	700.0	785.0	154.2	218.8	-0.9	41.9	-0.1	6.4
Sales tax	1,927.0	2,506.0	434.9	625.3	7.7	43.8	3.2	18.8
Imports	-	-	235.9	425.4	7.0	80.4	1.6	18.8
Domestic	-	-	199.0	199.9	8.1	0.4	1.5	0.1
FED	275.0	356.0	58.4	70.9	18.8	21.4	1.0	1.2
Total taxes	**4,691.0**	**5,829.0**	**1,010.2**	**1,396.4**	**4.8**	**38.2**	**4.8**	**38.2**

* Revised

Source: Federal Board of Revenue

Tax collection against Target and Actual Collection **Figure 4.3**



T= Target, A= Actual collections

Source: Federal Board of Revenue

Growth in Economic Indicators **Table 4.4**

percent

	Q1- FY21	Q1-FY22
Production		
Textile	2.2	0.8
Food	13.7	3.4
POL	2.4	4.7
Automobile	-5.9	42.6
Overall LSM	**4.5**	**5.1**
Sales		
Electricity*	1.3	7.9
Cement**	19.0	3.9
Automobile***	8.7	68.5
POL	10.5	17.9
FMCG	23.7	21.0

* electricity generation, ** cement dispatches *** excluding three wheelers

Source: Pakistan Bureau of Statistics, All Pakistan Cement Manufacturers Association, National Electric Power Regulatory Authority

higher import volumes as well as a sharp uptrend in international commodity prices. In addition, expansion in domestic economic activity **(Table 4.4)**; higher commodity prices (both energy and non-energy); withdrawal of the Corporate Income tax exemptions announced in March2021;[5] tax administration measures to improve audit procedures; and some budgetary measures to improve collection (**Table 4.5**) provided further impetus to the tax collection and reflected in a notable increase in the FBR tax-to-GDP ratio during Q1-FY22 (**Figure 4.4**).

Import-related taxes showed a pronounced increase

A sharp rise in imports during Q1-FY22 bolstered collection from import-

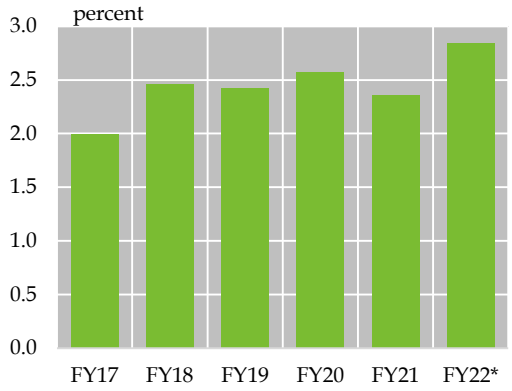
[5] These reforms include the withdrawal of tax exemptions and the reversal of reduced tax rates on various categories.

Budgetary Revenue Measures for FY22 **Table 4.5**

Revenue-Enhancing Measures	Relief Measures
The price of sugar (on which ST was charged) was changed to actual market rate, compared to the fixed price of Rs 60 per kg.	Provision of zero-rating regime on plant and machinery for registered exporters under export facilitation scheme.
Zero-rating regime for petroleum crude oil and machinery for petroleum and gas sector was withdrawn.	Exemption of ST and FED for border sustenance markets.
Threshold for tax on electricity consumption was reduced from Rs 75,000 to Rs 25,000 (rate stayed the same at 7.5 percent)	Reduction in sales tax rate on locally manufactured cars of up to 1,000cc to 12.5 percent from 17 percent.
Online marketplaces were directed to collect withholding tax of 2 percent on supplies made through e-commerce.	Reduction in FED by 2.5 percent on locally manufactured cars.
Levy of regulatory duty on luxury items and additional customs duty applied on import of automobile parts.	Reduction of WHT on telecom services from 8 to 3 percent.
Withdrawal of ST exemption on non-essential items (raw and ginned cotton, LNG/RNG, soybean seeds)	Reduction in advance tax on usage of internet and telephone service from 12.5 to 10 percent

Source: Ministry of Finance

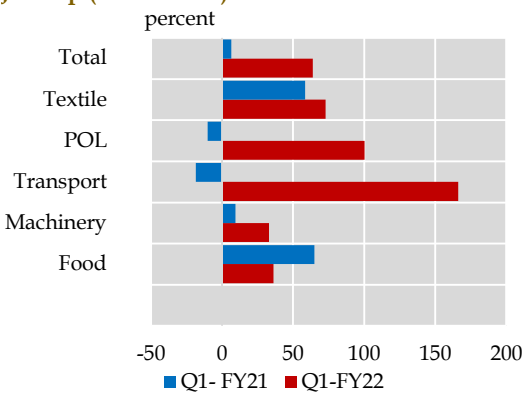
Tax to GDP for Q1 **Figure 4.4**



* the ratio for FY22 is based on estimated GDP

Source: Ministry of Finance

Growth in Import Value during Jul-Sep (sector Wise) **Figure 4.5**



Source: Pakistan Bureau of Statistics

related taxes during the period. Particularly, collection from POL products more than doubled during the period amid increasing international prices and rising import volumes (**Figure 4.5**). Similarly, with a rebound in domestic demand, personal car imports (both CBU and CKD) rose by 206.8 percent compared to a decline of 25.8 percent last year as per PBS data, which translated into a corresponding increase in tax collection (**Table 4.6**)

GST collection from domestic sales remains flat

Around one-third of the entire GST collection on domestic sales was contributed by the energy sector, mainly POL products, electrical energy and oil exploration. In the non-energy sector sugar, textile and other food products made notable contributions.[6]

[6] These were the major domestic GST spinners in FY21. The information on tax spinners for Q1-FY22 is not available.

Major Import-related Taxes (Jul-Sep) Table 4.6
billion Rupees; growth in percent

	FY21	FY22	Growth
Sales tax	**235.9**	**425.4**	**80.4**
POL	52.2	137.0	162.5
Iron and steel	23.1	31.6	36.9
Animal or vegetable fats and oil	16.2	26.1	60.7
Vehicles other than railway or tramway	10.3	32.3	213.1
Customs duty	**154.2**	**218.8**	**41.9**
POL	18.7	50.1	167.6
Vehicles other than railway or tramway	14.0	47.7	241.5
Iron and steel	13.6	13.9	1.6
Total	**390.1**	**644.2**	**65.1**

Source: Federal Board of Revenue

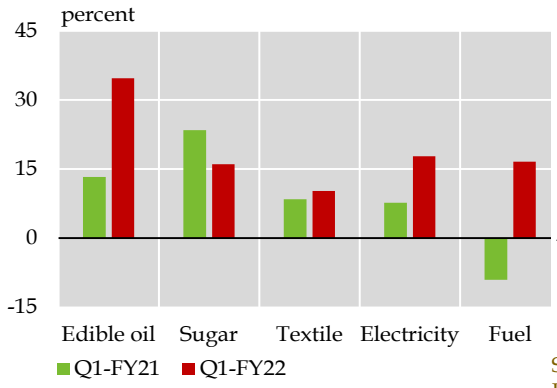
Despite a sizable growth in domestic sales of POL products and fast-moving consumer goods (FMCGs), healthy uptick in electricity generation, and surge in domestic prices of various commodities (**Figure 4.6a**), the growth in collection from GST remained stagnant during Q1-FY22. This may be explained by a significant reduction in GST rates on POL products.

The government reduced GST on POL products during Q1-FY22 to minimize the impact of the increasing global oil prices on end-consumers **(Figure 4.6b)**.[7,8] Similarly, the GST rate on locally manufactured cars (of up to 1,000cc) was reduced to 12.5 percent from 17 percent, which further dented revenue collection.

FED collections edged up strongly

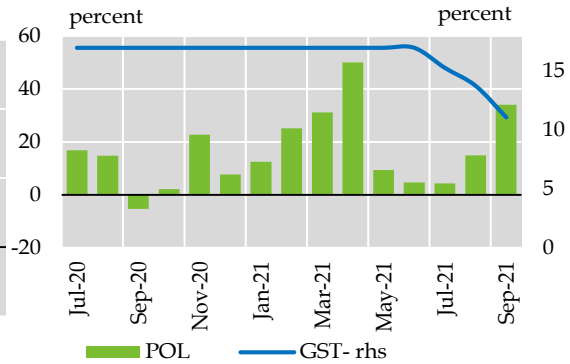
The increase in FED collection was achieved despite a reduction in FED rates on automobiles and juices. Major sub-heads in this category are beverages, cement and cigarettes. The notable increase in FED can be explained by continued anti-smuggling drive against illegal cigarettes that switched the domestic demand to local brands. Moreover, growth in beverages sales, as

Increase in Domestic Prices of Major Commodities Figure 4.6a



Source: Pakistan Bureau of Statistics

Growth in POL Sales and GST Rates Figure 4.6b



Source: Oil Companies Advisory Council, Federal Board of Revenue

[7] FBR SRO No. 860(I)/2021 – Dated: July 6, 2021
[8] The average GST rate on POL products stood at 13.4 percent during Q1-FY22 against 17 percent in Q1-FY21.

gauged from a rise in both domestic production and prices, bolstered collections from this segment during Q1-FY22. [9]

Direct taxes grew significantly due to continued administrative efforts

With the pickup in economic activity, continued administrative efforts, and removal of CIT exemptions from March 2021, direct taxes rose by 32.3 percent during Q1-FY22, compared to 2.2 percent growth last year.

The expansion in withholding taxes (WHT) was driven by the substantial growth in imports, along with an increase in salaries of government employees and a surge in development spending. The rise in WHT collection was despite a 0.5 percent reduction in the WHT rate on contracts.

Sustained efforts to improve tax administration further boosted collections

The fiscal authorities scaled up efforts to improve tax regulations and procedures. Some of the new measures during Q1-FY22 included: (i) initiation of awareness drive to encourage filing of income tax returns[10]; (ii) improvement in audit procedures by reducing the time of litigation process; (iii) compulsory indication of business bank account of the taxpayer while filing tax returns; and (iv) FBR's compliance with the Financial Action Task Force (FATF) action plans regarding anti-money laundering/countering the financing of terrorism (AML/CFT) for Designated Non-Financial Business and Professions (DNFBPs).[11]

To improve voluntary payments, the FBR launched countrywide electronic and print media campaigns to encourage the filing of income tax returns. In addition, the penalty rate was also increased on late filing of returns. The drive contributed to a significant 44 percent increase in the number of tax filers (as on the closing date of filing returns); at the same time, collections from returns rose to Rs 48.6 billion from Rs 29.6 billion last year.

Non-tax revenue declined on account of lower collections from petroleum levy

The FY22 budget envisaged a 38.2 percent increase in NTRs, which was expected to come mostly from the petroleum development levy. During Q1-FY22 NTR collections fell by 22.6 percent, compared to 15.2 percent decline in the same period last year (**Table 4.7**). This drop is mainly explained by lower PDL collection in the wake of downward adjustment in PDL rates during the quarter. In view of the sharp increase in international oil prices, the government significantly reduced PDL rates

[9] The production of beverages rose by 3.0 percent during Q1-FY22, whereas prices of this product category also went up by 3.9 percent during the quarter.
[10] Source: FBR press release dated October 16, 2021.
[11] The FATF plenary had approved two actions specific to Designated Non-Financial Business and Professions in June 2021, which are being regulated by the FBR. Since then, the FBR has launched an online portal and a mobile app to facilitate the DNFBPs in implementing AML/CFT regulations, including generating Suspicious Transaction Reports. Meanwhile, the FBR has carried out number of inspections of DNFBPs to minimize tax evasion and imposed fines on non-compliance. Source FBR Press Release dated October 21, 2021.

Non-tax Revenues during Jul-Sep (consolidated) **Table 4.7**

billion Rupees, growth in percent

	FY20	FY21	Growth
SBP profits	105.0	109.0	3.8
Profits (post office/PTA)	8.2	30.1	269.2
Mark-up (PSEs & others)	25.7	19.5	-24.1
Royalties on gas & oil	14.6	21.7	48.5
Dividends	1.5	1.9	27.3
Passport & other fees	3.0	6.1	106.7
Defense	2.9	2.8	-1.3
Petroleum levy	136.4	13.3	-90.2
GIDC	5.0	6.5	30.8
Total	**356.3**	**275.7**	**-22.6**

Source: Ministry of Finance

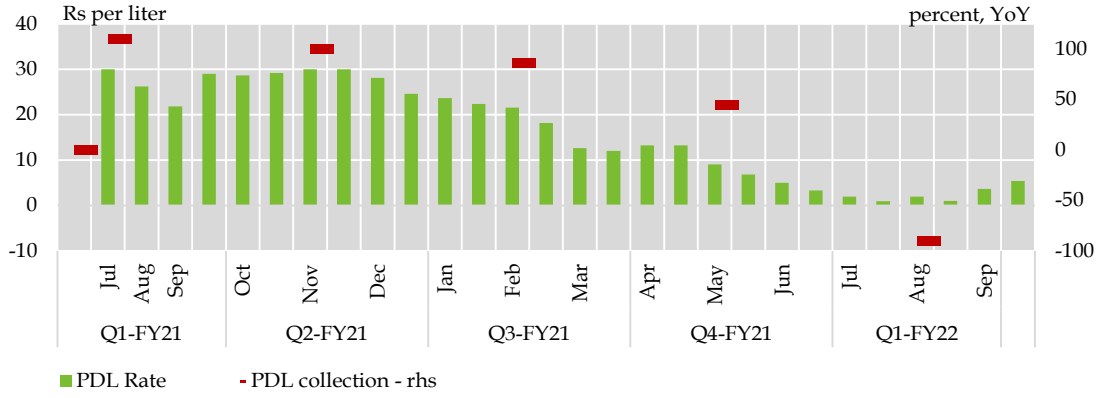
to provide breathing room to consumers. This led to a 90.2 percent decline in collection from PDL during the quarter (**Figure 4.7**).

Meanwhile, the SBP's profit to the government remained almost at last year's level in the first quarter. This was despite a contraction in interest earnings stemming from partial retirement of the government's debt with SBP. This drop was more than offset by the interest earnings from open market operation (OMO) injections, which almost doubled over the same period last year. Meanwhile, revenues from PTA profits rose sharply, as the government received Rs 23.4 billion against the issuance of a 4G spectrum license to a major cellular company. With this, the total collections from PTA profits rose to Rs 30.1 billion in Q1-FY22, compared to Rs 8.2 billion last year.[12]

4.3 Federal Expenditures[13]

The budget estimate for federal expenditures in FY22 was set 18.9 percent higher than FY21. Particularly, the target for development spending was increased by a wide margin to support the ongoing economic recovery, both at the federal and provincial levels.[14]

PDL Rates and Quarterly Collections Growth **Figure 4.7**



Source: Ministry of Finance and State Bank of Pakistan

[12] Importantly, this is one-half of the total sales price of the license; the remaining amount will be received in 5 equal installments annually.

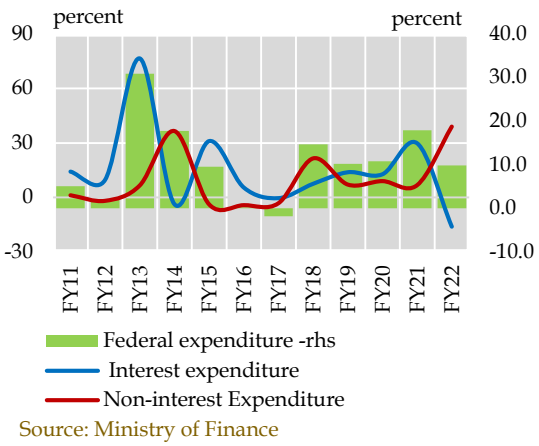
[13] The discussion in this section is based on expenditures excluding statistical discrepancy.

[14] The federal PSDP was targeted at Rs 900.0 billion in FY22, against Rs 667.3 billion actually spent in FY21. The cumulative provincial target was set at Rs 1,235.0 billion for FY22, against Rs 770.3 billion spent in FY21.

At the same time, non-interest current expenditures were also envisaged to be scaled up. This was done to make circular debt payments to the power sector under the Circular Debt Management Plan (CDMP); meet the expenses for procuring Covid vaccines to ensure sustained pace of inoculation; and cover the increase in salaries and pensions of government employees, which were kept unchanged last year. In addition, the pressure of interest payments – particularly on foreign debt – were expected to remain elevated, partly driven by the PKR depreciation and the gradually rising global benchmark rates like LIBOR.

In terms of actual outcome, the growth in federal expenditures decelerated to 9.9 percent in Q1-FY22 from 17.9 percent last year. The slowdown primarily came from a decline in interest payments on both domestic and foreign debt, which partially offset a sharp 39.0 percent rise in non-interest expenditures during Q1-FY22 **(Figure 4.8)**. This development was in contrast to Q1-FY21, when interest payments were the major contributor to the expenditure growth **(Figure 4.9)**. Meanwhile, non-interest expenditures rose sharply during Q1-FY22, in line with the budget estimates.

Growth in Federal Spending (Q1) **Figure 4.8**



Source: Ministry of Finance

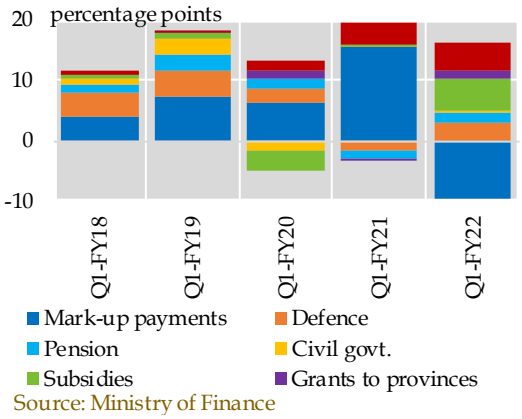
Federal Current Expenditures

A 16.1 percent decline in interest payments held down growth in federal current expenditures during Q1-FY22 **(Table 4.8)**. However, with a sharp pickup in spending on subsidies and grants, and a notable expansion in pensions and defense-related expenditures, the non-interest current spending grew by a sizable 39.4 percent in Q1-FY22. On the other hand, the growth in the running of civil government tapered off during the quarter, reflecting the government's continued focus on containing non-priority spending.[15]

Spending on Covid Vaccination and Power Sector remained prominent during Q1-FY22

The Economic Stimulus Package (ESP) announced after the Covid outbreak in March 2020 aimed to facilitate economic recovery and contain the spread of the pandemic. Nearly one-third of the total

Growth Contribution in Federal Current Expenditures **Figure 4.9**



Source: Ministry of Finance

[15] Circular No. 7(1) - Exp.IV/2016-440, dated July 15, 2021, Expenditure Wing, Finance Division.

State of Federal Expenditures **Table 4.8**

billion Rupees; growth in percent	Q1-FY21	Q1-FY22	Growth Q1-FY21	Growth Q1-FY22
Total Expenditures* (a+b)	**1401.9**	**1540.1**	17.9	9.9
(a) Current expenditure	**1271.5**	**1360.6**	16.4	7.0
Mark-up payments	742.1	622.7	29.8	-16.1
Domestic	684.9	571.1	38.6	-16.6
Foreign	57.2	51.6	-26.4	-9.7
Defence affairs and services	224.5	261.7	-7.5	16.6
Pension	86.7	110.7	-12.6	27.7
Running of civil govt.	88.9	89.5	1.9	0.6
Subsidies	2.8	73.9	-	-
Grants to provinces and others	126.4	202.1	37.8	59.9
Grants to provinces	18.1	32.6	-20.8	80.6
Grants to others	108.3	169.5	57.3	56.4
(b) Development expenditure and net lending	130.5	179.5	34.7	37.6
Total Development expenditure	**86.4**	**143.8**	-7.6	66.4
PSDP	82.5	143.8	-11.7	74.3
O/w Development grants to provinces	11.8	35.5	-45.8	201.5
Others development expenditure	3.9		3603.8	-100.0
Net lending	**44.0**	**35.7**	1244.5	-18.9
Provinces	-6.7	33.1	376.1	-591.5
Others	50.7	2.6	982.5	-94.9

* Excluding statistical discrepancy

Source: Ministry of Finance

allocation was spent till June 2021 to support businesses, agriculture and the vulnerable segments of the economy, and to scale up healthcare facilities to respond to the pandemic.[16] During Q1-FY22, a further payment of Rs 69 billion was made to the National Disaster Management Authority (NDMA) for the procurement of Covid vaccines. The total number of doses administered reached over 100 million up till October 2021, with almost 38 million individuals fully and 68 million partially vaccinated.

In terms of social protection, the disbursements under the Benazir Income Support Program (BISP) ticked down compared to same period last year. This was mainly due to the discontinuation *of* the *Ehsaas Emergency Cash Transfer Program* from Q2-FY21.

The expenditures on subsidies rose by Rs 71 billion during Q1-FY22, compared to the same period last year. This increase mainly emanated from disbursement of tariff differential subsidy to utility companies, which are paid each year, after the first quarter. However, the earlier disbursement this year pushed the overall growth during Q1 this year. In addition, a small payment was also made to PHPL under the CDMP in this period. It is important to note that the FY22 budget envisaged payment of Rs 266 billion to settle arrears of IPPs/PHPL under the CDMP.

[16] The ESP amounted to Rs 1.2 trillion.

Interest payments tapered off during Q1-FY22

After rising sharply during FY21, interest payments on both domestic and foreign debt declined in Q1-FY22, thereby lowering the share of FBR taxes spent on debt servicing **(Figure 4.10)**.

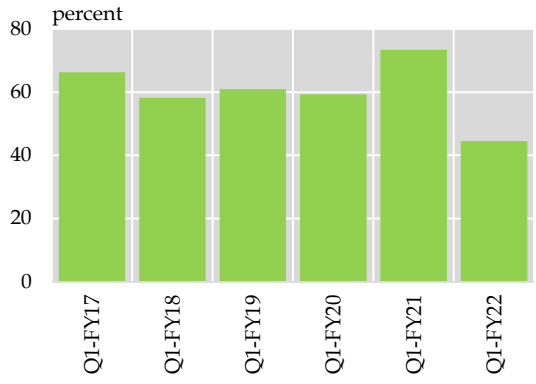
The low interest rate environment maintained throughout FY21, contributed to a 16.6 percent decline in interest payments in Q1-FY22, from Rs 684.9 billion during Q1-FY21 (**Figure 4.11**). This drop mainly stemmed from lower payments on T-bills, as the effective rates on maturing 6-month and 12-month T-bills was down 500 and 600 bps respectively in Q1-FY22 over the same period last year. Similarly, interest payments on PIBs also declined during the period. This was driven by a slowdown in the growth of the PIB stock as well as a 450 bps YoY decline in the effective rate paid on the maturing PIBs during the quarter.[17] Foreign interest payments also declined, reflecting the impact of deferred payments under the DSSI and lower benchmark global interest rates (LIBOR).

Pensions and Defence Spending rose significantly during Q1-FY22

Pension expenditures soared 27.7 percent during Q1-FY22 as compared to a decline in Q1-FY21. The growth this year was mainly driven by an increase in pensions of government employees.[18]

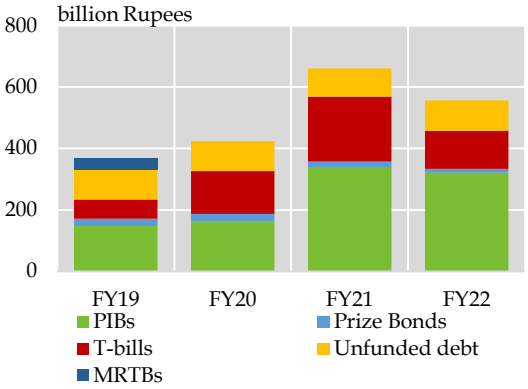
Defence expenditures grew by 16.6 percent during Q1-FY22, against a contraction last year. The budget target of defense spending was set higher for FY22, keeping in view the

Ratio of Interest Payments to FBR Tax Revenue **Figure 4.10**



Source: Ministry of Finance

Instrument-wise Interest Payments (Q1) **Figure 4.11**

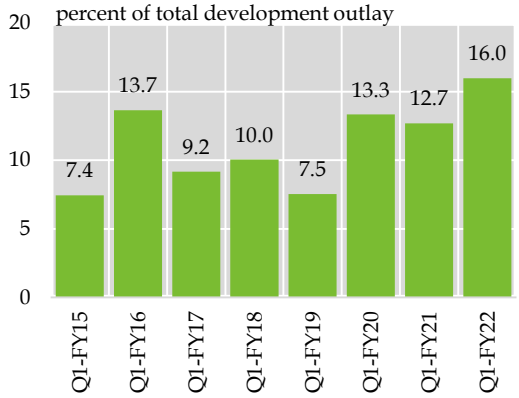


Source: State Bank of Pakistan

[17] It may be recalled that at end- June 2019, the government had converted the stock of MRTBs held by the SBP to PIBs, with maturities of 3 to 10 years. Nearly 70 percent of the SBP's debt stock was converted into 10-year Floating Rate PIBs (FR-PIBs). With the cumulative 625 bps reduction in the policy rate from March 2020 till September 2021, the pace of debt servicing on domestic debt also decelerated. The amount of short-term debt converted into long-term debt at end-June 2019 stood around Rs 6.4 trillion. Around 70 percent (Rs 4.5 trillion) of this stock was converted on floating rates.

[18] Circular No. 4(1)- Reg.6/2021-486, dated July 8, 2021, Regulations Wing, Finance Division.
Circular No. F.4 (3)R-4/2011 - Revision, dated July 26, 2021, Regulations Wing, Finance Division.

Federal PSDP Spending **Figure 4.12**



Source: Planning Commission

increase in salaries as well as special allowances for military officials.

In addition, a change in data categorization for some defense-related expenditures also partly contributed to this increase. For instance, during FY21, the expenditures pertaining to *security enhancement* were included in *other* development expenditures. However, in the FY22 budget, these expenditures are categorized under current spending of *defence affairs and services*.

Federal Development Expenditures

To provide further impetus to economic activity, the FY22 budget target for federal PSDP was set at Rs 900 billion, which depicted a 34.9 percent increase over last year. In line with this estimate, federal development expenditures rose by 66.4 percent in Q1-FY22, against a decline of 7.6 percent in the previous corresponding period. Importantly, the development spending stood at 16 percent of the annual estimate, which is close to the benchmark defined in the federal PSDP release strategy.[19] This is in contrast to the previous years, when development expenditures used to generally remain muted in the first quarter of the fiscal year. (**Figure 4.12)**.

The federal development grants to provinces rose significantly, which stimulated provincial development spending during the quarter. The development priorities for FY22 largely focused on water, food, energy resources, road infrastructure, meeting the Sustainable Development Goal (SDG) targets, and progress on CPEC projects.[20]

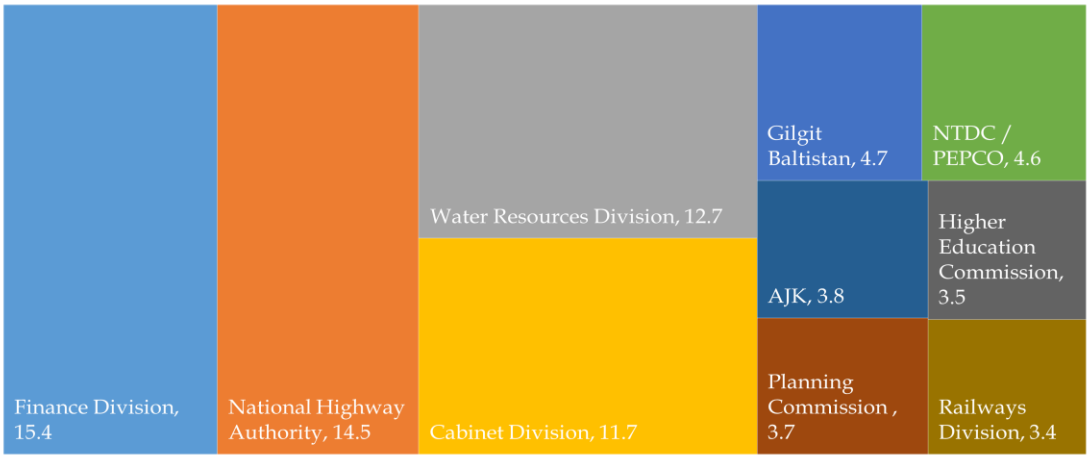
The PSDP releases during Q1-FY22 aligned with these objectives and were concentrated in the departments dealing with water resources, road infrastructure and special areas **(Figure 4.13)**.[21]

4.4 Provincial Fiscal Operations

The consolidated provincial surpluses during Q1-FY22 stood at Rs 276.9 billion, or 0.5 percent of GDP - which was almost half of the annual target for full-year FY22. All the provinces contributed to the surplus except for KP, which posted a deficit of Rs 3.2 billion **(Figure 4.14)**. A Rs 418.9 billion increase in total provincial revenue offset the Rs 186.4 billion expansion in provincial

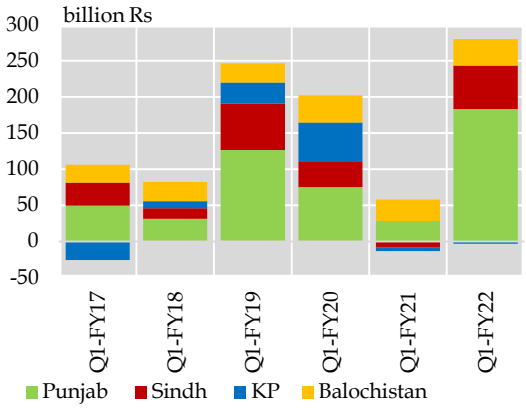
[19] According to the PSDP release strategy, 20 percent of the federal PSDP spending should be spent in the first quarter; 30 percent in the second and third quarters; and 20 percent in the last quarter of every fiscal year. Source: Revised Release Strategy for Funds Allocated for the Public Sector Development Programme (PSDP) 2019-20, Budget Wing, Finance Division.
[20] Source: Federal PSDP (2021-22), Planning Commission. Islamabad.
[21] Within the water sector, Dasu Hydropower project in KP had a priority status.

Top 10 PSDP Authorization - Division-wise (share in percent) **Figure 4.13**



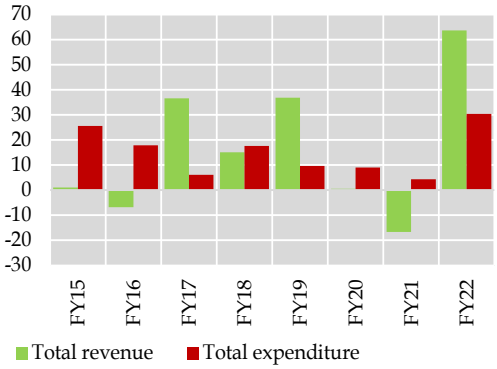
Source: Planning Commission of Pakistan

Province-wise Surplus **Figure 4.14**



Source: Ministry of Finance

Growth in Provincial Revenues & Expenditures (Q1) **Figure 4.15**



Source: Ministry of Finance

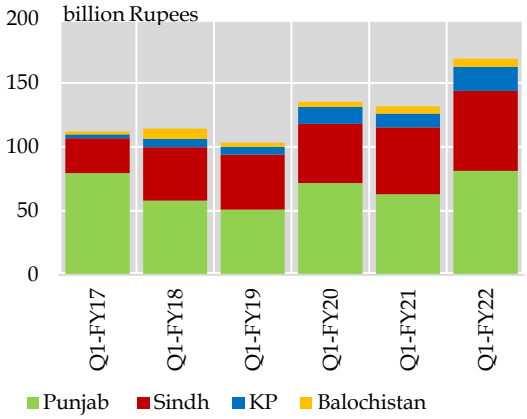
expenditures, driving the overall increase in the surplus **(Figure 4.15)**.

Provincial Revenues

A notable expansion in federal transfers to provinces from the divisible pool resulted in higher provincial revenues. In addition, better revenue collection from provincial own sources and higher federal grants to provinces further propped up provincial revenues.

Provincial own revenue grew by 28.3 percent during Q1-FY22 against a decline in Q1-FY21 **(Table 4.9)**. Major contribution to this growth came from Punjab and Sindh **(Figure 4.16)**. In Punjab, the collection from the general sales tax on services (GSTS) rose sharply, mainly due to the revival of economic activities. This uptick was realized

Provincial Own Revenue **Figure 4.16**



Source: Ministry of Finance

despite the continuation of the tax relief package amounting to more than Rs 50 billion for ease of doing business during FY22.[22] In the case of Sindh, the up surge in imports shored up the GSTS collection from port and shipping services. The own revenue collection in KP primarily came from higher *profits from hydroelectricity* during Q1-FY22.

Provincial Expenditures

The total provincial expenditures recorded a significant growth of 30.3 percent in Q1-FY22, against an increase of 4.3 percent during Q1-FY21. The rise was observed across current and development expenditures.

Specifically, the increase in current expenditures was engendered by increase in salaries and pensions of government employees. Punjab announced an increase of 10 percent in the salaries and pensions and a 25 percent special allowance for the financially distressed employees.[23] Likewise, Sindh and KP also announced 20.0 percent increase in salaries for FY22. In addition, spending on health and education sectors

Provincial Fiscal Operations **Table 4.9**

billion Rupees; growth in percent

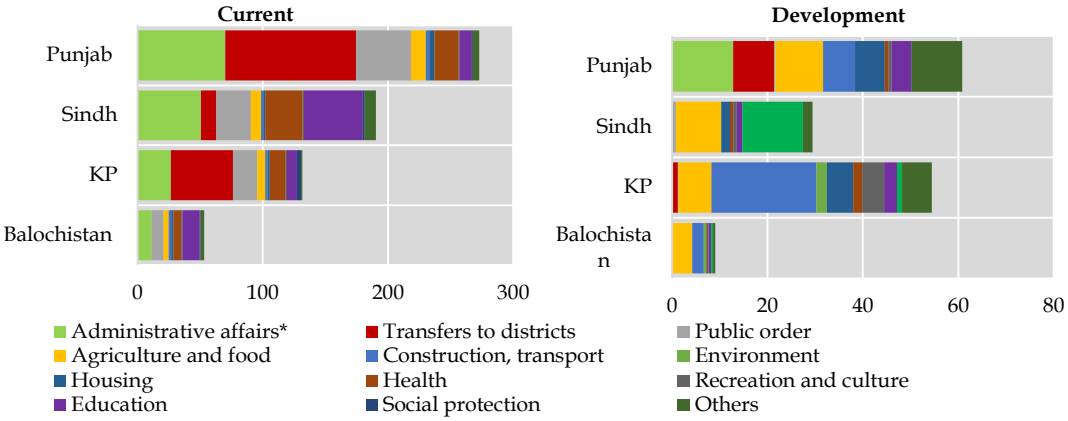
			Growth	
	Q1-FY21	Q1-FY22	Q1-FY21	Q1-FY22
A. Total revenue (a+b+c)	**658.9**	**1077.8**	**-16.7**	**63.6**
a. Provincial share in fed. revenue	504.0	807.5	-17.7	60.2
b. Fed loans and transfers	23.1	101.2	-46.4	338.1
c. Provincial own revenue	131.8	169.0	-2.7	28.3
Taxes	111.8	134.8	6.9	20.6
Non-taxes	20.0	34.2	-35.3	71.0
B. Total expenditures (a+b)	**614.5**	**800.9**	**4.3**	**30.3**
a. Current	565.9	648.0	9.2	14.5
b. Development	89.8	153.8	27.2	71.2
c. Statistical discrepancy	-41.2	-0.9	-	-
Overall balance (A-B)	**44.4**	**276.9**	**-78.0**	**524.0**

*Negative sign in financing means surplus.

Source: Ministry of Finance

[22] In the budget FY22, the Punjab government announced a tax relief package for the Covid-hit areas by reducing the sales tax on over 20 services for different sectors, including stamp duty, property tax, and rate of entertainment duty, among others. Source: Budget documents for FY22, Government of Punjab.
[23] Punjab Budget Highlights for FY22. Government of Punjab.

Provincial Expenditure Priorities during Q1-FY22 (billion Rs) **Figure 4.17**



Source: Ministry of Finance

rose across the provinces to improve service delivery **(Figure 4.17)**.[24]

Similarly, provincial governments also announced large increases in the development budgets for FY22. Punjab announced a development outlay of Rs 570 billion for FY22, which was up Rs 223 billion over last year. This included a District Development Package of Rs 360 billion, and spending on the 'Universal Health Insurance' program (Rs 80 billion) for the entire population of Punjab.[25] These priorities reflected in higher transfers to districts and increased spending on health during Q1-FY22.

Likewise, Sindh announced an Rs 83 billion expansion in development budget to Rs 252 billion for FY22. Health and education were the focus areas.[26] Similarly, the current spending on these two sectors also rose during the quarter **(Figure 4.17)**.

KP's development budget focused on the development of the province along with the merged areas, while Rs 150 billion allocation was made for the Annual Development Plan for FY22.[27] Accordingly, allocation to construction and transport dominated the development expenditures during Q1-FY22 **(Figure 4.17)**.[28]

[24] Some major areas of focus are improvement in hospital services and continuation of educational projects. For instance, Sindh has spent funds on the primary and secondary school education during Q1-FY22.
[25] Punjab Budget Highlights for FY22. Government of Punjab.
[26] Sindh Budget documents for FY22. Government of Sindh.
[27] The 25th Constitutional Amendment in 2018 officially merged the Federally Administered Tribal Areas (FATA) into KP. The administrative merger took place officially during 2018-19. Since then, the development spending in the newly merged areas has been increasing in the province, with the budgeted spending reaching Rs 97 billion for FY22. Source: KP White Paper for FY22.
[28] White Paper for FY22. Government of Khyber Pakhtunkhwa

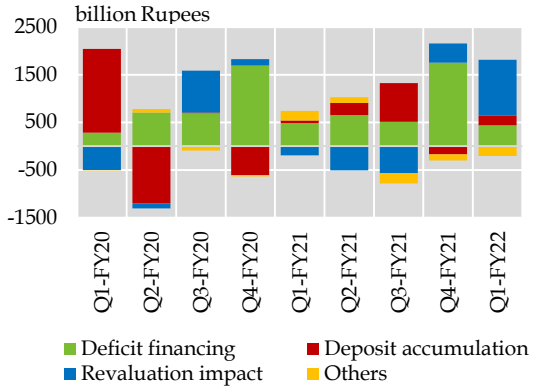
4.5 Public Debt

Despite the reduction in financing requirements, the public debt build-up gained pace during Q1-FY22. The stock of public debt reached Rs 41.5 trillion with an addition of Rs 1.6 trillion, against a Rs 0.6 trillion increase in the same period last year. Out of the entire increase this year, Rs 1.2 trillion came from the PKR's 7.7 percent depreciation against the US Dollar during this period (**Figure 4.18**).[29] A slight uptick in government deposits with the banking system also partially contributed in the overall increase in public debt.[30]

In terms of composition, around 90 percent of the addition to public debt was sourced from external sources. The maturity profile of external debt remained largely tilted towards long-term tenors mainly due to the issuance of Eurobonds and inflows from multilaterals. Moreover, external liabilities of the central bank also increased with an inflow of US$ 2.8 billion from the IMF under the global SDR allocations.[31]

On the other hand, the growth in domestic debt weakened during Q1-FY22. In terms of profile, the government adhered to its commitment of zero fresh borrowing from the SBP. The monthly analysis reveals that the stock of T-bills (short-term debt) rose sharply during July 2021, followed by a decline in the subsequent months (**Figure 4.19**). This pattern was in line with the auction targets set by the government for Q1-FY22.

Source of Change in Public Debt **Figure 4.18**



Source: State Bank of Pakistan

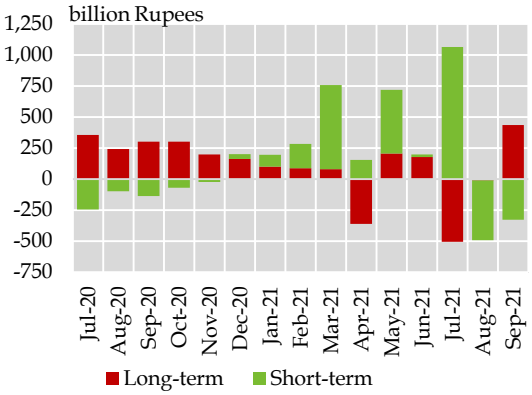
Anticipating market interest in the short-term paper, the targets for T-bills were set higher than upcoming maturities in July 2021. This was to meet the financing requirements and to make a large (Rs 961.0 billion) repayment of fixed-rate PIBs falling

[29] The external debt is contracted in different currencies and converted to US Dollars using the end-period exchange rates of various currencies against the greenback. Similarly, the US Dollar value is converted to PKR using the end-period exchange rates for reporting purposes. Any appreciation/depreciation of the US Dollar against other currencies leads to revaluation gains/losses for Pakistan. Similarly, any depreciation/appreciation of the PKR vis-à-vis the greenback leads to revaluation losses/gains for Pakistan. The revaluation losses of Rs 1.2 trillion during Q1-FY22 due to the PKR depreciation against the US Dollar offset the revaluation gains of US$ 0.4 billion from the appreciation of the US Dollar against other international currencies during the quarter.

[30] The government's deposits include those of both the federal and provincial governments. The overall rise in government deposits with the banking system came from provincial governments. The deposits of the provincial governments held with the SBP increased by Rs 0.3 trillion, whereas the deposits of the federal government held with the SBP declined by roughly Rs 0.2 trillion.

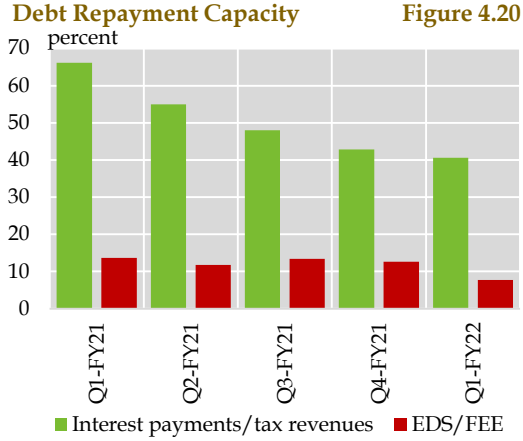
[31] External liabilities are not a part of public external debt.

Tenor-wise change in Domestic Debt **Figure 4.19**



Source: State Bank of Pakistan

Debt Repayment Capacity **Figure 4.20**



Source: Ministry of Finance, State Bank of Pakistan

due in the month. In the following months, in line with the auction targets, the government made net repayments of T-bills, leading to a decline in their stock. However, market interest in floater PIBs with fortnightly and quarterly reset options remained strong. Hence, the debt mobilization through these instruments exceeded targets, leading to an increase in the stock of PIBs during August and September 2021.

The debt repayment capacity of the country – as measured by the ratios of interest payments–to-tax revenues and external debt servicing-to-foreign exchange earnings (FEE) – improved during Q1-FY22 (**Figure 4.20**).[32]

As seen from the auction targets, given the market's reluctance to invest in long-term paper, the PIB targets were set lower than maturities. During the period of heightened uncertainty about the course of monetary policy, keeping market interest in long-term paper intact is a challenging task. However, the government may signal its commitment for lengthening the domestic debt maturity by setting higher targets for long-term paper. This will further strengthen the government's ability to achieve objectives of the medium-term debt strategy, such as improvement in the maturity profile and ensuring lower cost of borrowing.

Domestic Debt

The stock of government domestic debt reached Rs 26.4 trillion by end- September 2021 with an addition of Rs 0.2 trillion from end-June 2021 (**Table 4.10**). Adequate availability of external financing eased the growth in domestic debt to 0.6 percent, against 1.8 percent last year.

Instrument-wise analysis

Government made net repayments of T-bills after July 2021

Sensing the market's interest in short-term paper, the government set the net of maturity target for T-bills at a much higher level of Rs

[32] Foreign exchange earnings is a sum of exports of goods, exports of services, primary income account credits and secondary income account credits.

525 billion during Q1-FY22, compared to net retirement of Rs 903 billion in the same quarter of last year. Similarly, the target for floater PIBs was announced at Rs 525 billion, against Rs 830 billion during Q1-FY21.

On the other hand, the auction target for fixed-rate PIBs was set at Rs 150 billion, against maturities of Rs 961 billion falling due during July 2021. Accordingly, the offered and accepted amounts for T-bills (particularly 6-months) remained on the higher side in July 2021 (**Figure 4.21 and 4.22).** In the subsequent months, fund mobilization through T-bills declined. The net of maturity acceptance of T-bills stood at Rs 1,041 billion during July, against retirements of Rs 560 billion and Rs 353 billion during August and September 2021, respectively.

Furthermore, inflows into the Naya Pakistan Certificates (NPCs) for residents amounted to Rs 8.3 billion during Q1-FY22, against Rs 0.7 billion during the same quarter of last year.[33] These inflows also helped diversify the investor base for government debt securities.

Change in Government Domestic Debt (Q1) **Table 4.10**

billion Rupees

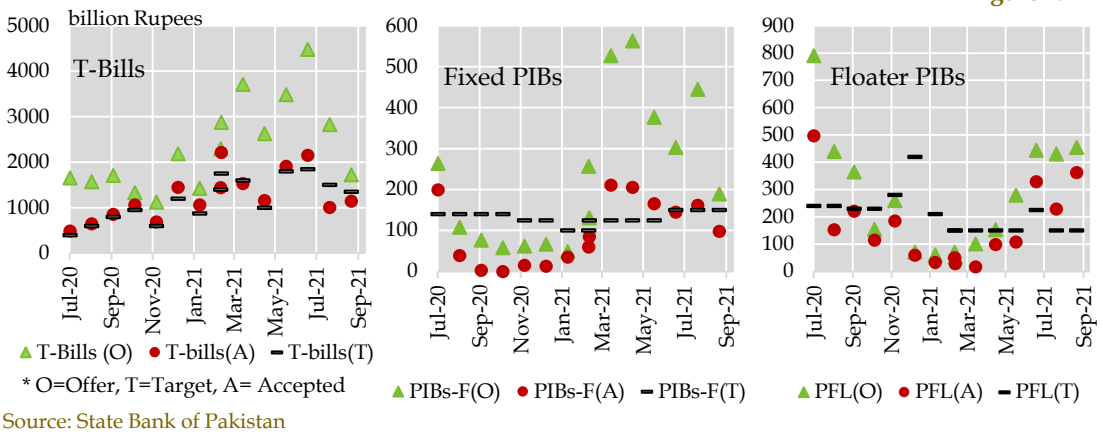
	Net Flows	
	FY21	FY22
Government domestic debt	419.3	178.4
institution-wise		
A. Through banking system	312.0	70.6
From scheduled banks	597.0	355.6
From SBP	-285.0	-285.0
B. Through non-banks	107.4	107.2
Instrument-wise		
A. Permanent debt	898.6	-67.2
B. Floating debt	-480.0	250.8
C. Unfunded debt	0.8	-14.0
NSS (net of prize bonds)	5.7	-13.5
D. Foreign currency instruments	-0.1	-0.1
E. Naya Pakistan Certificates	0.7	8.3

Source: State Bank of Pakistan

Net PIB retirements during Q1-FY22

Though the investment in floater PIBs (PFLs) increased during Q1-FY22, net retirements of fixed rate PIBs more than offset the inflows in PFLs. In overall terms, there were net PIB

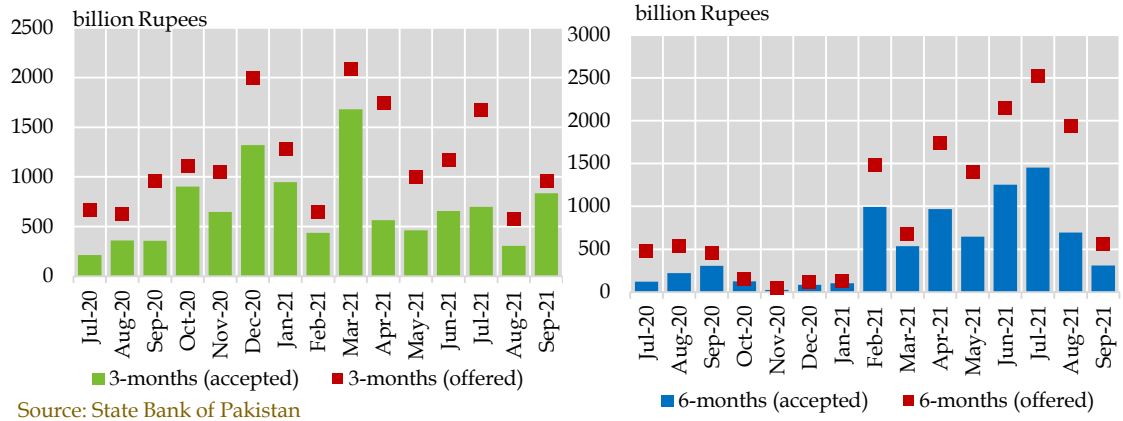
Investment in Government Securities **Figure 4.21**



Source: State Bank of Pakistan

[33] These NPCs include both Islamic and conventional types.

Bidding Pattern of T-bills **Figure 4.22**



Source: State Bank of Pakistan

retirements of Rs 67.0 billion between end-September and end-June 2021. This also includes the repayment of Rs 0.3 trillion to the SBP. So far, the government has settled an amount of Rs 0.9 trillion (including Rs 0.3 trillion in August 2021), out of its Rs 7.7 trillion debt held with the SBP that was re-profiled at the end of FY19. Out of total amount, roughly Rs 1.2 trillion was re-profiled into fixed PIBs.

The bidding pattern of PIBs also changed within the quarter. The expectations of an increase in the policy rate and banks' already high exposure in PIBs, discouraged further investments into long-term securities, especially in fixed-rate PIBs. However, the market's interest in 2-year and 3-year PFLs - which have fortnightly and quarterly coupon reset options –remained strong. These instruments allowed an extension in the maturity profile of domestic debt in August and September 2021. However, as the returns on PFL are adjusted fortnightly in line with any change in the benchmark interest rate (3-month T-bills), the repricing risk has also increased.

National Savings Schemes (NSS) witnessed net outflows

With a ban on institutional investments into NSS from the start of FY21, institutions continued to withdraw funds from these schemes, leading to overall net outflows, particularly from Defence Savings Certificates and Special Savings Certificates. However, with the upward adjustment in profit rates compared to the same period last year, net inflows were seen into Regular

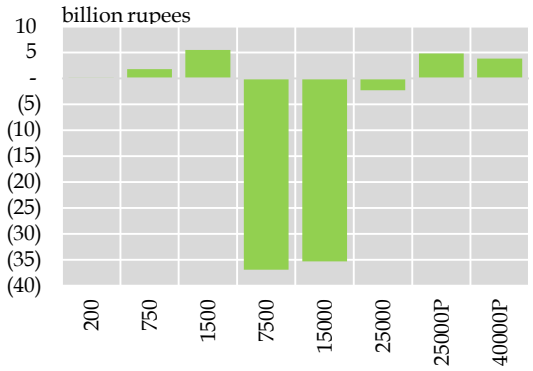
Instrument-wise net inflows into National Savings Schemes **Table 4.11**

Inflows in billon Rs; profit rates in percent

	Gross inflows		Net inflows		Profit rates	
	Q1-FY21	Q1-FY22	Q1-FY21	Q1-FY22	Q1-FY21	Q1-FY22
Defence savings certificates	7.1	10.6	-1.5	-2.1	8.3	9.4
Special savings certificates	22.3	22.6	6.5	-17.9	7.7	9.4
Regular income certificates	17.2	23.9	2.9	5.4	7.8	8.8
Behbood savings certificates	41.6	48.0	3.5	2.8	10.1	11.0

Source: Central Directorate of National Savings

Net Investment in Prize Bonds during Q1-FY22 **Figure 4.23**



Source: Central Directorate of National Savings

Income Certificates (RIC) and Behbood Savings Certificates (BSC) (**Table 4.11**).

Discontinuation of prize bonds led to continued withdrawals during Q1-FY22

Net outflows were recorded from prize bonds during the period under review. A high volume of withdrawals from Rs 7,500 and Rs 15,000 prize bonds more than offset the gross inflows into the premium prize bonds **(Figure 4.23)**.

Public External Debt & Liabilities

Revaluation gains contained the pace of increase in public external debt

The stock of public external debt (excluding liabilities) increased US$ 1.6 billion during Q1-FY22 to US$ 88.0 billion by end-September 2021, against a US$ 1.9 billion increase recorded during the same quarter last year. Although fresh disbursements remained higher than last year, revaluation gains of roughly US$ 0.4 billion due to the US Dollar's appreciation against other international currencies helped contain the pace of public external debt accumulation.[34] Almost 40 percent of the government external debt is denominated in non-USD currencies. Therefore, movement of other currencies against the US Dollar directly influence the stock of external debt. More than half of these revaluation gains during Q1-FY22 owed to the depreciation of the IMF's Special Drawing Rights (SDRs) against the US Dollar. Similarly, the US Dollar's strong performance against the Euro and the Japanese Yen also contributed to these gains. Meanwhile, the country's external liabilities increased with the release of US$ 2.8 billion from under the additional SDR allocation (**Table 4.12**).

Change in Public External Debt (Q1) **Table 4.12**

million US$

	FY21	FY22
Public external debt (1&2)	1,913.0	1,598.0
1. Government external debt	1,987.5	1,909.0
of which		
i) Long term (>1 year)	2,357.5	1,477.0
Paris club	278.4	-382
Multilateral	1,487.3	364
Other bilateral	984	66
Commercial loan	-425.5	140
Euro bond	-	1,000
NPCs	1	344
ii) Short term (<1 year)	-370	432
Multilateral	-303.7	473
Commercial loans	-26.5	-
2. From IMF	-75.4	-311
Foreign exch. liabilities	-859.3	2,881.0
Central bank deposits	-1,000.00	-
SDR Allocation	32	2,725.0

Source: State Bank of Pakistan

Long-term inflows dominated external loan disbursements

Gross disbursements stood at US$ 3.2 billion during Q1-FY22 compared to US$

[34] The country had registered revaluation losses of US$ 0.9 billion during Q1-FY21.

Disbursement of Foreign Economic Assistance (Q1) **Table 4.13**

amount in million US$

Donor	FY21	FY22
Multilateral sources	1,485	1,595
Bilateral sources	105	110
Commercial loans	335	457.5
Safe deposit	1000	0
Euro bond	0	1,000
Total	**2,925**	**3,205**

Source: Ministry of Economic Affairs

2.9 billion during Q1-FY21.[35] Out of the total amount, US$ 1.9 billion were disbursed for budgetary support and US$ 0.8 billion as project aid. Specifically, the ADB disbursed US$ 0.3 billion for Covid-19 vaccine support, whereas the IDA provided US$ 0.4 billion for a program on affordable clean energy. A short-term credit facility of US$ 0.4 billion was also provided by the IDB during Q1-FY22. A large part of the inflows (US$ 1.6 billion) was long-term in nature and sourced from multilateral institutions (**Table 4.13**).

Eurobond issuance fetched better rates than FY21

The government mobilized US$ 1.0 billion from the issuance of Eurobonds of various tenors during Q1-FY22. During March 2021, when Pakistan had re-entered the international capital market after around three years, the country had adopted a program-based approach with the registration of the Global Medium-Term Note (MTN) program, which allowed it to tap the market regularly and at a short notice. Keeping in view the ample liquidity available in the global market, favorable trend of international benchmark interest

Eurobonds Issued by Pakistan **Table 4.14**

amount in million US$, rate in percent

Tenor	Amount	Rate
FY21		
5-year	1,000	6.0
10-year	1,000	7.38
30-year	500	8.88
FY22		
5-year	300	5.87
10-year	400	7.12
30-year	300	8.45

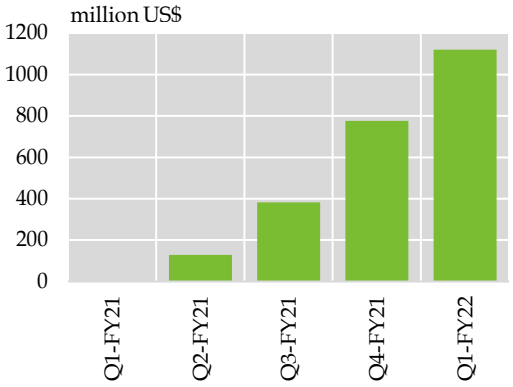
Source: Ministry of Finance

rates, and scheduled repayment of US$ 1.0 billion against a maturing Sukuk bond in October 2021, the timing of issuance was appropriate. (**Table 4.14**)

Inflows into Naya Pakistan Certificates (NPCs) continued

Naya Pakistan Certificates (NPCs) attracted US$ 0.3 billion inflows during the period

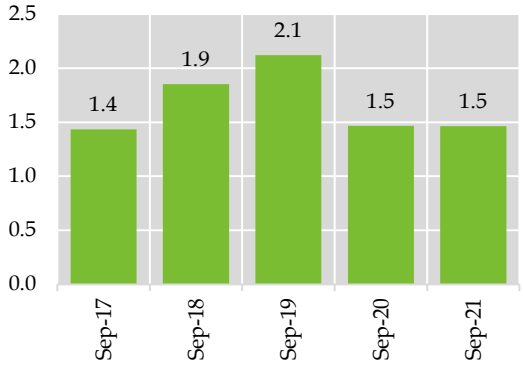
Cumulative Inflows - Naya Pakistan Certificates by non-residents **Figure 4.24**



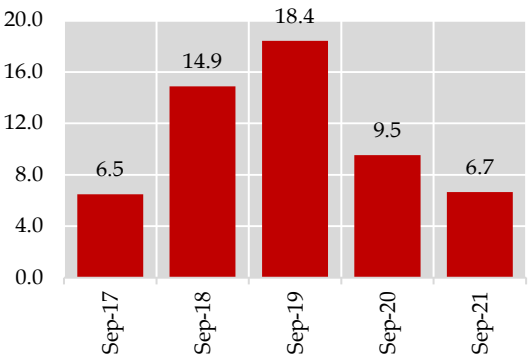
Source: State Bank of Pakistan

[35] This amount excludes inflows from the IMF, Pakistan Banao Certificates, Naya Pakistan Certificates, and investment from non-residents into government securities.

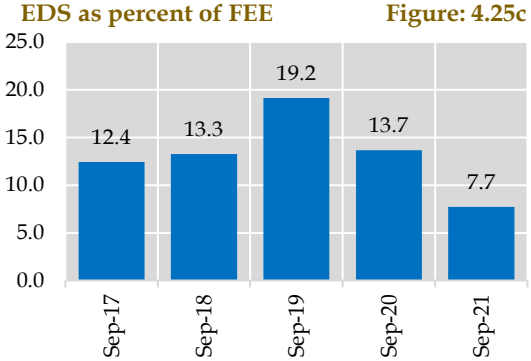
ST Debt as percent of Total Debt **Figure: 4.25a**



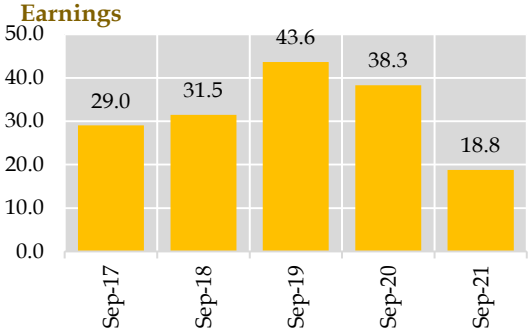
ST debt as percent of SBP Reserves **Figure: 4.25b**



EDS as percent of FEE **Figure: 4.25c**



EDS as percent of Export Earnings **Figure: 4.25d**



* EDS external debt servicing; FEE foreign exchange earnings

* EDS external debt servicing;

Source: State Bank of Pakistan

under review.[36] With this additional investment, the stock of NPCs in public debt reached US$ 1.1 billion by end- September 2021 (**Figure 4.24**). These inflows have not only provided support to the official FX reserves, but also improved the maturity profile of external debt. On the other hand, there were net outflows of US$ 100 million in foreign investment from local government securities (both short term and long term) during the quarter.

External debt sustainability indicators improved during Q1-FY22

Significant increase in the foreign exchange earnings and the continued build-up of FX reserves improved the solvency and liquidity position of external debt during the quarter. The deferred repayments under the DSSI

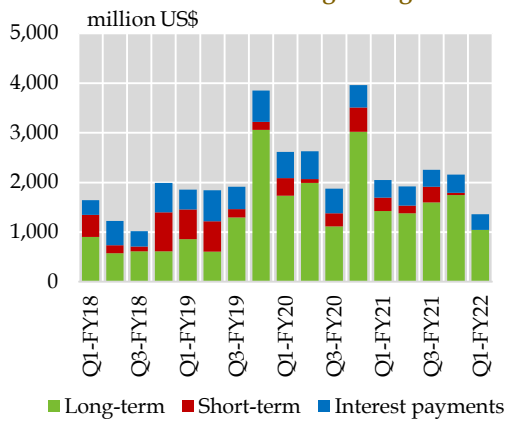
[36] This number indicates investment by non-residents only. Investment by residents are recorded in the category of domestic debt, as mentioned above.

provided further respite.[37] Specifically, with the increase in FX reserves, the claims of short-term (ST) public external debt over SBP reserves declined from 9.5 percent to 6.7 percent. Similarly, the debt repaying capacity of the government strengthened, as evident from the ratio of external debt servicing-to-export earnings (**Figure 4.25**).[38]

Public external debt servicing

Public external debt servicing (excluding liabilities) slowed down to US$ 1.4 billion during Q1-FY22 from US$ 2.0 billion during Q1-FY21[39] (**Figure 4.26**). This slowdown emanated from the debt relief provided under the DSSI and lower global benchmark interest rates (LIBOR) during the quarter. The country secured debt relief of US$ 0.6 billion (US$ 0.4 billion principal and US$ 0.2 billion interest payments) under the DSSI during the first quarter. This relief helped contain the volume of debt servicing. The country had benefitted from the DSSI in Q1-FY21 as well, however the volume of relief

Public External Debt Servicing **Figure 4.26**



Source: State Bank of Pakistan

was lower (US$ 0.2 billion principal and 0.1 billion interest payments).

Similarly, as most of the commercial loans are benchmarked with LIBOR, a reduction in LIBOR also contained external debt servicing during the period. On average, 3M-LIBOR stood around 0.25 percent during Q1-FY21, which declined to 0.13 percent on average during Q2-FY22.

[37] Even after excluding the impact of DSSI, the ratio of EDS/FX earnings stand at 11.1 percent as of end September 2021 compared to 15.7 percent as of end September 2020.
[38] The ratio of EDS/exports earnings improved to its lowest level since Q4-FY11. During Q4-FY11, highest volume of exports earnings in a particular quarter was recorded, which led to improvement of this ratio. In Q1-FY22, the second highest quarterly export earnings along with a decline in external debt servicing led to improvement.
[39] This includes principal component both long term and short term plus interest payments made on public debt only

5 External Sector

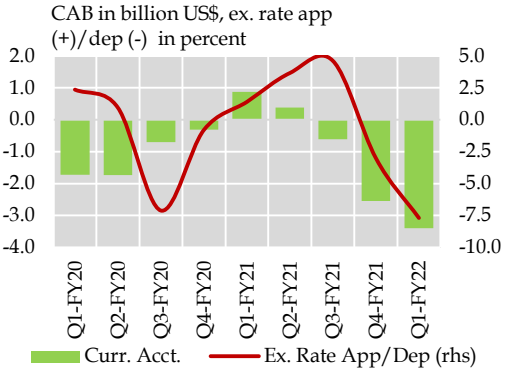
The substantial increase in global commodity prices strained Pakistan's external sector position during Jul-Sep 2021, by pushing goods import payments to an all-time quarterly high of US$ 17.5 billion. Demand-side pressures emanating from strong industrial output added onto the import burden. Exports, especially of textiles, also benefitted from the higher cotton prices; however, the rise in export earnings was outstripped by the higher import payments. Resultantly, the merchandize trade deficit widened to its highest quarterly level on record. This imbalance was partially offset by workers' remittances, which continued on their upward trajectory and crossed US$ 8 billion for the first time in a quarter. Nevertheless, the current account deficit rose to US$ 3.4 billion during the period. The resulting payments gap reflected in the market-determined exchange rate, which depreciated 7.7 percent during the quarter. Nonetheless, the availability of considerable external financing, including under the additional SDR allocation and tap bond issuance, resulted in the SBP's FX reserves rising to US$ 19.3 billion by end-September 2021.

5.1 External Sector Developments

The surge in global commodity prices proved challenging for Pakistan's external sector during the first quarter of FY22. The higher prices significantly added to the country's import burden, which was already elevated in the wake of the policy-induced uptick in demand in some import-dependent sectors (especially automobiles and construction); capex imports; and the need to import Covid-19 vaccines. The resultant payment pressures – which could not be completely offset by the rising receipts under both exports and workers' remittances – manifested in the interbank FX market, where the PKR depreciated 7.7 percent against the US Dollar during the quarter (**Figure 5.1**). Nonetheless, the country's external buffers remained intact, as SBP's FX reserves rose by US$ 2.0 billion to US$ 19.3 billion by end-September 2021 (**Table 5.1**).

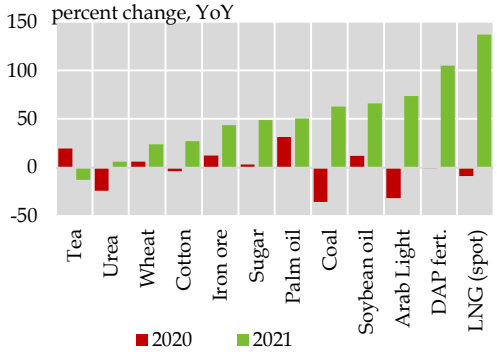
The broad and significant spike in international commodity prices (**Figure 5.2**), along with the unprecedented uptick in global shipping and logistics costs, is having spillover effects across both developed and developing economies. First, the resultant uptick in CPI inflation is leading to central banks reevaluating their accommodative post-Covid policy stances, and market participants to price in future rate hikes into

Curr. Acct. Balance & Change in PKR-USD Ex. Rate **Figure 5.1**



Source: State Bank of Pakistan

Growth in Major Global Commodity Prices during Jul-Sep **Figure 5.2**



Source: World Bank & Bloomberg

Pakistan's Balance of Payments during Jul-Sep **Table 5.1**
billion US Dollars

	FY20	FY21	FY22	Change in FY22
Current account balance^	-1.7	0.9	-3.4	-4.3
Trade balance	-5.3	-5.3	-10.2	-4.9
Exports	6.0	5.4	7.2	1.9
Imports	11.3	10.6	17.5	6.8
Energy	2.9	2.1	4.0	1.9
Non-energy	8.4	8.6	13.5	4.9
Services balance	-1.2	-0.5	-0.8	-0.2
Primary income balance	-1.4	-1.5	-1.0	0.5
Secondary income balance	6.1	8.2	8.5	0.3
Workers' remittances	5.5	7.1	8.0	0.9
Capital account balance	0.1	0.1	0.1	0.0
Financial account balance*^	-2.5	0.6	-5.9	6.5
FDI into Pakistan	0.5	0.5	0.4	-0.1
FPI into Pakistan	0.3	-0.1	0.9	1.0
o/w Eurobonds/Sukuk	-	-	1.0	1.0
FX Loans & Liabilities (net)*	1.0	-0.2	4.3	4.5
o/w SDR allocation	-	-	2.8	2.8
SBP's FX reserves (end-period)**	7.9	12.2	19.3	2.0
PKR app(+)/dep(-) in percent**	2.4	1.4	-7.7	-

^Negative change shows worsening & vice versa *Including below-the-line IMF repayments **Change during quarter
Note: negative sign with financial account balance means FX inflow into Pakistan and vice versa
Source: State Bank of Pakistan

current bond yields.[1] Second, for multiple commodity-importing developing economies, the sharply rising commodity prices and shipping costs are generally worsening their trade balances and subsequently leading to currency depreciations (**Section 5.4**).

In Pakistan's case, the impact of the commodity price surge was much more pronounced on imports than on exports, and contributed to the trade deficit rising to a quarterly record high of US$ 10.2 billion during Jul-Sep 2021. That said, some demand-side pressures were also evident. In the midst of the continued accommodative policy stance, strong industrial activity translated into higher demand for imported inputs.

Here, it is worth noting that the rise in global prices also benefitted Pakistan's goods exports, especially high value-added items, which crossed the US$ 7 billion-mark during the quarter. However, the magnitude of this benefit was capped by the country's limited export base. With the current account in deficit, the substantially higher financial flows during the quarter played a crucial role in consolidating the official FX reserves position. The earlier decision in March-April

[1] For instance, the yield on the benchmark 10-year US Treasury bonds averaged 1.3 percent during Jul-Sep 2021, almost double the average of 0.7 percent in the same period last year. Meanwhile, the US Dollar Index appreciated 1.9 percent during the quarter, whereas it had depreciated 3.6 percent in the same period last year (source: US Federal Reserve and Bloomberg).

2021 to opt for a Medium-Term Note Program when issuing sovereign debt also proved helpful, as the country was able to raise a further US$ 1.0 billion via tap bond issuance from foreign investors in July 2021.[2] The continued inflows from mostly non-resident Pakistanis into the Naya Pakistan Certificates via the Roshan Digital Accounts, also provided an important source of official external financing during the period.[3]

While the financial inflows were important in stabilizing the reserves position, it is important for the country to generate non-debt creating FX earnings to ensure the sustainability of the external account. In this regard, some encouraging developments include the continued uptick in informational and communications technology (ICT) exports, as well as the foreign direct investment inflows into technology start-ups in Pakistan.

5.2 Current Account

The current account recorded a deficit of US$ 3.4 billion during Jul-Sep 2021, against a surplus of US$ 0.9 billion in the same period last year. The major reason for the widening current account gap is the 93.7 percent uptick in the merchandize trade deficit, which reached US$ 10.2 billion during the quarter. While goods exports recorded broad-based growth, the sharper uptick in import payments resulted in a significantly higher merchandize trade deficit. The services trade deficit also widened considerably on YoY basis, mainly due to a more than doubling of net freight payments, though the continued growth in ICT exports partially offset some of the higher payment pressures. Meanwhile, a reduction in the primary income deficit and continued increase in workers' remittances partially offset the higher trade deficit.

Workers' remittances maintain their upward trajectory

Workers' remittances rose 12.5 percent to US$ 8.0 billion during Jul-Sep 2021, after increasing 31 percent in the same period last year. Corridor-wise data indicates that inflows from the advanced economies as well as five out of six Gulf Cooperation Council (GCC) countries rose during the quarter (**Table 5.2**).

Multiple factors that have been driving the remittance growth since the Covid-19 outbreak and discussed in the SBP's *State of the Economy Reports* over the past year – such as the adoption of digital channels for funds transfer and the formalization of inflows, incentives in Pakistan for banks and money transfer operators (MTOs) to channelize higher inflows, and fiscal support in the advanced economies – continued to be in play during Jul-Sep 2021, and contributed to the sustained increase in remittances from most of the major corridors.

[2] Under the Medium-Term Note Program, an issuer is able to raise financing from capital market investors from time to time, including at short notice, without undergoing the extensive legal and regulatory processes every time. Instead, the underlying documents are prepared and filed once at the start of the program, and are then only updated in the future when the issuer goes for a tap issuance.
[3] Of the US$ 849 million gross inflows received in RDAs during Jul-Sep 2021, US$ 610 million went into NPCs. From their launch in September 2020, the cumulative inflows into RDAs reached US$ 2.4 billion by end-September 2021, of which US$ 1.6 billion had been invested in NPCs.

Corridor-wise Remittances Received Pakistan during Jul-Sep **Table 5.2**

million US$

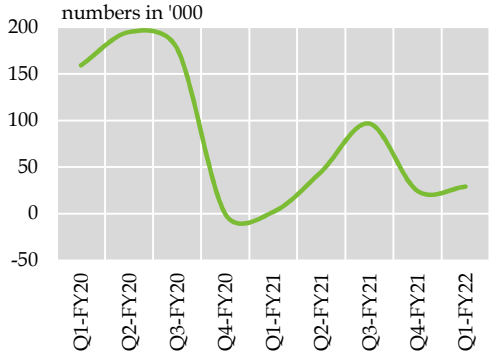
	2020	2021	Abs. Change
US	632.8	836.1	203.3
UK	985.5	1,115.9	130.4
GCC	4,286.9	4,451.5	166.9
KSA	2,080.5	2,025.9	-54.6
UAE	1,420.8	1,544.9	124.1
Other GCC	784.4	880.7	96.2
Germany	93.7	130.8	37.1
France	90.0	130.4	40.4
Italy	137.4	228.7	91.3
Australia	141.2	181.6	40.4
Canada	117.2	162.5	45.3
Others	659.8	797.0	137.2
Total	**7,144.5**	**8,034.4**	**832.3**

Source: State Bank of Pakistan

Furthermore, the employment dynamics for foreign workers in the Middle East are also improving, as air travel restrictions are eased and economic activity picks up. Changes over the past year to the *Kafala* systems in both Saudi Arabia and Qatar would also make it slightly easier for workers to switch jobs, and therefore not tie the workers' employment to one firm's business circumstances.[4]

To some extent, these evolving changes in the labor markets of the GCC are also reflected in the data of Pakistanis who are going to the region for work. After an initial uptick in the number of workers that went to the GCC after some ease in air travel restrictions during October 2020-March 2021, the trend in work-related migration appears to have recovered from the sharp Delta variant-induced drop (**Figure 5.3**),

No. of Pakistanis Going to the GCC for Work **Figure 5.3**



Source: Bureau of Emigration & Overseas Employment

contributing to the healthy outlook for remittances.

Higher freight costs widen the services trade deficit

The services trade deficit widened to US$ 760.1 million in Jul-Sep 2021, up from US$ 533.1 million in the same period last year (**Table 5.3**). Unlike last year, when sizable reductions in the travel and transport services deficit had curtailed the overall services deficit, the trend reversal in these two segments contributed to the higher services deficit this year.

Net freight payments more than doubled to US$ 827.4 million during the quarter. Freight imports during a period partially depend on the magnitude of the goods imports during the same period; the substantial percent rise in goods imports during Jul-Sep 2021 therefore contributed to the higher freight

[4] In Qatar, after the changes to the Kafala system, workers can switch jobs after giving a one-month notice to their current employer; previously, they had to obtain a no objection certificate from their employer to switch jobs. In Saudi Arabia, workers can now switch their jobs after the end of their current contract, though after obtaining the consent of their current employer.

Breakdown of Services Balance during Jul-Sep* **Table 5.3**
million US$

	2020	2021	Change**
Transport	-395.0	-850.0	-455.0
o/w Air passengers	22.7	10.5	-12.2
Freight	-398.0	-827.4	-429.5
Travel	-97.9	-113.0	-15.1
o/w Education exp.	-28.5	-56.7	-28.2
ICT Services	307.1	498.0	190.8
Exports	445.1	635.0	189.9
Imports	137.9	137.0	-0.9
Financial Services	-16.1	-21.0	-4.9
Other Services	-331.3	-274.1	57.2
Services Balance (net)	**-533.1**	**-760.1**	**-227.0**

*Negative balance means deficit and a positive sign means surplus.
**Positive sign shows YoY improvement in services account & vice versa
Source: State Bank of Pakistan

deficit in the quarter as well.[5] Moreover, the global freight costs, including the cost of containers, have spiraled quite substantially since the Covid outbreak, as global supply chains have been stretched due to a myriad of localized and global factors.[6]

Meanwhile, net travel services deficit grew 15.4 percent YoY to US$ 113 million during the quarter. The data breakdown indicates that higher FX payments for educational expenses were the primary drivers of the higher travel imports during the quarter.[7]

Last year during Jul-Sep, based on numerous anecdotes, many students pursuing higher education abroad had either postponed their studies till they could attend in-person classes, or they attended classes virtually and saved on traveling and living expenses. In both these cases, the FX payments for education-related purposes were lower as compared to the year earlier. During Jul-Sep in 2021, the ease in international air travel amidst the vaccine rollout, provided opportunities for students to go abroad for in-person studies. In line with this trend, the education-related FX payments also increased.

Lastly, the country's net exports of information and communications technology (ICT) services continued to rise, growing 62.1 percent YoY to US$ 498.0 million; to put this FX earning into perspective, the country earned a lower US$ 437.1 million from the export of one of its traditional items – rice – during the same period. ICT exports have been rising consistently since the Covid-19 outbreak, as Pakistani firms and freelancers capture the surge in global demand for tech-related services in the wake of remote working and e-learning arrangements. Within ICT, exports increased across almost all segments, including software consultancy, call centers, and telecom services, during the

[5] Freight imports are estimated by the SBP using a freight factor, which is applied to the goods import payments during a month. The higher the goods imports in a period, the higher will be the freight import payments. From July 2015 to June 2018, the freight factor was 3.5; it was reduced to 2.7 during July 2018 to August 2021; and then increased to 3.17 in September 2021. The factor is periodically derived from a survey of various logistics firms in airlines, shipping and related industries.
[6] Global shipping costs, as captured by the Baltic Dry Index, more than doubled during Jul-Sep 2021 on YoY basis (from an average of 1,526 index points last year to 3,727 points). The average cost of a 40 MT shipping container box, as per World Container Index's (WCI) Composite Container freight benchmark, more than tripled in Jul-Sep 2021 on YoY basis, to US$ 9,836 from US$ 2,297 (source: Bloomberg).
[7] On net basis, FX payments for educational expenses rose to US$ 56.7 million during Jul-Sep 2021, from US$ 28.5 million in the same quarter last year. Before the Covid-19 outbreak, in Jul-Sep 2019, these FX payments had amounted to US$ 22.9 million.

period. The government as well as the SBP are actively working to promote this rapidly growing services segment, including via facilitating receipt of export earnings and tax rebates and incentives.

5.3 Financial Account

The net financial flows into the country amounted to US$ 5.9 billion during July to September FY22, in contrast to an outflow of US$ 600 million during FY21; after accounting for below-the-line IMF repayments. The largest inflow was due to the Special Drawing Rights (SDR) allocation by the IMF in August of 2021 (US$ 2.8 billion), followed by the tap issuance of Eurobonds in July 2021 (around US$1.0 billion. Furthermore, the country also received significantly higher external financing from mainly multilateral and commercial sources, as opposed to making net retirements last year. The inflows from these sources more than offset a 4.1 percent reduction in net foreign direct investment during the period.

Sector-wise Net FDI inflow in Jul-Sep **Table 5.4**

million US dollar

	FY21	FY22	Abs.
Food*	4.0	3.1	-0.9
Chemicals	-0.4	-5.5	-5.1
Trade	26.4	10.1	-16.3
Oil & gas**	58.3	47.9	-10.4
Electronics	-2.6	-0.2	2.4
Electrical machinery	36.8	4.5	-32.3
Transport	-6.2	-17.9	-11.7
Power	198.1	131.1	-67
o/w Coal	106.4	59.8	-46.6
Hydel	45.0	25.5	-19.5
ICT	-2.1	88.4	90.5
o/w Telecom	-12.8	24.2	37
IT	10.8	64.2	53.4
Financial firms	98.0	100.5	2.5
Others	-102.2	-96.7	5.5
Total	**457.6**	**439.1**	**-18.5**

*includes food packaging **exploration & refining

Source: State Bank of Pakistan

Foreign direct investment

Net FDI inflows into Pakistan fell by 4 percent to US$ 439.1 million in the first quarter of FY22, from US$ 457.6 million last year **(Table 5.4)**. The decline was relatively broad-based across sectors, though the power sector – which has had the dominant share in net FDI over the past few years – accounted for most of this drop.

FDI into the power sector declined 33.9 percent to US$ 131.1 million. Within power, FDI into both coal and hydropower segments fell during the quarter. Here, two major factors stand out. First, most of the investments into the country's power sector had been arriving under the first phase of CPEC. As most of these projects have been completed and become operational, fresh investments into the sector from China has correspondingly diminished. Second, another possible factor could be the active global policy focus on reducing the usage of coal (including in power generation) over environmental sustainability concerns. This has discouraged investments into coal-fired power projects globally, including possibly in Pakistan as well.[8]

[8] A report from the Center for Research on Energy and Clean Air points out that "In June 2021, the G7 countries announced that they would stop all new financing for overseas coal projects by the end of this year, as well as a 'Clean Green Initiative' to support sustainable development in developing countries at

In contrast to the power sector, FDI into the information communications technology (ICT) sector increased by US$ 90.5 million YoY to US$ 88.4 million, against a marginal net outflow last year. Within ICT, FDI into IT services firms registered a sizable increase, with higher investments coming from China, Germany and the UAE. Within the IT sector, investments came into a tech incubator from Germany; a major telecom services operator with majority ownership stakes in the UAE; and into a Chinese manufacturer of telecom equipment and consumer electronics.

In this regard, it is encouraging to note that Pakistan's digital services firms and tech entrepreneurs, are consistently increasing their exports and are now also benefitting from the sharp increase in global investments flowing into tech start-ups. Especially since the outbreak of Covid-19, foreign investors are looking to invest into Pakistan's communications sector, largely because of the consistently rising telecom connectivity, along with the increased demand for digital services amidst the pandemic.[9] Recent FX regulatory changes in Pakistan are also aimed at facilitating these services-oriented firms and start-ups to scale-up their operations and to increase their global footprint. **Box 5.1** below discusses some recent developments in this regard.

Box 5.1: Start-up Firms in Pakistan –Attracting Foreign Investment [10]

One of the major outcomes of the Covid-19 outbreak and the resultant social distancing and containment measures is the acceleration in the trend of digitization. According to a study, an estimated 70 million *additional* people became digital consumers only in the Southeast Asia region after the beginning of the pandemic.[11] While e-commerce and distant learning platforms were among the major avenues for internet usage, the pandemic also stimulated a drive to digitize a wide range of other services, including financial technology (fintech) and logistics companies. Many of these services attempt to address structural imbalances in developing countries, in areas like financial inclusion, gender disparity in financial access, and efficiency-lags in the retail sector and in logistical connectivity. As such, firms offering digital solutions in these areas have become highly sought-after by global investors, and have managed to raise significant amount of external financing. Investments are flowing into start-ups at

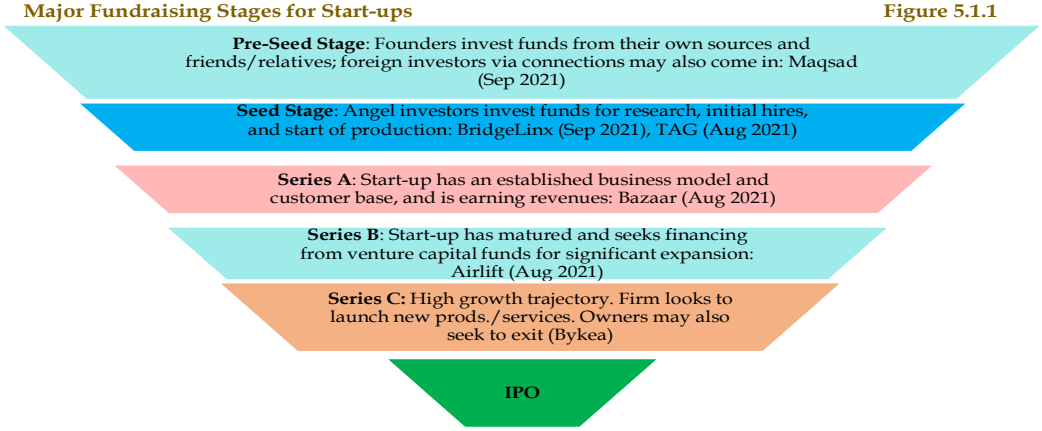
the US Climate Summit in April 2021, [China] re-iterated a commitment to green the BRI. Source: Overseas Coal Briefing; Centre for Research on Energy and Clean Air (2021).

[9] During Q1-FY22, broadband penetration in Pakistan increased from 46.9 percent to 49.1 percent (source: Pakistan Telecommunications Authority).

[10] This Box utilizes data from the Deal Flow Tracker of Invest2Innovate (i2i), a firm deeply involved in promoting start-ups in Pakistan. The i2i data and classifications are as of November 15, 2021. The data essentially captures self-announced investments by the firms. As such, the data does not necessarily imply the actual amount of foreign investment realized in Pakistan during any given time period. This analysis excludes deals for which any of the four major parameters – firm's name, sector of activity, amount of the announced investment, and name of the foreign investor (fund or individual stakeholder) – were not available in the Deal Flow Tracker database as of November 15, 2021. Lastly, given this chapter's focus on the External Sector, the analysis excludes deals involving local venture capital firms and local other investors.

[11] The report defines 'digital consumer' as someone who has purchased a product online at least once over the past 12 months. Source: Southeast Asia, the Home for Digital Transformation (2021). Facebook and Bain & Company.

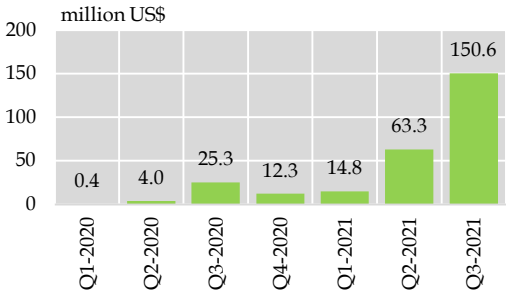
Major Fundraising Stages for Start-ups **Figure 5.1.1**



varying stages of development, including those at the initial stages, to those with established customer bases and revenues, as displayed in **Figure 5.1.1**.

Globally, a major reason for the higher investments into alternative assets, including start-ups, is the substantial monetary easing in the advanced economies, which has led to liquid global capital markets. The venture capital arms of large asset management firms are pouring investments into the technology sector, whereas specialized and tech-focused venture capital firms are now diversifying into new markets and across different sectors.[12] In the finance space, large commercial banks are buying fintech firms outright, instead of pursuing large-scale in-house efforts to come up with digital products.

Announced Foreign Investments in Pakistani Start-ups* **Figure 5.1.2**



*Data extracted on November 15, 2021. Investment announcements by firms.
Source: Invest2Innovate (for data)

It is encouraging to note that many Pakistani start-ups have managed to capitalize on this strong appetite of global venture capital and angel investment funds and raised financing from foreign as well as local investors since the Covid-19 outbreak. Based on analysis of data compiled by Invest2Innovate (i2i), a total of eight Pakistani start-ups announced having raised funds from foreign investors during Jul-Sep 2021, worth over US$ 150 million (**Figure 5.1.2**).[13] Furthermore, these investments have been growing consistently since the Covid-19 outbreak in Q2-2020. Meanwhile, the sectoral breakdown shows that the

[12] According to data from PitchBook, investments by non-traditional venture funds (such as hedge, mutual and pension funds, and sovereign wealth funds) into American start-ups amounted to US$ 100 billion during the first six months of 2021 (Jan-Jun). That compares with *full-year* investment of US$ 103 billion by these funds into start-ups in 2020, and the previous 5-year (2015-19) average of US$ 57.8 billion.
[13] As mentioned earlier also, data for only foreign investments into start-ups are considered for this analysis, including in **Figure 5.1.2** and **Figure 5.1.3**.

transport sector accounted for the largest share of the announced investments (**Figure 5.1.3**), though this was due to a large-value transaction for one firm; in terms of number of firms attracting foreign investment, the fintech segment dominated, followed by e-commerce.
Multiple factors have played a role in increasing the announced investments into start-ups in Pakistan.

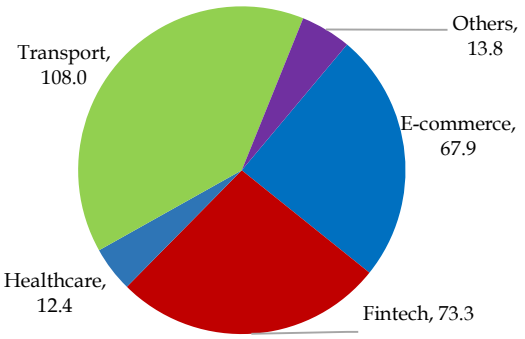
Pakistan-based start-ups are tackling shortcomings across retail, transport & logistics segments: Start-ups that have so far received the greatest amount of foreign interest in Pakistan are mainly offering digital solutions to bring efficiency to the retail shopping experience. Firms in this space can be broadly categorized into two groups: those that offer grocery delivery services directly to consumers; and others that offer digital platforms to facilitate business-to-business (B2B) connections and transactions. The second group appears to have more firms involved. These firms offer a wide range of services, including: connecting small retailers with multiple suppliers (including SMEs) on one platform (instead of the traditional model of arranging inventory from different suppliers); providing warehousing facilities; and providing digital book- and record-keeping products. Some of these firms also arrange delivery services for the products ordered via their platforms.

Closely linked with this space is the transport and logistics segment. Recent investments have been announced by a firm offering freight services that connect manufacturing and industrial firms – such as FMCGs, cement and textile firms – with fleets of truck operators.

Fintech firms are in the spotlight: As indicated in **Figure 5.1.3**, fintech firms have attracted the second-highest interest from foreign investors. These firms are at the early stages of plugging sizable gaps across the country's banking landscape.[14] Multiple start-ups have begun to offer short-term advance (loan) services to customers via digital platforms, in the form of buy now-pay later and early wage access.

Foreign Inv. Announced by Pakistani Start-ups from Q1-2020 to Q3-2021 **Figure 5.1.3**

values in million US$



Source: Invest2Innovate (for data)

Meanwhile, a couple of fintech firms that have attracted foreign interest are offering electronic money (e-money) wallet services to consumers as well as businesses, after obtaining the Electronic Money Institution (EMI) license from the SBP. Other similar firms that have also announced successful fundraising rounds from foreign investors are at the initial development stages, having obtained either in-principal approval or approval to commence pilot projects. These firms have developed digital platforms from where consumers can receive and transfer money and make a wide range of payments. Some of these fintech firms are also offering credit to consumers, including via early wage access facilities.

***Regulatory changes to facilitate local IT firms, including start-ups and freelancers*:** With a view to diversify the sources of the country's foreign exchange earnings and to facilitate the ongoing digitization

[14] Though financial inclusion in Pakistan has improved, the country still lags regional economies. As of 2017, the percentage of adult population (over 15 years of age) in Pakistan with a bank account was 21.3 percent, significantly lower than the average for low- and middle-income countries (63.0 percent) and South Asia (69.6 percent). Source: Global Financial Inclusion database, World Bank.

drive, the SBP has made multiple changes to foreign exchange regulations. Subject to applicable restrictions, the major regulatory changes allow local firms to:[15]

- Establish their footprint outside the country, by setting up holding companies abroad;
- Remit FX out of Pakistan for necessary operational expenses and initial capital requirements; and
- Remit FX out of Pakistan to undertake equity stake in a foreign company, in order to expand its own business.

Another major regulatory change relates to making it easier for foreign funds to take an equity stake in a start-up. Specifically, in May 2021, the SBP allowed Pakistani start-ups to raise funds from foreign investors via convertible debt instruments, which could be later converted into an equity stake.[16] Such transactions are common across the world, as venture funds initially lend money to a start-up and then convert the loan to an equity stake, in case the start-up matures and is able to generate steady revenues. The regulatory change would help Pakistan-based start-ups to attract investment from foreign investors.

Furthermore, the SBP streamlined regulations for Pakistani businesses so they could acquire the services of major global tech firms, in order to provide seamless services to their clients. The central bank has also made it easier for freelancers to receive payments from abroad via money transfer operators, such as Western Union, MoneyGram and Payoneer.[17]

Foreign Portfolio Investment

Net FPI inflows into Pakistan amounted to US$ 879 million in Jul-Sep 2021, against a net outflow of US$ 145 million last year. The entire inflows this year were received into debt securities, whereas an outflow was recorded from equity securities.

Pakistan raised US$ 1 billion from Eurobonds via a tap issuance under the Global Medium-Term Note Program; the program facilitates debt issuers in accessing international capital markets on relatively short notice. This is because the underlying legal and regulatory documents have to be prepared only once, and these are simply updated ahead of a new debt issuance. In April 2021, the country had realized US$ 2.5 billion in proceeds from Eurobonds that were issued under this note program. In the July 2021 tap issuance, Pakistan raised funds from 5-, 10- and 30-year bonds, while benefitting from the drop in benchmark US Treasury yields relative to March 2021 (**Table 5.5**).

Eurobonds Issued by Pakistan in 2021 **Table 5.5**

Tenor	Coupon (%)	Benchmark (%)*	Amount Raised (bn. US$)
March 2021			
5-year	6.0	0.8	1.0
10-year	7.4	1.6	1.0
30-year	8.0	2.3	0.5
July 2021			
5-year	5.9	0.8	0.3
10-year	7.1	1.3	0.4
30-year	8.5	1.9	0.3

*Average yield on US Treasury bond of same tenor

Source: Economic Affairs Division, Ministry of Finance, US Federal Reserve

[15] The changes were made via FE Circular No. 1 of 2021, in February 2021. The circular also provides the detailed criteria and transaction limits for firms that can utilize these regulatory changes.
[16] The eligibility criteria for start-ups that can issue such convertible limits, along with details on the limits on tenor and cost of financing, are given in FE Circular No. 4 of 2021.
[17] In February 2020 via EPD Circular Letter No. 3 of 2020, the SBP had increased the monthly per-person limit for payments that can be received by Pakistani freelancers via MTOs from US$ 1,500 to US$ 25,000.

In contrast to debt securities, FPI outflows from equity securities continued, amounting to US$ 100 million in the quarter. A couple of factors explain this ongoing trend. First, expectations of monetary policy normalization in the advanced economies, especially in the US, are triggering capital outflows from some emerging markets that are perceived to be relatively riskier, such as Pakistan.[18] Second, equity markets of some EMs, along with a few advanced economies, performed well during Jul-Sep 2021, thereby providing more attractive investment opportunities for global investors than the Pakistan Stock Exchange (**Figure 5.4**).

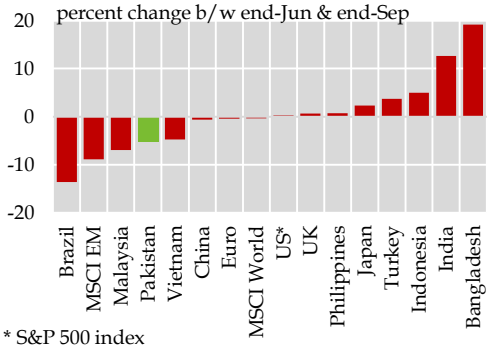
In fact, the Pakistan Stock Exchange had been under pressure during the period, amidst uncertainty related to the resumption of the IMF program and the emerging pressures on the current account and inflation. Furthermore, data from the National Clearing Company of Pakistan indicates that the sell-off from Pakistani equities was noted across multiple major sectors, such as banks, cement and fertilizer (**Figure 5.5**). However, listed ICT firms appeared to attract significant interest from foreign investors during the period.

Net incurrence of liabilities

The net inflow of external loans and liabilities into Pakistan amounted to US$ 4.3 billion in during the first quarter of FY22, net retirements of US$ 0.02 billion in the same period last year; after accounting for below-the-line IMF repayments. During the quarter, significant inflows were realized from multilateral and commercial sources (**Figure 5.6**).

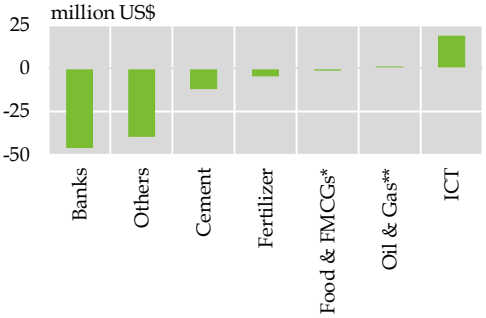
Within the borrowings from multilaterals such as the Asian Development Bank and the World Bank, loans were received to purchase Covid-19 vaccines, and for power and infrastructure development projects. Meanwhile, within bilateral financing, loans from China were mainly for funding an ongoing road infrastructure project. The

Equity Market Performance During July-Sep 2021 **Figure 5.4**



* S&P 500 index
Source: Bloomberg

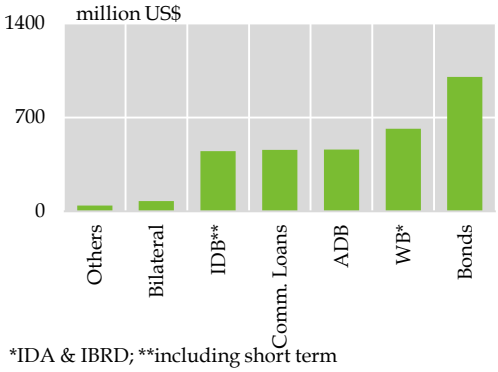
Sectoral Breakdown of Foreign Investors' Buying (+)/Selling (-) Activities in PSX, Jul-Sep 2021 **Figure 5.5**



*incl. personal care items; **OMCs & exploration firms
Source: National Clearing Company of Pakistan Ltd.

[18] For instance, the 5-year credit default swap (CDS) rate for Pakistan averaged 423.8 basis points during Q1-FY22, which was higher than that of Turkey (394.7 bps), China (39.2 bps) and India (80.2 bps) in the same period (source: Bloomberg).

Gross Loan Disbursement (Q1) **Figure 5.6**



*IDA & IBRD; **including short term
Source: Economic Affairs Division, Ministry of Finance

country also received commercial loans worth US$ 457.5 million (in gross terms) during Q1-FY22, against US$ 335 million in the same quarter last year.

5.4 Reserves and Exchange Rate

In line with the higher financial flows received during the period, the country's overall forex reserves rose US$ 1.6 billion during Jul-Sep 2021 and reached US$ 26.0 billion by end-September. The data breakdown shows that the SBP's FX reserves had risen by US$ 2.0 billion, whereas commercial banks' reserves declined US$ 0.4 billion during the quarter.

The SBP's reserves increased mainly due to cumulative inflows of US$ 3.8 billion from the tap issuance of the Eurobonds and the additional SDR allocations from the IMF. These inflows, coupled with the available multilateral and commercial financing, allowed the SBP to easily make the debt repayments falling due in the period.

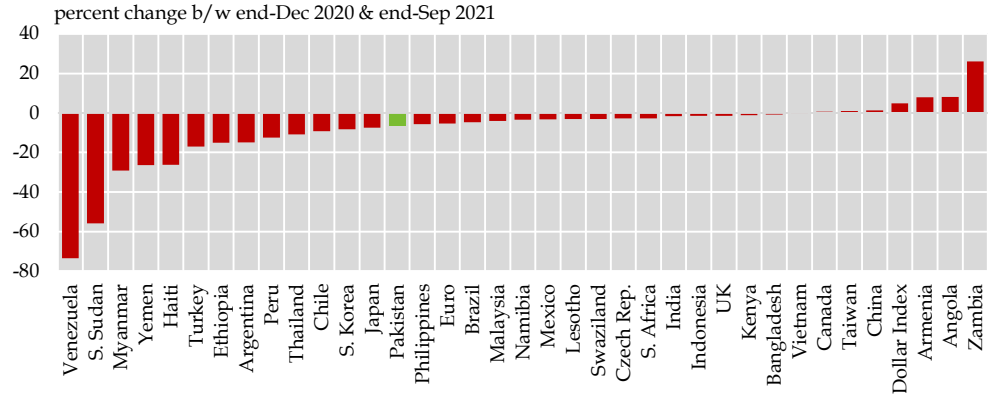
On the other hand, the commercial banks' reserves dropped slightly during the quarter. This drop mainly reflected the higher import financing extended by banks from the foreign currency (FE-25) deposits held with them during the period,[19] whereas the level of deposits stayed mostly unchanged between end-June and end-September 2021.[20]

Meanwhile, as discussed earlier, the PKR came under pressure in the interbank market during the quarter, in the wake of the widening current account gap. At the same time, the US Dollar itself has been appreciating against the currencies of multiple emerging market and advanced economies. Expectations of a scaling back of the monetary stimulus by the Federal Reserve in the wake of higher inflation outcomes has contributed to the US Dollar's strengthening against other currencies. When looked over a slightly longer horizon, specifically from the start of CY-21 till end-September, the PKR's depreciation was relatively moderate as compared to other EMs (**Figure 5.7a**). However, it is also worth noting that the average PKR exchange rate during Jan-Sep 2021 had appreciated 1.9 percent against the US Dollar over the average parity in Jan-Sep 2020 (**Figure 5.7b**).

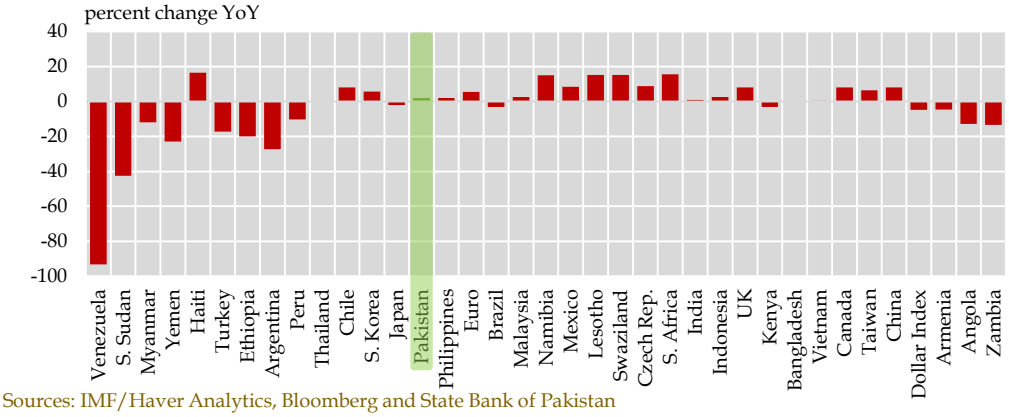
In real effective exchange rate (REER) terms, the emerging markets presented a slightly

[19] Commercial banks' FX reserves comprise the foreign currency deposits (FE-25 deposits) held with them, excluding any FX-denominated trade financing extended by them to exporters and/or importers.
[20] Between end-June and end-September 2021, banks' liquid FX reserves declined by US$ 369 million. The breakdown shows that FE-25 deposits dropped by US$ 98 million, whereas the trade financing extended by banks rose by US$ 271 million during the period.

Change in Exchange Rates Against US Dollar during Jan-Sep 2021 **Figure 5.7a**

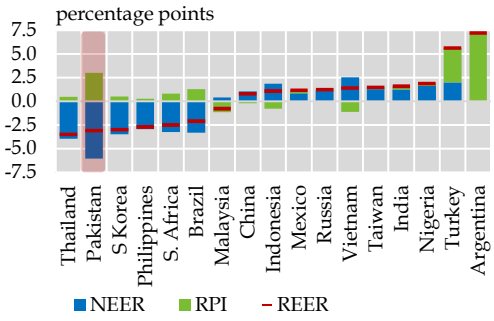


Change in Average Exchange Rates Against US Dollar during Jan-Sep 2021 **Figure 5.7b**



Sources: IMF/Haver Analytics, Bloomberg and State Bank of Pakistan

Breakdown of Change in REER of Major EMs during Jul-Sep 2021* **Figure 5.8**



*JP Morgan Effective Ex. Rate Indices (CPI-deflated)
Source: Haver Analytics

mixed picture, with currencies of some economies appreciating and others depreciating during Jul-Sep 2021 (**Figure 5.8**). Most of the EMs, including Pakistan, witnessed upward price pressures, as captured by the change in the Relative Price Index (RPI) during the period. The nominal effective exchange rate (NEER), however, appeared to play a dominant role in determining the REER movements. In Pakistan's case also, the depreciation in the NEER offset the increasing relative price pressures, and led to a depreciation in the REER during the quarter.

5.5 Trade Account[21]

In Q1-FY22, Pakistan's trade deficit rose by 102.8 percent YoY to US$ 11.8 billion. In the same period last year, the trade gap had reduced to US$ 5.8 billion amid pandemic-related slowdown in trade (**Figure 5.9**). The second lowest trade deficit, since Q3-FY16, achieved in Q1-FY21 was a result of contained growth in imports (0.8 percent) and marginal decline in exports (-0.7 percent) on YoY basis.

In contrast to last year, exports in Q1-FY22 increased by a significant 27.9 percent YoY to US$ 6.9 billion, with both textile and non-textile items registering an increase. The positive price effect amid elevated cotton prices, reinforced the effect of higher volumes in textiles. Moreover, the governments' facilitative policies, to support the manufacturers and exporters, after the pandemic shock also contributed to the overall exports performance in the quarter.

Despite a reasonable improvement in exports, a sharp increase in imports, on the other hand, contributed to the widening of the trade deficit in Q1-FY22. Imports increased by 66.1 percent YoY. Both energy products, and agricultural and chemical product groups (including medicinal products) made a significant contribution to the Q1-FY22 import growth. Besides, imports of machinery, food and transport groups remained at elevated levels.

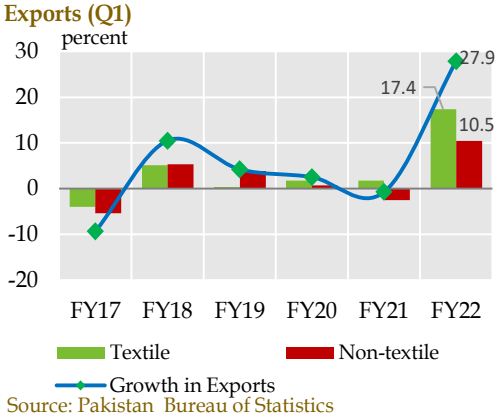
Exports

As per Customs data, exports increased by 27.9 percent YoY to US$ 7.0 billion in Q1-FY22, as opposed to last year when they had slightly declined by 0.7 percent. Historically second-highest in any quarter, these exports were also 31 percent higher than the pre-Covid average (FY18 to FY20) of US$ 5.3 billion.

Growth in exports was broad-based in Q1-FY22, as it was driven from both textile and non-textile products. While growth in textile exports accelerated from 2.9 percent last year to 27.4 percent this year, non-textile exports also made significant contributions towards overall growth vis-a-vis last few comparable quarters (**Figure 5.10**).

Within the textile group, the prominent products included: apparel, home textiles and other textile made-ups, cotton yarn and fabrics, and synthetic textiles. Whereas, in the non-textile category, the major products were: rice; fruits and vegetables; chemicals and pharmaceuticals; oilseeds and nuts.

Breakdown of Growth in Total Exports (Q1) **Figure 5.10**



Source: Pakistan Bureau of Statistics

[21] 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.

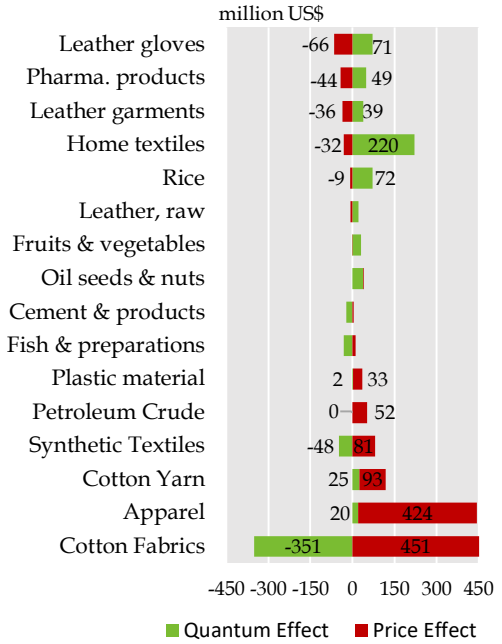
On the aggregate level, this performance in Q1-FY22 came on the back of elevated unit values for some major products in the export basket, especially from the textile sector; however, quantums were also over and above last year for many products (**Figure 5.11**).

For textiles, higher YoY unit values could be attributed to higher input costs, particularly of cotton in the domestic and international market, as well as to the partial knock-on impact of soaring international freight charges on raw material imports. In case of petroleum exports, higher unit values are explained by higher international crude prices. Elevated crude prices also translated into higher unit values fetched by chemicals and plastic materials.

Higher export quantums were realized as a result of capacity expansion in the manufacturing industry, including in textile, chemicals and pharmaceutical industries, partly supported by the SBP's concessionary refinance facilities for fixed investment—Temporary Economic Refinance Scheme (TERF) and Long-Term Financing Facility (LTFF).[22] Whereas, on the demand side, textile exporters were able to secure additional orders from the traditional buyers.

During the quarter, the government also continued the provision of power and gas subsidies to the top five export-oriented sectors, which are designed to make them regionally competitive. Power tariff was set at 9 cents per kWh and gas at US$ 6.5 per mmBtu. This policy contributed to higher quantum exports of many products, with some registering better performances even compared to pre-Covid years (first quarters of FY19 and FY20) (**Figure 5.12**).

Breadkdown of YoY Change in Export Values of Major Products in Q1-FY22 **Figure 5.11**

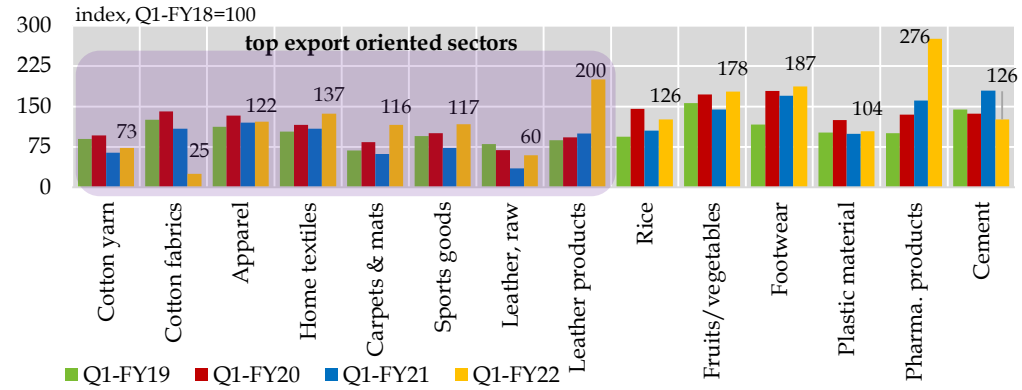


Source: Pakistan Bureau of Statistics

Overall, exporters' liquidity position also improved on the back of higher sales tax refunds. Overall, these refunds amounted to Rs 51.8 billion during Q1-FY22, rising 17.8 percent over last year. It may be noted that in FY21, total sales tax rebates had been Rs 208 billion, which was Rs 116 billion more than the previous year. As a result, exporters' liquidity position had improved, and they were well-placed to fulfill foreign orders.

[22] Total disbursements under TERF, as of end-June 2021, amounted to Rs 139 billion, against a total Rs 435 billion approved financing. The textile sector, which received Rs 69.5 billion in disbursements, was a major beneficiary of this facility. Source: SBP's Annual Report for FY21.

Quantum Exports in Top Five Export Oriented Sectors and Others **Figure 5.12**



Source: Pakistan Bureau of Statistics

Destination-wise, Pakistan's major exports, such as apparel and rice, performed better in traditional markets of the US, EU-27, UK, China, and Africa. However, exports to Afghanistan deteriorated in view of muted cross-border trade due to political uncertainty there.[23] That said, better performance elsewhere supplanted this fall.

Textile Exports

Textile exports grew by 27.4 percent growth to US$ 4.4 billion in Q1-FY22, sharply accelerating from 2.9 percent growth same period last year. Within textiles, exports of knitwear, ready-made garments, bed wear, towels, cotton fabric and yarn, synthetic textiles, and textile made-ups (like dusting or cleaning cloth) performed quite well.

Apparel (knitwear and readymade garments) and home textiles (bed wear and towels) are regarded as high value added products; whereas, cotton fabric and cotton yarn as major low value added products.

In Q1-FY22, apparel registered growth of 28.4 percent to US$ 2.0 billion. Whereas, home textiles exports posted a 22 percent growth to US$ 1.0 billion, which was an acceleration from last year's 9.5 percent growth. Intermediary products, cotton fabric and yarn, together contributed US$ 846 million towards overall exports, which was US$ 218 million over and above last year.

Price effect was positive across apparel, home textiles (towels only) and intermediary products (both cotton yarn and fabric). As far as quantums are concerned, apparel and home textiles shipments increased with intermediary products (cotton fabric) partly offsetting their impact.

Higher unit values bear significantly on textile exports

Higher unit values of Pakistan's major textile products can be traced to the cotton prices trending higher from a year ago in the domestic as well as international market

[23] Pakistan's cumulative exports to the US, UK, EU-27, and China jumped by US$ 1.0 billion to US$ 4.5 billion in Q1-FY22; whereas, exports to Afghanistan declined from US$ 255 million last year to US$ 151 million this year.

(**Figures 13 and 14**). Some competitor countries like Bangladesh have also seen similar surge in export unit values.[24]

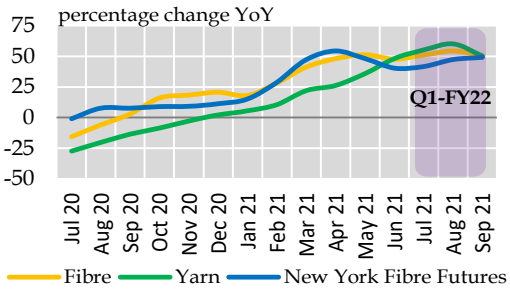
In order to fulfill foreign orders and faced with domestic shortage of cotton supplies as the inventories ran out ahead of the fresh harvest, Pakistani textile firms' import demand increased at a time when international prices were also trending higher. Pakistan's raw cotton imports jumped by 65 percent to US$ 343 million in the quarter, keeping the rising momentum from FY21.[25]

One major reason behind the international price run-up has been strong demand from China, as the country moved to source its cotton supplies from abroad following the US' import ban on Chinese textile products made from Xinjiang cotton in December 2020.[26]

Second, as the global textile industry is making strong post-pandemic recovery, demand for cotton is not only rising, it is outpacing the supplies. This is leading to dwindling global stocks and elevated prices.[27] Besides China, cotton is witnessing vigorous demand from Pakistan, Bangladesh and Vietnam as well.

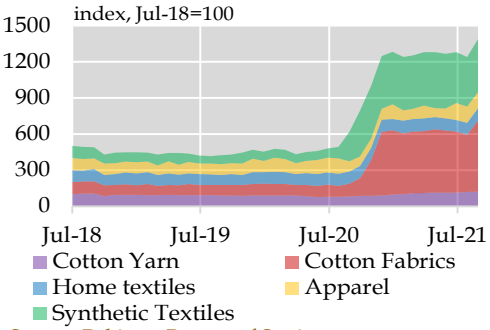
Third, global logistical crisis and soaring freight cost further raised the landed cost of imported cotton in Pakistan, which is eventually being factored into export unit

Cotton Fibre and Yarn Prices Trending High in Pakistan and Internationally* **Figure 5.13**



*cotton fibre & yarn prices in US cts/lb & US$/kilo
Source: Emerging Textiles

Rising Export Unit Values of Pakistan's Major Textile Products, Jul-18 to Sep-21 **Figure 5.14**



Source: Pakistan Bureau of Statists

[24] "The jump in [Bangladesh's] exports in value terms is also due to the rise in prices over a surge in material costs. Cotton fiber and yarn prices have tremendously increased in the past month. Energy prices are also soaring at the same time in Bangladesh like elsewhere." Source: Bangladesh Apparel Exports Quarterly Report, dated November 5, 2021, Emerging Textiles.

[25] Pakistan imported US$ 153 million worth of cotton from the US in Q1-FY22, which was US$ 67 million more than last year.

[26] Source: US Customs and Border Protection press release dated December 2, 2021 (www.cbp.gov/newsroom/national-media-release/cbp-issues-detention-order-cotton-products-made-xinjiang-production).

[27] Source: World Cotton Lint Market Analysis, Forecast, Size, Trends and Insights Update: COVID-19 Impact, Indexbox

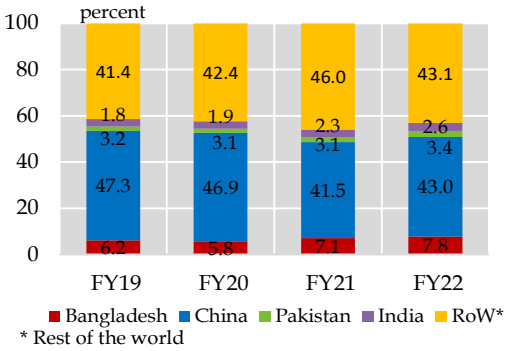
prices of finished goods, like apparel and home textiles.[28, 29]

Quantums also support higher textile exports values

Apparel shipments surpassed last year's level, which can be traced to significantly higher import volumes of the US, EU-27 and UK. Over the last few years, Pakistan's shares in the US and the EU-27 have been inching up, whereas China's share in these markets has been shrinking (**Figures 15a and 15b**).[30] Moreover, the momentum of higher orders received during FY21 has also carried into this year.

At the disaggregate level, shipments of readymade garments, after dipping heavily in Q1-FY21, recovered well in Q1-FY22, pushing up overall apparel volumes. A major factor was the demand for formal wear bouncing back as the Covid-related mobility restrictions generally eased around the globe in 2021, and many workers returned to their workplaces.[31]

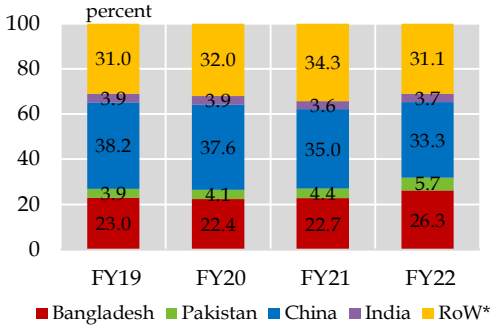
Figure 5.15a **Rising Share of Pakistan in US' Imports by Volume in Q1**



* Rest of the world

Source: Office of Textiles & Apparel (US)

Figure 5.15b **Rising Share of Pakistan in EU-27's Imports by Volume in Q1**



Source: Eurostat

[28] For instance, between July-2020 and July-2021, global container freight rate index rose about 4 times from US$ 1,762 to US$ 8,848. Source: Statista (www.statista.com/statistics/1250636/global-container-freight-index/#statisticContainer)

[29] Nishat Chunian Limited noted in its Financial Report 2021: "Unavailability of local cotton compelled the company to import cotton…. Freight has significantly jumped largely due to two underlying factors; oil prices increasing transportation charges for Karachi bound shipments and the tussle due to container shortage globally causing a hike in ocean freight. However, yarn prices, by virtue of being market driven, have improved significantly, allowing the company to transfer substantial impact of drastic rise in aforementioned input costs, to its customers."

[30] "…from 2015 to 2020, China's lost market shares in the world apparel exports (around 7.8 percentage points) were picked up jointly by its competitors in Asia, including ASEAN members (up 4.4 percentage points), Bangladesh (up 1.3 percentage points), and Pakistan (up 0.3 percentage point). Such a trend is most likely to continue in the post-Covid-19 world." Source: www.just-style.com/features/world-textiles-and-apparel-trade-amidst-a-pandemic-statistical-review-2021/

[31] This factor has also been mentioned in Nishat Mills Limited's Financial Report 2021: "Sale of workwear cloth also increased because of increase in demand soon after softening of lockdown restrictions world over."

In case of home textiles as well, higher demand originated from the major EU-27 market, which imported 24.4 percent more from Pakistan in Jul-Sep this year, according to Eurostat.

There was vibrancy in the country's entire textile supply chain as higher foreign orders for finished products had also prompted robust demand for textile intermediaries, i.e. cotton fabric and yarn. This phenomenon had necessitated capacity expansion along the value chain. The government's supportive policies in the wake of the pandemic, and the SBP's concessionary refinance schemes (TERF and LTFF) facilitated this capacity expansion.[32] It is evident by the fact that the textile industry took on majority of total fixed investments loans in FY21, with 54 percent higher offtake than the year before.[33]

Among major low value added textile items, cotton yarn shipments recovered in Q1-FY22, mainly owing to low base effect from last year. However, the same cannot be said about the cotton fabric shipments, as their precipitous fall continued from last year. It was mainly due to higher domestic consumption of cotton fabric, leaving lower exportable surplus for the quarter.

Nevertheless, it is pertinent to note here that elevated unit values of cotton fabric supplanted the impact of negative quantum effect, and resulted in 21.9 percent growth in fabric's export values to US$ 557 million.

Rice Exports

Rice exports rose by 17.5 percent to US$ 423 million in Q1-FY22. This growth is partly attributable to low base effect of Q1-FY21, when exports had dropped by almost a quarter. Quantum effect was positive and significant, while the price effect was negative and small.

At the disaggregate level, basmati rice exports were US$ 33 million more than last year, reaching at US$ 154 million. One major contributor to Pakistan's higher basmati shipments was Kazakhstan, which imported 16 times more of this premium grain in this quarter than last year. Besides, there was also higher demand from some African countries, mainly Kenya and Somalia.[34] Price of Pakistan's basmati rice trended lower than last year, making it more competitive in the international market.[35] This reflected in lower export unit values for the premium grain (**Figure 5.16**).

On the other hand, non-basmati rice exports also rose by 12.8 percent to US$ 270 million in the first quarter. Higher shipments could be traced to China, where demand was strong, as underscored by growth in consumption and import of rice amidst Asian origin quotes being lower than the domestic

[32] For instance, as noted by Interloop Limited in its Q1-FY22 financial report: "…. conducive government policies coupled with large export orders have encouraged textile companies to expand their production capacities, which is expected to increase Pakistan's exports in the foreseeable future."
[33] The industry used most of these loans to import textile machinery. In FY21 and Q1-FY22, these machinery imports were 35 percent and 145 percent higher YoY, respectively.
[34] In value terms, Pakistan exported US$ 25 million worth of basmati rice to Kazakhstan, and US$ 29 million to Africa, in the quarter.
[35] Pakistan's average quote for basmati rice during Jul-Sep FY22 was 24 percent lower from a year ago. Source: FAO Rice Price Updates

prices.[36] Besides, Pakistan also shipped higher volumes to African destinations, mainly Madagascar, Kenya and Cote d'Ivoire.

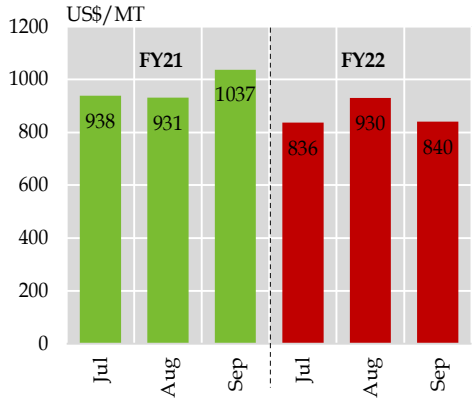
Chemicals and Pharmaceuticals

Exports of chemicals and pharmaceutical products grew by US$ 139 million and clocked in at US$ 363 million in Q1-FY22. Chemicals, other than the ones used in pharmaceutical and plastic products, had the highest share (**Figure 5.17**). Their export values rose significantly to US$ 202 million, showing 94 percent growth YoY. While proceeds from chemical exports received a boost from higher volumes, they were also supported by elevated prices of petroleum crude in the international and domestic market.[37]

Fruits and vegetables

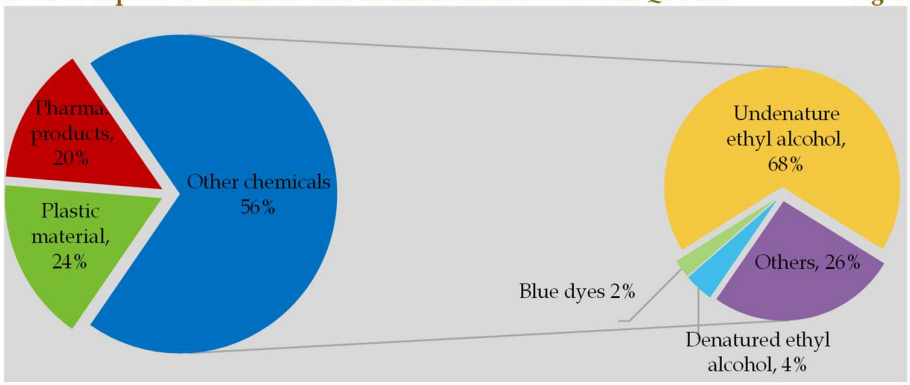
Exports of fruits and vegetables increased by 22 percent to US$ 165 million in Q1-FY22, mainly owing to higher volumes. Major contributions came from fruits—primarily from mangoes, whose exports rose to US$ 87

Basmati Rice Export Unit Values **Figure 5.16**



Source: Pakistan Bureau of Statistics

Breakdown of Exports of Chemicals and Pharmaceutical Products in Q1-FY22 **Figure 5.17**

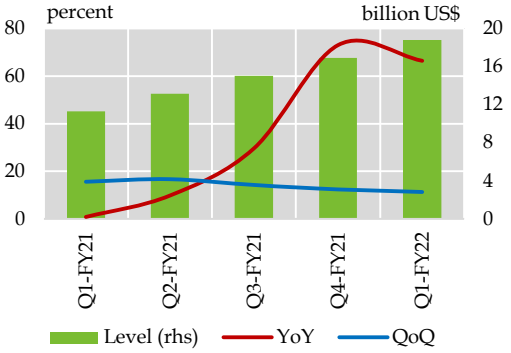


Source: Pakistan Bureau of Statistics

[36] Source: USDA 2021. World Agricultural Production Report. July issue. Washington, DC: United States Department of Agriculture

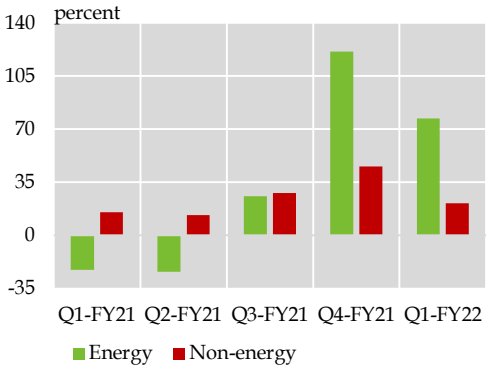
[37] Crude and its derivatives are used to make petrochemicals (like ethylene). Rising crude oil prices drive up petrochemical costs as well as market prices for many downstream chemical intermediates and plastics. Source: www.ihsmarkit.com/research-analysis/understanding-how-fluctuating-crude-oil-prices-impact-petrochemical-investment-strategies.html

Pakistan's Recent Quarterly Imports **Figure 5.18**



Source: Pakistan Bureau of Statistics

Growth in Global Energy and Non-Energy Commodity Prices **Figure 5.19**



Source: World Bank

million, about US$ 24 million more than last year. Shipments to the UAE, Kazakstan, and Uzbekistan were quite higher.

Imports

Imports in Q1-FY22 reached US$ 18.7 billion. The increase in imports is recorded in all the major groups. While it is a record high increase in a quarterly imports, there was a deceleration in its growth compared to the preceding quarter (**Figure 5.18**). Multiple factors have contributed to the steep rise in imports in Q1-FY22.

Rising global commodity prices contributed significantly to the increasing import volume

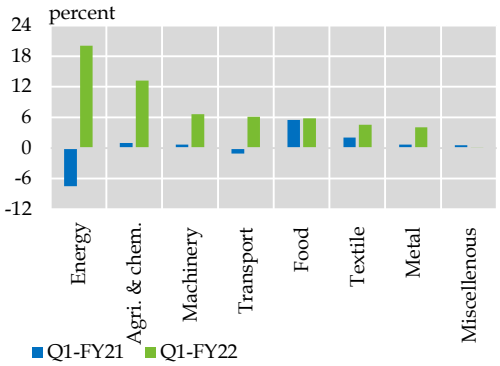
Global commodity prices—both energy and non-energy—remained elevated in 2021. Covid-related disruption in global supply and supply chains, specifically in shipping and allied services, amid recovery in the global demand, created an upward pressure on the commodity prices (**Figure 5.19**).

Category-wise index of non-energy commodity prices increased 31.5 percent on average in first nine months of 2021, and 27.8 and 45.5 percent respectively in Apr-Jun and Jul-Sep 2021 on YoY basis. Index of energy prices, on the other hand, was more volatile; increasing on average by 74.7 percent during Jan-Sep 2021. In Apr-Jun and Jul-Sep of 2021, the energy index rose by 121.1 and 77.1 percent YoY.

Strengthening pace of recovery in the advanced economies, falling global oil inventories, and unanimity maintained by the members of OPEC+ and shale producers in USA in pumping crude oil raised the oil prices to a higher level. At the same time, depletion of the global natural gas stock, adverse weather conditions, and some country-specific shocks, like the decline in Brazilian hydropower output, pushed European natural gas prices to record highs by September 2021.[38]

[38] Source: World Economic Outlook, October 2021. Also, see Box 3.1 in Chapter 3 for more details on rising international commodity prices.

Groupwise Contribution in Q1 Imports **Figure 5.20**



Source: Pakistan Bureau of Statistics

Pakistan also felt the brunt of the increased global commodity prices, especially energy prices. Energy contributed 20.0 percentage points in 66.1 percent growth in imports in Q1-FY22, while contribution of energy was -7.5 percentage points in 0.8 percent import growth in this period of last year (**Figure 5.20**).

Reviving economic activity also strengthened the import demand

The overall policy environment remained accommodative in Q1-FY22 and various economic stimuli continued to support the economic activity, thereby strengthening the import demand. For instance, disbursement against the approved loans under the government's announced housing scheme and erstwhile SBP schemes announced in the wake of the Covid shock continued in Q1-FY22.[39] Furthermore, a continuous increase in workers' remittances might also have added to the purchasing power of the households for imported consumer-durable goods.[40]

Energy Imports

As discussed above, surging global energy prices largely drove the rise in the energy imports in Q1-FY22. Import of crude oil and LNG show the influence of global prices, while higher volume also reinforced the increased imports of petroleum products (**Table 5.6**). Growing economic activity, specifically in transport and power sectors, sustained the demand for HSD and furnace oil despite a significant increase in domestic prices of these products (**Figure 5.21**).[41]

Power generation registered a 6.9 percent increase YoY, despite abated water flow in rivers reducing the hydel generation, and volatile international prices restricting LNG imports (**Figure 5.22**).[42] The shortfall in hydel

Breakdown of Increase in Imports of Major Energy Commodities in Q1-FY22 **Table 5.6**

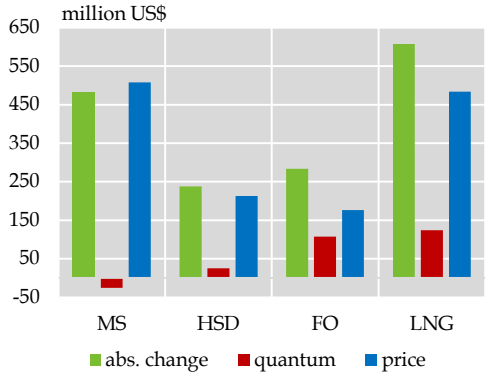
million US$

Items	Change	Quantum impact	Price impact
POL prods.	1049.6	122.7	926.9
Crude oil	562.2	9.1	553.1
LNG	604.7	-16.2	620.9
Coal	365.0	38.7	325.8

Source: Pakistan Bureau of Statistics

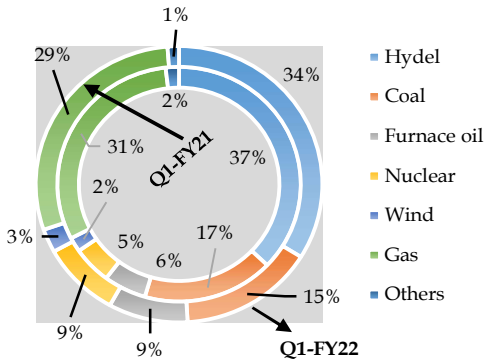
[39] Around Rs 11.7 billion and Rs 60.2 billion were disbursed against approved loans under Mera Pakistan Mera Ghar and TERF schemes in Q1-FY22, while Rs 4.6 billion and Rs 64.6 billion respectively were disbursed in Q4-FY21.
[40] Workers' remittances increased by 12.5 percent YoY in Q1-FY22.
[41] The government transferred the impact of global price increase, albeit partially, to domestic fuel prices, leading to 13.4 percent and 53.6 percent rise in domestic HSD and FO prices respectively during Q1-FY22.
[42] Flows in Jhelum at Mangla and Indus at Tarbela, together, reduced by 4.0 percent YoY in Q1-FY22 (source: WAPDA).

Fuel Imports in Q1 FY22 **Figure 5.21**



Source: Pakistan Bureau of Statistics

Share of Major Fuels in Power Generation **Figure 5.22**



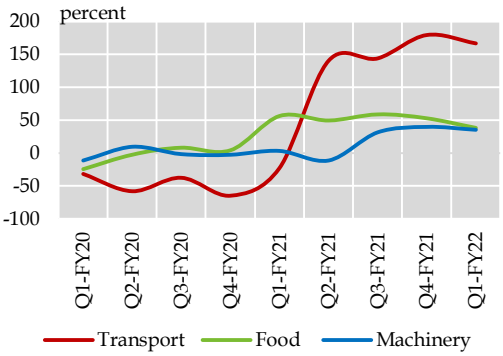
SourceNational Electric Power Regulatory Authority

and reduced LNG supplies to power sector were offset by an increased use of furnace oil and nuclear-based generation.

Non-energy imports

Non-energy imports increased by 58.3 percent YoY to US$ 14.1 billion in Q1-FY22. In terms of contribution, agricultural and chemical group had the largest share. The pandemic-induced import of medicine rose 311 percent YoY to US$ 1.1 billion in Q1-FY22. Moreover, chemical imports due to burgeoning demand in textile sector also increased. Together, the increase in these two categories largely explains the rise in imports of this group in Q1-FY22 (**Table 5.7**). Besides these, imports of transport, food and machinery items contributed significantly to the broad-based increase in the non-energy imports (**Figure 5.23**).

Growth in Imports of Transport, Food and Machinery **Figure 5.23**



Source: Pakistan Bureau of Statistics

Transport

The growth spurt experienced by transports in Q2-FY21 onward continued in Q1-FY22, where overall transport imports increased to US$ 1.1 billion; registering a growth of 166.6 percent YoY. Both CBU and CKD transport imports grew sharply. Contrastingly, in the same period of last year, transport imports declined by 23 percent YoY. Persistent increase in demand of motorcycles, motor cars, and heavy vehicles elevated CKD/SKD imports in Q1-FY22 (**Figure 5.24**).

While ongoing economic recovery has increased demand for heavy vehicles, including buses and trucks, the rising income from workers' remittances and inflows in the Roshan Digital Accounts (RDA) may have added to the purchasing power of the

households, which resulted in a steep rise in the demand for motor cars and motor cycles.[43] Similar to CKD/SKD imports, the

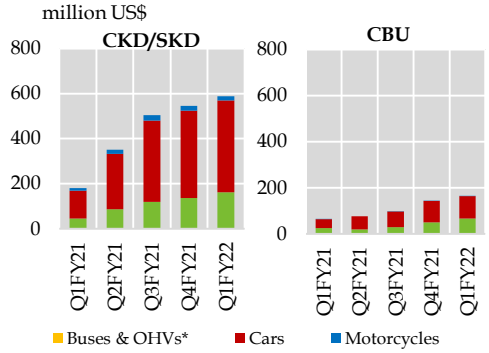
Pakistan's Major Imports (Q1) **Table 5.7**

million US$

Items	FY21	FY22	Change
Energy group	**2,328**	**4,593**	**2,265**
POL prods.	1,126	2,176	1,050
Crude oil	693	1,255	562
LNG	420	1,025	605
Agri and chem	**1,923**	**3,419**	**1,496**
Fertilizer	150	256	106
Plastic Material	519	755	236
Med. Products	279	1148	868
Other chem.	928	1,224	295
Transport group	**414**	**1,105**	**690**
Cars	164	503	339
CBUs	39	96	56
CKDs	125	407	283
Truck & buses	72	230	159
Aircraft & ships	87	205	118
Metals group	**1,084**	**1,542**	**458**
Steel scrap	485	501	16
Iron & steel	375	710	335
Food group	**1,712**	**2,364**	**652**
Wheat Un-milled	102	99	-2
Tea	142	151	9
Palm oil	579	891	312
Sugar	13	91	78
Textile group	**677**	**1189**	**512**
Raw cotton	208	343	135
Syn. yarn	141	226	86
Machinery group	**2,105**	**2,848**	**743**
Power gen	424	530	106
Electrical	324	492	168
Construction	31	39	7
Cell phones	493	495	2
Other machinery	526	747	222
All other items	**772**	**1,387**	**615**
Coal	241	605	365
Total imports	**11,286**	**18,773**	**7,487**

Source: Pakistan Bureau of Statistics

Breakdown of Transport Imports **Figure 5.24**



* Other heavy weight vechiles

Source: Pakistan Bureau of Statistics

CBU imports also witnessed a significant rise in both motor cars and heavy vehicles (**Figure 5.24**).

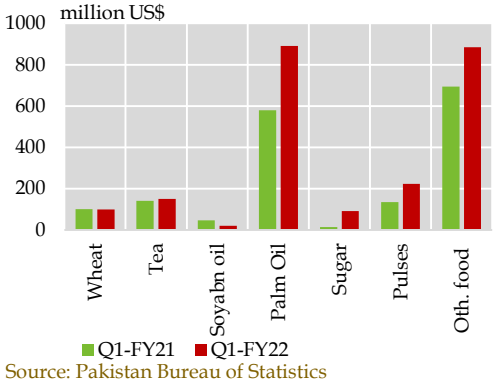
Food

The food imports increased 38.1 percent YoY to US$ 2.4 billion in Q1-FY22 (**Figure 5.25**). In order to contain the prices of essential items, the government continued to import wheat and sugar in Q1-FY22, despite a significant increase in production of wheat in the last crop cycle (ending April) and the forecast of a decent increase in the sugarcane production in this crop cycle (beginning in October).[44] Disruption in the supply chain of sugar, specifically, created upward pressure on the sugar prices prompting the government to import this commodity.

[43] Domestically produced motor car sales increased 80.6 percent, while sales of buses, trucks & light commercial vehicles increased by 93.2 percent in Q1-FY22. Comparatively, the sales of cars and buses trucks & light commercial vehicles increased merely by 2.7 percent and 24.8 percent in Q1-FY21 (**Chapter 2**).

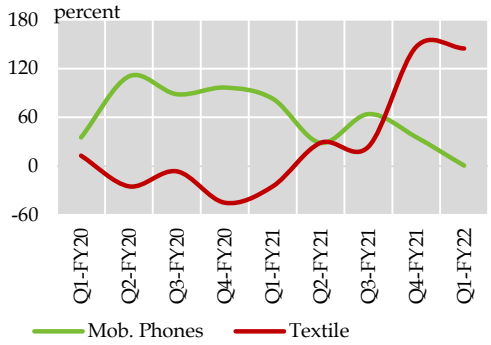
[44] Pakistan produced a record 27.3 million tons of wheat in FY21. However, it was insufficient to cater to the domestic demand of around 29.5 million tons. Moreover, some pressure may be emanating from smuggling of wheat and wheat flour to Afghanistan. Sugarcane production, in contrast, is estimated to increase by 8.2 percent, to 87.6 million tons, due to increase in the crop area (source: MNFSR).

Figure 5.31: Key Components of Food Imports **Figure 5.25**



Source: Pakistan Bureau of Statistics

Growth in Mobile Phones and Textile Machinery **Figure 5.26**



Source: Pakistan Bureau of Statistics

Import of palm oil continued to increase in Q1-FY22, with higher prices offsetting the decline in volume (**Table 5.8**). Covid-related supply disruption in Malaysia and Indonesia and increased demand of palm oil from India and China sustained the price of this commodity at elevated level.[45] Moreover, amid increased commodity prices, quantum increase in tea and pulses and some other food items inflated the overall food import bill in Q1-FY22 (**Figure 5.25**).

Breakdown of Imports of Selected Non-Energy Commodities in Q1-FY22 **Table 5.8**

million US$

Items	Change	Quantum impact	Price impact
Fertilizer	106.0	-1.4	107.5
Plastic Material	236.0	-13.0	249.0
Med. Products	868.0	109.3	759.0
Steel scrap	16.0	-184.1	199.7
Iron & steel	335.0	134.3	200.6
Palm oil	312.0	-85.7	397.9
Raw cotton	135.0	55.7	79.0
Syn. yarn	86.0	24.6	61.3

Source: Pakistan Bureau of Statistics

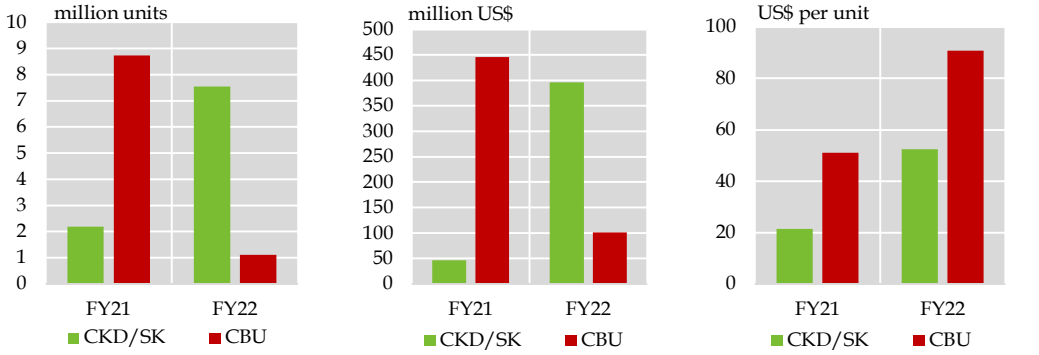
Machinery

Machinery imports climbed to US$ 2.8 billion, with a 35.3 percent YoY broad based rise in Q1-FY22. Nevertheless, two distinct features warrant some deliberation (**Figure 5.26**). First, the pace of increase in mobile phone imports decelerated to a marginal 0.4 percent YoY in Q1-FY22, as improving Covid condition in the country is slowing down the growth in the online activities. This has curtailed some demand of mobile phones.

Importantly, incentivized by Mobile Device Manufacturing Policy (MDMP) 2020, the increase in the CKD/SKD overshadowed the CBU phone imports in both quantity and volume (**Figure 5.27**). Moreover, unit value of these imported mobiles have also increased compared to last year, albeit more sharply for the CKD/SKD mobiles. This suggests that the import of these gadgets is shifting towards the high-end. While CBU imports may be edging towards the costly brands, the local mobile industry is also enhancing their input quality to become

[45] SBP Annual Report on State of Pakistan's Economy FY21.

Breakup of Mobile Imports in Q1 **Figure 5.27**



Source: Pakistan Bureau of Statistics

competitive in the international market. This is evident by the fact that the local industry has started exporting some of their products.[46]

Second, the import of textile machinery increased 144.8 percent YoY to US$ 230.9 million in Q1-FY22. The textile sector, including apparel manufacturers, availed Rs 31.8 billion in approved loans under TERF and LTFF, which may have augmented the demand for textile machinery. This development is in continuation of Q4-FY21, when textile machinery imports had also reached US$ 214.5 million, increasing by 146.6 percent.

Besides mobile phones and textile machinery, the import of power generating machinery corresponded with the continuing power generating projects in the country.[47] Moreover, the ongoing increase in industrial activity, specifically in textile industry and transport sector, raised the demand for switch gears and other electrical equipment leading to the increased demand of electrical machinery.

Apart from the higher demand of machinery, growing demand for the textile exporting sector led to quantum rise in import of raw cotton, despite its higher international prices. The expected increase in cotton production in the country, together with the global commodity price effect, may have restrained some of the imports of cotton in Q1-FY22. Cotton production is estimated to increase by 33.1 percent, to 9.4 million bales.[48] Moreover, despite higher prices, flourishing demand in the transport sector led to significant increase in iron and steel imports, reinforced by the volumetric increase also. However, in case of iron and steel scrap imports, the price led increase more than offset the decline in volume of the commodity's imports.

[46] Pakistan exported mobiles worth US$ 2.3 million during Jul-Aug FY22.
[47] SBP Annual Report on State of Pakistan's Economy FY21.
[48] Source: Pakistan Central Cotton Committee (PCCC)

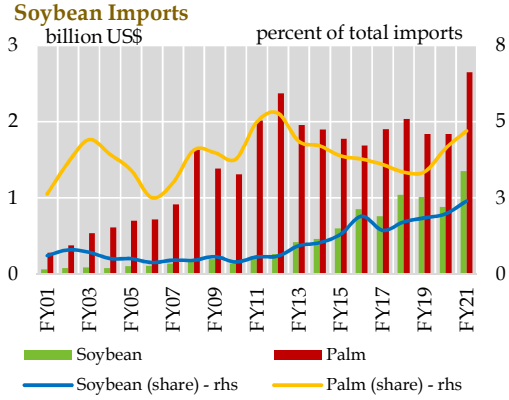
Special Section: Pakistan's Rising Palm & Soybean Imports: Understanding the Drivers and Challenges to Domestic Oilseed Production[1]

Pakistan's reliance on imports for edible oil and oilseed meals to meet domestic demand consumption has been increasing over the past two decades: 86 percent of domestic edible oil consumption in 2020 came from imports up from 77 percent in 2000; in case of oilseed meal, imports contributed 58 percent in 2000 compared to 20 percent in 2000. Within the edible oil and oilseeds category, palm and soybean imports form 90 percent of the total category imports in value terms, and 87 percent in quantity terms. However, policy focus on both these agriculture commodities has been lacking. This special section sheds light on the drivers of rising palm and soybean imports where growing demand pressures from inter alia increasing population, rising per capita consumption and gradual modernization of poultry industry has outpaced the domestic supply which has been eroding mainly on account of weak policy focus on oilseed crops. Whilst discussing overarching constraints to oilseed production in the country, this special section also explores the prospects of palm and soybean where the key finding is that palm does not have much potential in Pakistan in the short to medium term, whereas soybean can be produced at large scale in the medium term if policy support is provided. Lastly, it offers broad policy directions to be explored to arrive at long-term solutions to rising import dependence for edible oil and meals.

S1.1 Introduction

Pakistan's palm and soybean-related imports stood at US$ 4 billion in FY21, rising by 47 percent year-on-year, compared to compound average growth of 12.3 percent in the last 20 years. While in part this increase stems from rising international commodity prices, the rise in palm and soybean imports is not a new phenomenon. The combined imports of palm and soybean have been growing noticeably over the last twenty years, rising to 7.1 percent of total imports in FY21 from 3.2 percent in FY01. **(Figure S1.1)**. Currently, palm and soybean products are among the top 10 commodities (at 8-digit HS Code level) imported by the country. [2]

Trend in Pakistan's Palm and Soybean Imports **Figure S1.1**



Source: Pakistan Bureau of Statistics

[1] This special section draws on discussions with various oilseed related stakeholders, including the Pakistan Oilseed Board (formerly Pakistan Oilseed Development Board); Federal Seed Certification and Registration Department; National Agriculture Research Centre; Ayub Agricultural Research Institute; Sindh Coastal Development Authority (SCDA); Dr Sohail Jehangir Malik, Innovative Development Strategies; Dr Yusuf Zafar, former chairman Pakistan Agriculture Research Council; Dr. A. W. Gandahi honorary consultant to SCDA, Pakistan Poultry Association; All Pakistan Solvent Extractor Association; Pakistan Edible Oil Refiners Association; and International Food Policy Research Institute

[2] Harmonized System (HS) code is an internationally accepted system to codify tradable commodities in various categories and sub-categories, where 2-digit HS code refers to main category and 8-digit HS code refers to most granular sub-category.

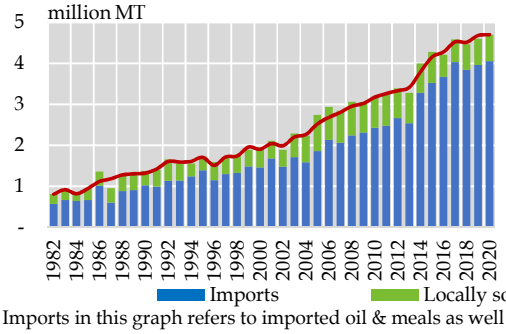
Several demand and supply factors are driving the imports of palm and soybean, which constitute the bulk of Pakistan's total imports of oilseeds and their products in both value and volume terms. In terms of value, palm and soybean products constitute 90 percent of total edible oil and oilseeds imports. In quantity terms, total imports of oilseeds and its products surpassed 7 million metric tons in FY21, 87 percent of which comprised palm and soybean. The remaining 13 percent comprised rapeseed, sunflower, groundnut, copra and other oilseeds and related products.

At the one end, the demand for edible oil and oilseed products has been rising due to increasing population, growing income levels, and the gradual modernization of livestock industry, particularly poultry. At the other end, local oilseed production has been unable to keep pace with increasing domestic demand for edible oil and oilseed products (including meals for animal feed). During the last 15 years, the local production of edible oil has registered negative average annual growth of 1.2 percent, while the demand per capita has increased by 2.3 percent,[3] leading to increasing reliance on imports for both edible oil and meals **(Figure S1.2)[4].**

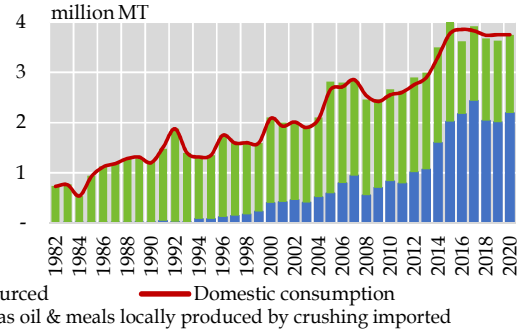
However, Pakistan's growing reliance on palm and soybean is not out of sync with global consumption patterns of edible oil and meal, which is also dominated by palm oil and soybean oil in the edible oil category, and soybean in the meal category (**Figure S1.3a and b**).

Even among countries that are largest producers of rapeseed/canola and sunflower – which are the third and fourth most consumed vegetable oils in the world - palm and soybean oil have noticeable shares in their respective edible oil consumption. This is true even among countries that have low edible oil consumption and are among biggest producers of rapeseed and sunflower **(Figure S1.4).**

Historical Trend of Demand and Supply of Edible Oil in Pakistan **Figure S1.2a**



Historical Trend of Demand and Supply of Oilseed Meal in Pakistan **Figure S1.2b**

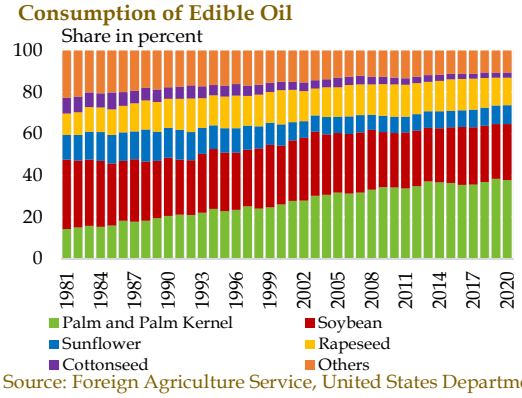


Imports Locally sourced Domestic consumption

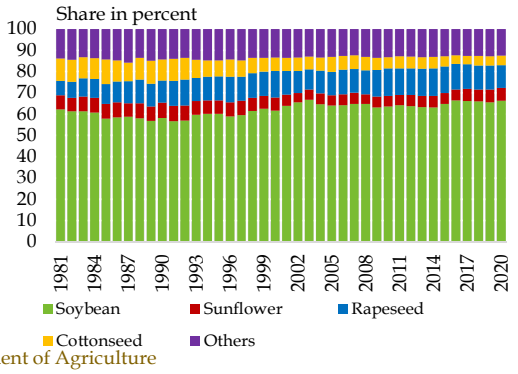
Imports in this graph refers to imported oil & meals as well as oil & meals locally produced by crushing imported oilseeds. Locally sourced only includes oil & meals locally produced by crushing oilseeds grown in Pakistan.
Note: The figure does not account for variation due to beginning and ending stocks.
Source: Foreign Agriculture Service, United States Department of Agriculture

[3] Pakistan Oilseed Development Board (2019). *National Oilseeds Enhancement Program, Umbrella PC-1 for Planning Commission of Pakistan.* Islamabad: Pakistan Oilseed Development Board, MNFSR
[4] In all the figures based on USDA data sets, the years on the horizontal axes represent the Oct-Sep period, with 2020 constituting Oct-19 to Sep-20 period.

Breakdown of Global Consumption of Edible Oil **Figure 1.3a**

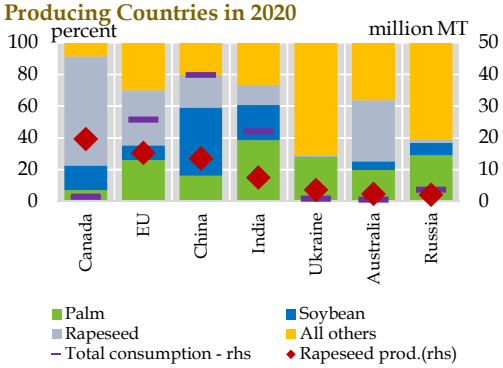


Breakdown of Global Consumption of Oilseed Meal **Figure 1.3b**

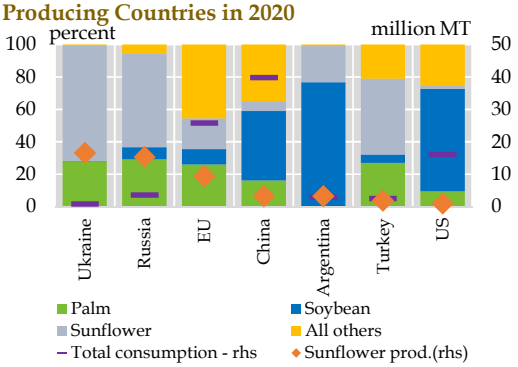


Source: Foreign Agriculture Service, United States Department of Agriculture

Share of Palm and Soybean oil Consumption in Top-7 Rapeseed Producing Countries in 2020 **Figure S1.4a**



Share of Palm and Soybean oil consumption in Top-7 Sunflower Producing Countries in 2020 **Figure S1.4b**



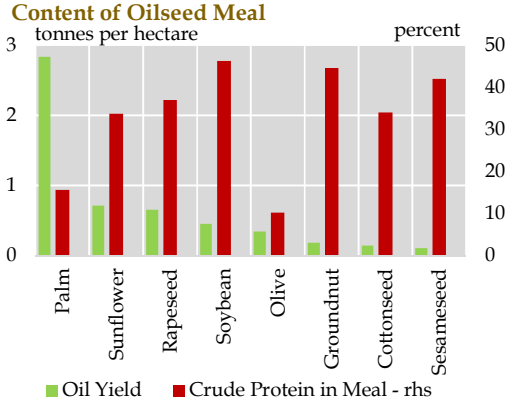
Source: Foreign Agriculture Service, United States Department of Agriculture

This global consumption pattern stems from high resource use efficiency of palm and soybean, measured in terms of oil yield per hectare for oil, and protein yield in the case of meals. The former is important to meet the requirements of growing human population. The latter is important to sufficiently feed livestock (poultry, ruminants and others), since protein-based meals enable faster and healthy growth of livestock animals **(Figure S1.5).**[5]

Contrary to global trends, there has been little focus on palm and soybean in Pakistan. Various five years plans since 1955 have highlighted and proposed the need to focus on soybean and other oilseeds. However, lack of consistent policy has prevented oilseed crops, particularly soybean, from taking off. On the other hand, whilst initial surveys and pilots on palm began in the mid-90s, palm started featuring in policy documents only after 2005. However, so far

[5] Different meals have different nutritional compositions. The protein content in the meal, along with its digestibility and mix of amino acid, dictate its usage in livestock.

Oil Yield of Oilseeds and Protein Content of Oilseed Meal **Figure S1.5**



Source: Our World in Data and INRA-CIRAD-AFZ feed tables

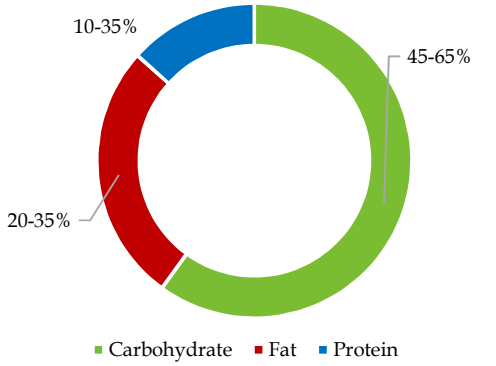
policy efforts with long-term focus have not been undertaken for oil palm plantation. These trends pose the question whether or not Pakistan can grow palm and soybean in the country. Accordingly, this Special Section first looks at the demand drivers of edible oil and oilseeds (**Section S1.2**), including rising population and per capital income, which are expected to further rise over the next 20 years. Supply-side factors are discussed in **Section S1.3** with a focus on overarching challenges to the oilseed sector in Pakistan, stemming from lack of consistent policy and institutional constraints. **Section S1.4** sheds light on the prospects of growing palm and soybean in the country. Drawing on the work of local agricultural research institutes, the section highlights that oil palm plantation does not seem to have potential in Pakistan in the short to medium term of 5-10 years, whereas soybean can be produced at large scale in the medium term if policy support is provided. **Section S1.5** summarizes the findings, and offers broad policy direction needed to be explored for short- and long-term solutions to the problem of rising edible oil & oilseeds import bill.

S1.2 Demand Drivers

Oilseeds are an essential part of the human diet, making them one of the vital crops from the lens of food security. Generally recognized, Acceptable Macronutrient Distribution Range (AMDR) entails that in a healthy diet 35-55 percent of total calories should come from proteins and fats **(Figure S1.6)**. One of the significant sources for both these macronutrients is oilseeds. The two products extracted from oilseeds are edible oil and the residual, which is either used directly as meal or is otherwise processed into oilseed-based meal. Oils are the direct source of fats for human consumption, whereas meals are used as feed for poultry, ruminants and other livestock, and aquaculture, which in turn are primary source of animal protein and other nutrients necessary in the human diet **(Figure S1.7).**

In addition, the oil from oilseeds is used by both food and non-food industries such as biscuits, tea whitener, soap, cosmetics, pharmaceuticals, paint, fertilizer and biodiesel.[6] Due to its pivotal role in dietary needs and use in multiple industrial

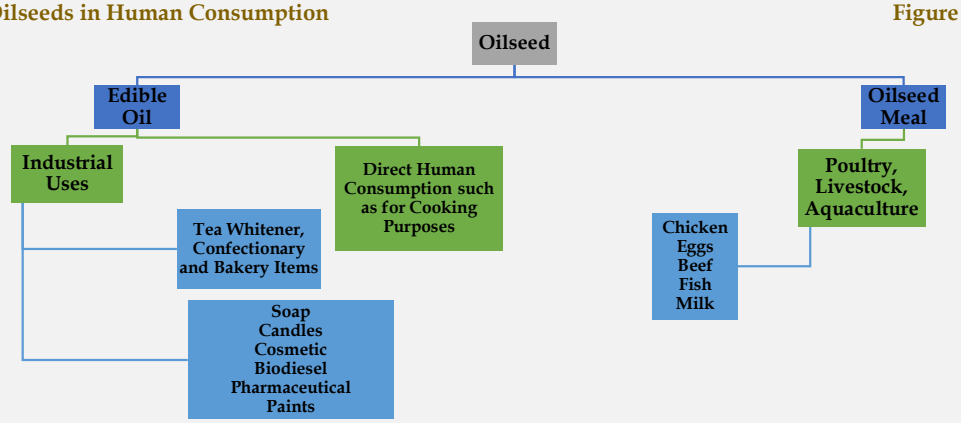
Acceptable Macronutrient Distribution Ranges (AMDR) **Figure S1.6**



Source: National Academy of Medicine, USA

[6]A. Abiodun (2017). "The Role of Oilseed Crops in Human Diet and Industrial Use." In P. Ahmad (eds.) "Oilseed Crops: Yield and Adaptations under Environmental Stress ", New Jersey: Wiley

Oilseeds in Human Consumption **Figure S1.7**



Source: R.J. Mailer (2006). "Oilseeds: Overview." In C. Wrigley, H. Corke, K. Seetharaman, and J. Faubion (eds.), "Encyclopedia of Food Grains (Second Edition)" pp. 221-227.

products, global consumption of oilseeds has increased manifold since the 1980s, with more than 600 million tons consumed in 2019 (**Figure S1.8)**.

Although Pakistan's share in global oilseed consumption is a marginal 1.1 percent, it follows the same growth trend, with domestic consumption up 3.5 times over 1981. The increase is driven by a rise in demand for both edible oils and oilseed meals.

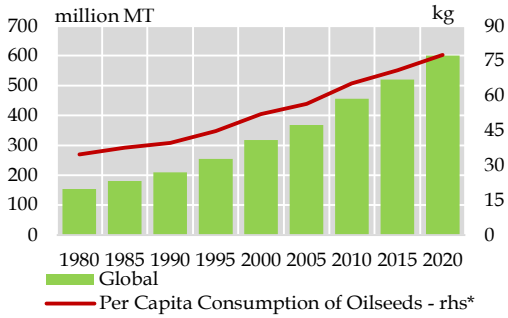
Edible Oils

Edible oil consumption in Pakistan has increased significantly over the last few decades: from 0.7 to 4.7 million tonnes between 1981 and 2020. The main demand drivers are rising population, dietary preferences and increase in per capita income.

Drivers of Growth

Pakistan's rising demand for edible oil is driven in part by high population; the

Global Consumption of Oilseeds **Figure S1.8**



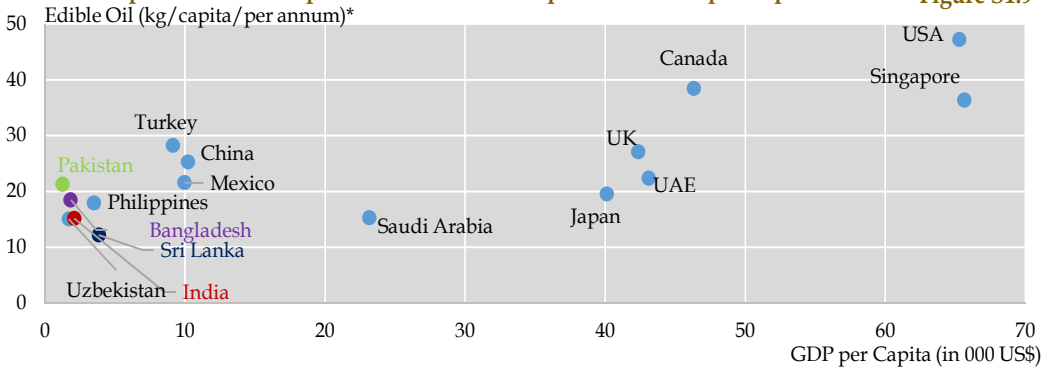
*Calculated by dividing total oilseed consumption data from USDA by total world population data from WB

Source: Foreign Agriculture Service, USDA and World

country is fifth most populous in the world, with population growing at a rate of 2.1 percent over the last two decades.[7] However, while the country's estimated per capita edible oil consumption is lower compared to high income countries like the USA, Canada and Singapore, amongst the countries with similar income levels, Pakistan's per capita oil consumption is comparatively high **(Figure S1.9)**.

[7] World Development Indicators, World Bank

Relationship between Per Capita Edible Oil Consumption and GDP per Capita **Figure S1.9**



*per capita edible oil consumption is calculated using consumption data from USDA and population data from WB

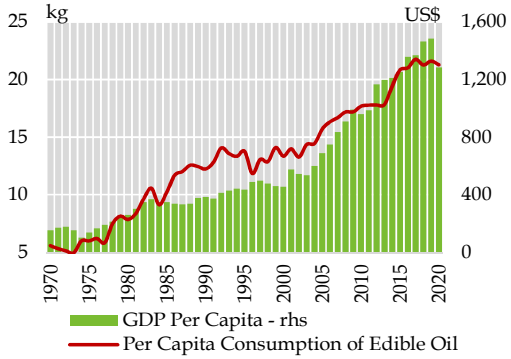
Source: Foreign Agriculture Service, United States Department of Agriculture and World Bank

The country's per capita consumption is also higher than India and Sri Lanka, which have comparable dietary preferences and have relatively higher GDP per capita. Since approximately 96 percent of the edible oil consumed in the country is used for food purposes,[8] this difference in per capita consumption implies consumer preference for higher use of oil in food at household and commercial level.[9]

There has also been growth in per capita consumption of edible oil in Pakistan over the years, growing in tandem with rising GDP per capita since vegetable oils are highly responsive to income growth and one of the cheapest source of fat and protein (**Figure S1.10**). [10]

This trend is reaffirmed by income quintile data from Household Integrated Economic Survey (HIES), as indicated in **Figure S1.11**. However, it is important to note that while

Per Capita Consumption of Edible Oil in Pakistan **Figure S1.10**



Source: Foreign Agriculture Service,USDA and World Bank

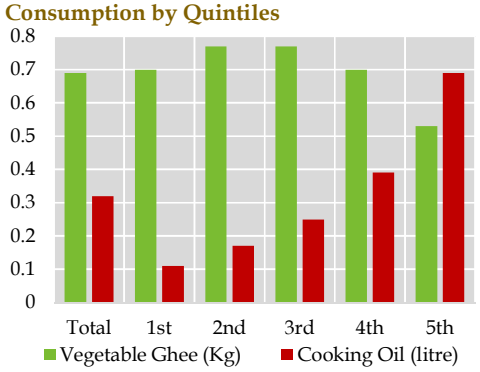
the overall demand increases with the increase in income, the composition of the consumption changes across the income level. For the 3rd, 4th and 5th quintile (top 60 percent), with rising income, per capita consumption of ghee reduces and that of cooking oil increases.

[8] Calculated from USDA datasets. Consumption data includes household, commercial and industrial consumption. Data for commercial usage of edible oil, and food-non-food classification of industrial usage is not separately available.

[9] Anecdotal evidence suggests that demand for oil is also increasing due to growth in fast food chains in urban areas.

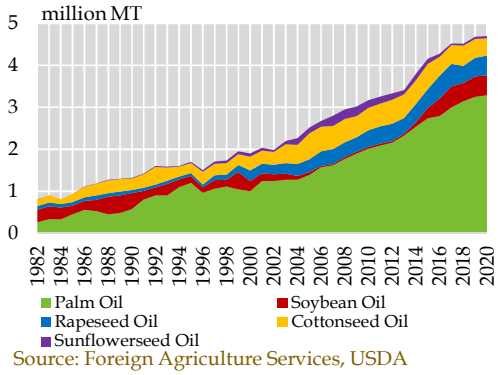
[10] Indian Institute of Palm Oil Research (2015). *Vision 2050*. New Delhi: Indian Council of Agricultural Research.

Pakistan's Monthly Per Capita Consumption by Quintiles **Figure S1.11**



Source: HIES 2018-2019 , Pakistan Bureau of Statistics

Pakistan's Commodity-wise Consumption of Oil **Figure S1.12**



Source: Foreign Agriculture Services, USDA

This suggests that after a certain income level, the gains in household income result in substitution of vegetable ghee with softer vegetable oils.[11] This behaviour can be due to the perceived health benefits attached to soft oil as against the negative effect of trans fat in vanaspati ghee.[12] Despite consumer preferences tilting towards cooking oil in higher income groups, vegetable ghee consumption is higher than that of cooking oil at household level in Pakistan.[13]

Trend in Commodity-wise Consumption of Edible Oils

The higher consumption of vegetable ghee is also reflected in the category-wise data of edible oil consumption. Palm oil dominates, with a 70 percent share in total consumption in 2020 (**Figure S1.12**). Palm oil, a semi-solid oil, is the main ingredient for manufacturing vegetable ghee, for three main reasons. Palm oil and its variants are among the most used products to manufacture various consumer and non-consumer industrial products, ranging from confectionaries and margarines to toothpastes, grease and printing ink. It is also widely used in household cooking and baking, and its stability at higher temperatures makes it suitable for deep-frying as well.[14,15,16] Palm oil is also more

[11] Vegetable ghee is a (fully or partially) hydrogenated blend of hard and soft oil. Hard oils, for instance, palm and coconut oil, are semi-solid at room temperature. In contrast, soft oils such as soybean, sunflower, and rapeseed oil are liquid at room temperature. Through the process of hydrogenation liquid or semi solid fats are converted into solid fats by adding hydrogen.

[12] V. Dhaka, N. Gulia, K.S. Ahlawat and B.S. Khatkar (2011). "Trans fats- Sources, Health Risks and Alternative Approach - A Review", *Journal of Food Science and Technology*, 48(5):534-541.

[13] In comparison, the consumption of desi ghee is much lower. As per HIES 2018-19, desi ghee consumption was 0.01 kg/capita in Pakistan, down from 0.02 kg/capita in 2007-08. Even in rural areas, it fell from 0.03 to 0.01 kg/capita during this period.

[14] O.A. Abiodun (2017). The Role of Oilseed Crops in Human Diet and Industrial Use. In Oilseed Crops, P. Ahmad (Ed.)

[15] K.G. Berger (2003). "Palm Oil." In B. Caballero (eds.). "Encyclopedia of Food Sciences and Nutrition (Second Edition)" Cambirdge, Massachusetts : Academic Press

[16] Fairus, M., Hidzir, M. and H. M. Aspar (2013). The Palm Oil Market in Pakistan. *Palm Oil Developments No.59, p9-11.*

preferable in the country because of its cheaper price. In comparison with soft oils,[17] the price of palm has been consistently lower throughout the peaks and troughs in international edible oil prices (**Figure S1.13**).

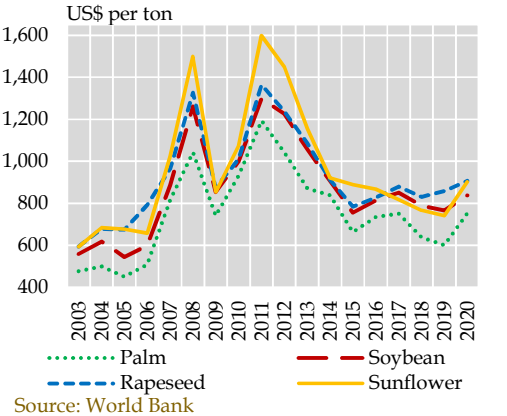
Cross-country comparison shows that like Pakistan, preference for palm oil consumption in India, Sri Lanka and Bangladesh is higher, compared to countries with much higher GDP per capita, where the consumption of soft oils is higher than that of palm oil (**Figure S1.14**). This is because most soft oils, although expensive than palm, contain unsaturated fat, which are comparatively more beneficial for health as they reduce the risk of cardiovascular diseases and improve blood cholesterol levels.[18] On the other hand, since palm oil is rich in saturated fats, the World Health Organization recommends it should be less than 10 percent of total calorie consumption.[19] Consumer awareness, combined with higher income levels and local production of alternative soft oils, are the reasons why palm oil consumption is relatively lower in these countries compared to countries with lower per capita income.

Demand Outlook for Edible Oils

Pakistan's per capita edible oil consumption is already higher compared to economies with similar income levels. In addition, increasing income levels may also translate in increased per capita consumption of edible oil, as will population growth. According to the UN's World Population Prospect 2019, at constant-fertility, the country's population in 2025 is set to reach 245 million, and 328 million by 2040. [20]

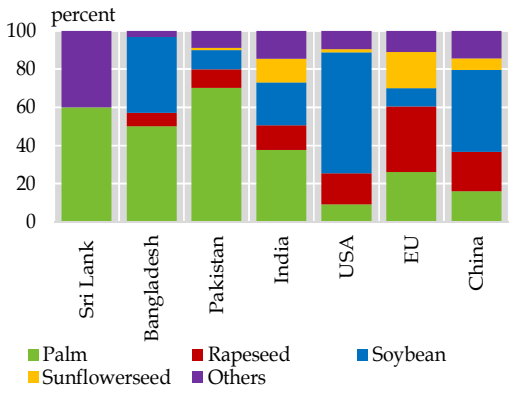
This implies that demand for edible oil will continue to increase noticeably in the coming

International Oilseed Prices **Figure S1.13**



Source: World Bank

Commodity-wise Consumption **Figure S1.14**



Source: Foreign Agriculture Service, USDA

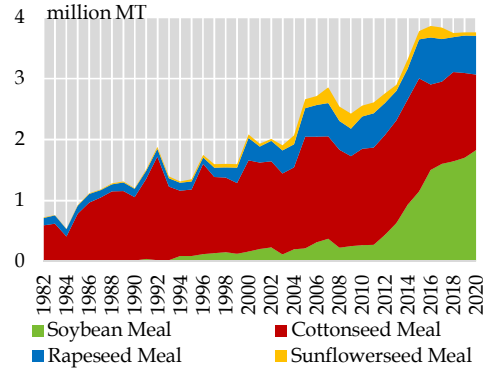
[17] Soft oils are liquid whereas hard oil are semi-solid at the room temperature.
[18] Harvard T.H. Chan, School of Public Health (www.hsph.harvard.edu/nutritionsource/what-should-you-eat/fats-and-cholesterol/types-of-fat/)
[19] World Health Organization (www.who.int/news-room/fact-sheets/detail/healthy-diet#:~:text=Energy%20intake%20(calories)%20should%20be,1%2C%202%2C%203).
[20] Even at low fertility rate, Pakistan's population is forecast to cross 240 million. (UN Department of Economic and Social Affair in World Population Prospects, 2019).

years. According to estimates by Pakistan Oilseed Department, total demand for edible oil in the country is conservatively expected to grow to 5.9 million tonnes in 2025-26, from 4.7 million tons in FY21. [21]

Oilseed Meal

Similar to the trend in demand for edible oil, the consumption of oilseed meal has also been increasing in Pakistan, having more than tripled between 1990 and 2020. As the entire meal consumed in the country is used as a source of plant-based protein in animal feed,[22] the growth in poultry, livestock, and aquaculture are primary drivers behind this surge in oilseed meal consumption, where poultry particularly stands out from the rest.

Commodity-wise Consumption of Oilseed Meal in Pakistan **Figure S1.15**



Source: Foreign Agriculture Services, USDA

The category wise trend indicates that consumption of soybean meal has increased over the years and that of cottonseed meal has declined. In 2020, the share of soybean meal stood at 49 percent whereas only 33 percent of total demand was met by cottonseed meal (**Figure S1.15**).

Demand Drivers of Oilseed Meal

i) Poultry

The increased use of soybean is due to the growth in poultry industry, coupled with high nutritional value of the soybean-based meal. Soybean meal offers better digestibility, quality mix of amino acids and has the highest protein content (around 44-50 percent) compared to all other oilseed meals.[23] These qualities make it a better feed ingredient for chicken in comparison to cottonseed.[24] Due to this limitation, the growth in poultry has not translated into increased use of locally produced, and relatively cheaper, cottonseed meal.

According to Pakistan Poultry Association (PPA) estimates for 2015-16, approximately 9.5 million tons of poultry feed was produced. [25] Of this about 20-30 percent comprised of oilseed meal the composition of which depends on price variances and various dietary factors.[26] This amounts to 2 to 2.8 million tonnes of meal consumption by

[21] Formerly Pakistan Oilseed Development Board (PODB)
[22] USDA dataset shows that approximately 100 percent of oilseed meal in Pakistan are used in feed.
[23] D. L. Hard (2004). "Innovative Developments in the Production and Delivery of Alternative Protein Sources", *Expert Consultation and Workshop on Protein Sources for Animal Feed Industry*. Rome: FAO
[24] S. Świątkiewicz, A. Arczewska-Włosek and D. Józefiak (2016). "The Use of Cottonseed Meal as a Protein Source for Poultry: An Updated Review", *World's Poultry Science Journal*, 72(3), 473-484.
[25] Pakistan Poultry Association (www.pakistanpoultrycentral.pk/poultry-status/, accessed on 28th Oct, 2021)
[26] Pakistan Poultry Association (www.pakistanpoultrycentral.pk/research-and-development/poultry-feed-ingredients-dont-get-confused/, accessed on 28th Oct, 2021)

the poultry industry for 2015-16, approximating to 52 to 73 percent of total meal consumed in the year.[27]

As the primary consumer, with compound average annual growth rate (CAGR) of 8.1 percent for poultry population for the last two decades, the poultry industry remains the leading driver of growing oilseed meal consumption. [28] The industry's growth can also be linked to the increase in per capita chicken consumption (**Figure S1.16**).

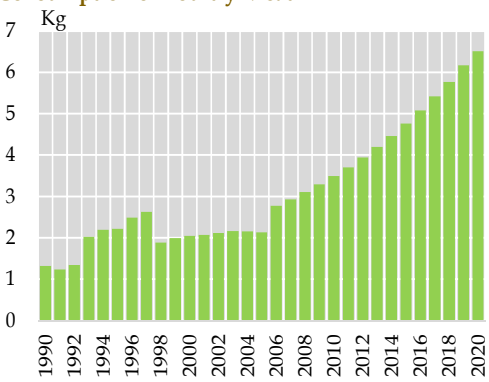
In addition to growing domestic demand for poultry, the poultry industry's modernization and advancement, as indicated by increased exports of chicken meat, has also influenced the demand mix of poultry feed with increased use of oilseed based meal corresponding with the take-off in chicken exports from 2010 onward **(Figure S1.17)**. According to USDA estimates, with modernization, meal inclusion rate of some poultry producers in Pakistan are even approaching the international standard of 35 percent.[29]

Further advancement and growth in the sector may lead to increased demand for soybean meal, in line with the meal consumption pattern of major poultry meat exporting countries. Top poultry exporters, regardless of whether or not they grow soybean crop in significant quantities, have sizable share of soybean meal in their overall consumption (**Figure S1.18**).

ii) Livestock & Aquaculture

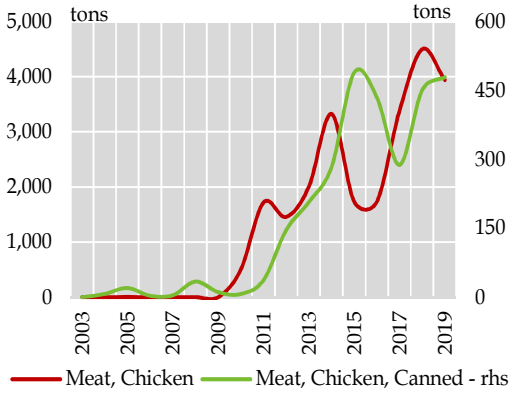
In addition to poultry, growth in per capita beef consumption and increase in population of other livestock animals[30] with a CAGR of 2.6 percent for FY02-21 period[31], are also contributors to the increased demand for oilseed meal in the country (**Figure S1.19**).

Pakistan's Annual Per Capita Consumption of Poultry Meat — **Figure S1.16**



Source: OECD-FAO Agriculture Outlook 2021

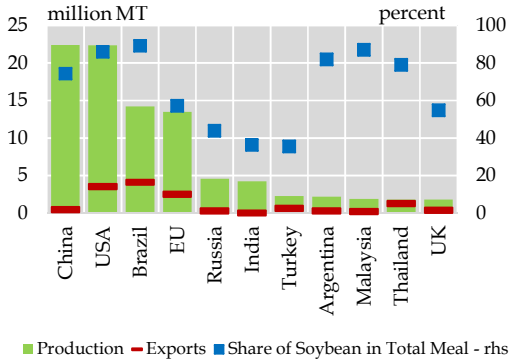
Pakistan's Chicken Exports — **Figure S1.17**



Source:Food and Agriculture Organization, UN

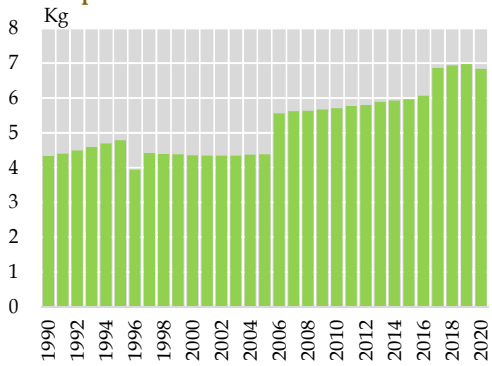
[27] The data for total meal consumed is from USDA data sets.
[28] Pakistan Economic Survey, 2021.
[29] USDA (2016). "*Oilseeds and Products Annual.*" GAIN Report NumberPK1607. Washington, D.C.: USDA
[30] Other livestock includes buffalo, cattle, goat, sheep, camels, asses, horses and mules.
[31] Pakistan Economic Survey, 2021

Use of Soybean Meal in Top Poultry Exporters and Producers **Figure S1.18**



Source: Agri Outlook (2021), OECD-FAO

Pakistan's Annual Per Capita Beef Consumption **Figure S1.19**



Source: OECD-FAO Agriculture Outlook 2021

This is because soybean meal is an important part of livestock feed since it is palatable for cows and has high amount of easily digestible energy.[32]

Currently, the livestock and dairy industry is still largely informal, with the dairy yields of the local breed being 6 to 8 times lower than the breeds in developed countries.[33] However, the livestock sector has started to formalize, with several formal sector dairy and meat brands surfacing over the last 10 years where investments in these sectors by leading local business groups is particularly noteworthy. Looking ahead, the federal government's plans to make Pakistan a hub for Halal meat exports, and focus on artificial insemination, production of proven sires, and other interventions to improve livestock breed aimed at dairy sector development.[34]

In addition, provincial governments are also making policy interventions to formalize and modernize meat and dairy industry (**Figure S1.20**).[35] These policies aim to improve animal nutrition and introduce modern breeding and livestock health care practices. In light of these livestock policy considerations, increasing imports of pure breeding cows and bovine semen (imported for the purpose of improving the genetics of local breeds) also point towards a gradual modernization of the livestock sector (**Figure S1.21**). These trends also point towards increasing usage of soybean meal in livestock feed in line with global feed practices.

Similarly, while aquaculture has historically remained a relatively small sector, the production of fish has also started to grow recently (**Figure S1.22**). However, the country has limited supply of fish meal and fish oil as feed for aquaculture, and going forward, any policy push towards higher production of fish and other aquaculture will

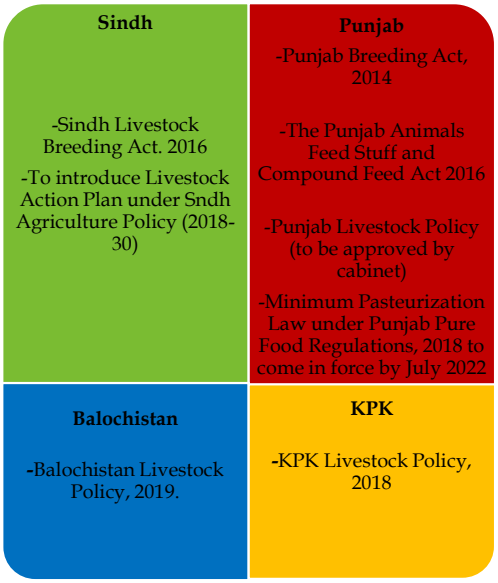
[32] Nutritional Value of Commonly Available Feed and Fodders in India (2012); Gujrat: National Dairy Development Board, India

[33] H. Shahid, O. Shafique and A. Shokat (2012). "Dairy Industry of Pakistan", *European Journal of Business and Management,* Vol 4, No.18.

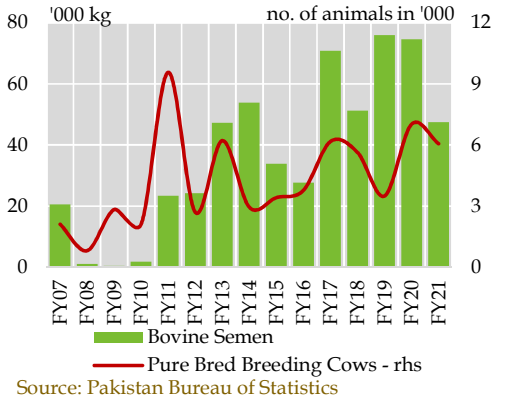
[34] Source: (a) Pakistan Halal Authority (www.pakistanhalalauthority.org.pk/AboutUs.aspx); (b) Planning Commission of Pakistan, 11th Five year plan (https://www.pc.gov.pk/web/yearplan)

[35] FAO (www.fao.org/pakistan/news/detail-events/en/c/1375087/)

Recent Laws and Regulations on Livestock **Figure S1.20**

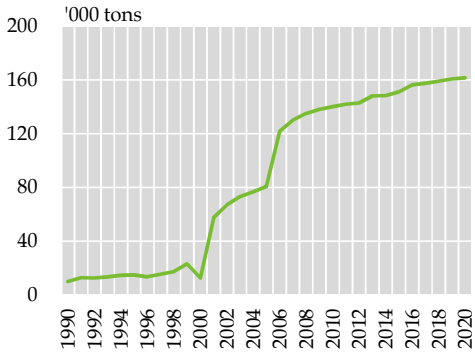


Pakistan's Livestock Imports **Figure S1.21**



Source: Pakistan Bureau of Statistics

Production of Fish from Aquaculture in Pakistan **Figure S1.22**



Source: Agricultural Outlook 2021, OECD-FAO

increase the demand for fish feed. This may in turn have to be fulfilled by soybean meal, where it is pertinent to note that Fisheries Development Board has been holding feeding trials with soybean as protein in feed.[36,37]

S1.3 Supply-Side Factors

Over the last six decades, the government has planned, and rolled out various types of programs and initiatives to increase production of oilseed crops in the country. Starting from the first 5-year plan to the most recent one, the importance of increasing oilseeds crop production has been recognized both to reduce import bill, and to improve human and animal nutrition – the latter aimed at increasing livestock productivity.[38] Whilst most proposed measures have revolved around sunflower and rapeseed/canola, soybean has also featured in the plans since 1960s, whereas oil palm plantations have only recently garnered attention (**Table S1.1**).

[36] P. Patil, D. Kaczan, J. Roberts, R. Jabeen, B. Roberts, J. Barbosa, and S. Zuberi (2018). *Revitalizing Pakistan's Fisheries: Options for Sustainable Development.* Washington, D.C.: WB.
[37] MNFSR
[38] Planning Commission of Pakistan, various five year plans (www.pc.gov.pk/web/yearplan)

Oilseeds in Pakistan's Five Year Plans **Table S1.1**

5-year plans	Actions/Strategies
1st: 1955-60	Expanded program to develop suitable varieties of soybean in East & West Pakistan. Emphasis on high yielding varieties of ground nut, rapeseed, linseed & castor.
2nd: 1960-65	Recommends trials to investigate possibilities of growing soybean.
3rd: 1965-70	No mention of oil seeds.
4th : 1970-75	Notes that oilseeds can also be used to fortify existing food by creating food-grain flours. Proposes policies & programs for implementation of evolution, acclimatization, and introduction of high yielding varieties of both existing and new oilseed crops. Recommends support price for soybean. Targets 79% production increase in non-cotton oilseeds over plan period.
5th : 1978-83	Defines long-term objective: contain vegetable oil imports. Increase in cultivation area of oilseed crops and rigorous breeding programs improved variety of seeds for oilseed crops. Prioritized research work on sunflower, soybean, and safflower. First time support price announced for soybean & sunflower. Targets 60% production increase in non-cotton oilseeds over plan period.
6th : 1983-88	Notes difficulty in bringing reforms in oilseed crops. Highlights that soybean provides most promising potential for efficient growth of poultry & livestock. Major emphasis on rapid expansion of oilseed crops for human & animal consumption. Crash program for increased output of edible oil seeds with heavy emphasis on soybean crop. Link farmers with National Commodity Board.
7th : 1988-93	Notes that previous plan failed to improve production of oilseed crops due to absence of comprehensive oilseed project. Proposes incentives to farmers in the form of assured prices and financial/technical assistance. Accelerate research on high yielding variety.
8th : 1993-98	Notes that previous plans did not result in significant improvement in oilseed. Targets breakthrough in oilseeds & doubling of production.
Medium Term Development Framework 2005-10	Targets 50% growth in domestic oilseed production, through: (a) high yielding varieties and improved research/extension services for sunflower/canola; and (b) increasing area under cultivation, such as replacing late sown wheat with sunflower. Large scale plantation of oil palm in coastal areas of Sindh & Balochistan also proposed along with olive in KP & other suitable areas.
11th: 2013-18	Proposes measures to promote olive. Recommends launch of program on research, extension & increased production of soybean. Targets 26% growth in rapeseed and 148% increase in sunflower. Mentions that efforts to be made on palm cultivation but no plans proposed.

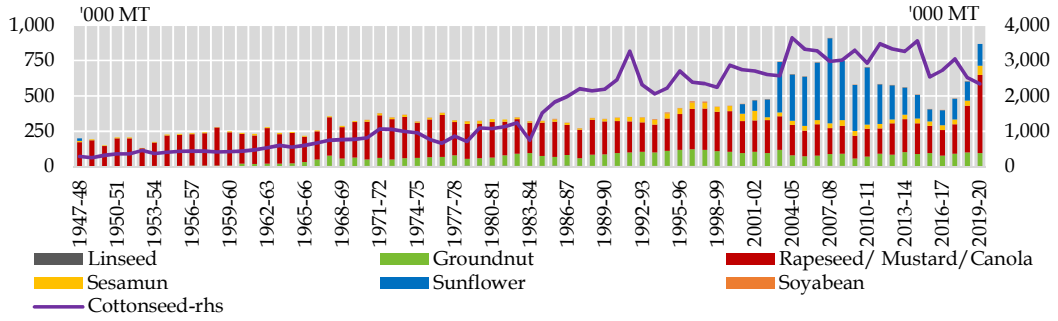
Source: Five Year Plans, Planning Commission, Ministry of Planning Development and Reforms

However, despite various measures recommended in the five years plans, the National Commission on Agriculture, 1988, noted that cultivation of oilseed crops in the country had stagnated in the first four decades since 1947, in sharp contrast to the rest of agriculture sector.[39] The situation has not improved since then. Production of both traditional and non-traditional oilseeds crops has not increased as per the targets set out in the various plans; whereas yields are also weak in comparison to other oilseed producing countries (**Figure S1.23 a,b** and **S1.24**).[40] For instance, in 1989, the government started a 7-year National Oilseed Development Project for the promotion of oilseeds. However, the project faced bottlenecks, such as inadequate seed supply and procurement problems, because

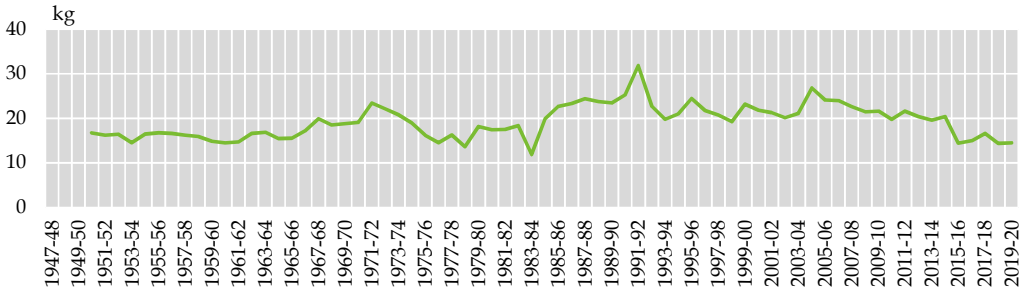
[39] Ministry of Food & Agriculture, 1988, Government of Pakistan, Report of the National Commission on Agriculture,

[40] A traditional crop is an indigenous species native to a specific region or one that was introduced a long time ago and, due to long use, has naturalized and become part of the culture of a community (Maundu, 1997)." Jane Muthoni & D. O. Nyamongo (2010), *Traditional Food Crops and Their Role in Food and Nutritional Security in Kenya*, Journal of Agricultural & Food Information, 11:1, 36-50

Historical Trend in Production of Different Oilseeds in Pakistan **Figure S1.23a**



Historical Trend in Per Capita Availability of Domestic Oilseeds **Figure S1.23b**



Source: Agriculture Statistics of Pakistan , MNFS&R

of which area and production targets could not be met.[41]

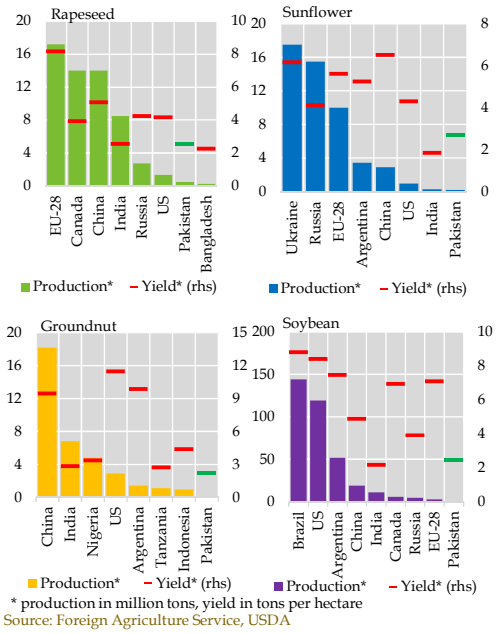
Among the traditional oilseed crops, including cotton, rapeseed, groundnut, sesame, castor and linseed, cotton and rapeseed are the major crops used in edible oil and oilseed meal production. Cotton, being primarily a fiber crop for textile, has the largest area under cultivation among crops that contribute to domestic edible oil production. Accordingly, cottonseed is the biggest contributor to domestic production of edible oil, despite having an oil extraction rate of only 16 percent.

Compared to cottonseed, other locally produced oilseeds have smaller shares in domestic production of edible oil and meals. However, since cotton cultivation has been on a secular decline, the contribution of cottonseed oil to total domestic edible oil consumption has fallen to 8.7 percent in 2020 from 17.2 percent 20 years ago.[42] Similarly, its share in meal produced from domestic oilseed crops dropped to 79 percent in 2020 from 88 percent in 2000, as per USDA data.

[41] Planning Commission of Pakistan, (2020), Rapeseed & Mustard Cluster Feasibility and Transformation Study

[42] Several reasons account for fall in cotton cultivation, including growing farmer preference for sugarcane, pest attacks, and low-quality seeds. For more details, related to decline in acreage and yield of cotton, see the SBP's FY20 and FY21 Annual Reports on the State of Pakistan's Economy.

Cross-Country Comparison of Production and Yield of Major Producers of Edible Oil Crops **Figure S1.24**



* production in million tons, yield in tons per hectare

Source: Foreign Agriculture Service, USDA

Meanwhile, despite having higher oil extraction rates of 42 percent and meal extraction rate of 58 percent, rapeseed's area under cultivation had gradually declined between 1967 and 2016.[43] In recent years, rapeseed's cultivar called Canola is being encouraged in Punjab through a cash subsidy package introduced in FY18,[44] as a result of which acreage and production more than doubled between FY18 and FY19.[45] However, despite these recent positive developments in rapeseed/canola, the area under cultivation of these crops is still small, and edible oil from combined domestic production of rapeseed/canola met only 4 percent of domestic edible oil demand in 2020, as per USDA data.

Compared to cottonseed and rapeseed, groundnut (peanut) and sesame have had much smaller area under cultivation and production in Pakistan. Even though both these crops are classified as oilseeds, they are not cultivated for producing edible oil and meals in Pakistan and in many countries around the world. Instead, their oilseeds are consumed in raw form.

Groundnuts are mostly consumed as roasted peanuts and in confectionary items, with negligible contribution to commercial edible oil production. Moreover, while groundnuts have a high oil extraction rate of 43-55 percent, its oil cannot compete with other edible oil products, as commercial production is not financially feasible due to high prices of groundnuts.[46] Similarly, while sesame also contains 50-60 percent oil and 22 percent protein, its seeds are mostly used in confectionary items.[47]

Among non-traditional crops, three non-traditional oilseed crops - namely sunflower, soybean and safflower – were promoted following the green revolution in Pakistan in 1960s. Of these, safflower gained farmers interest, whereas soybeans cultivation

[43] PS&D oilseeds dataset, USDA

[44] USDA (2018). *Pakistan Oilseeds Annual Report* Washington D.C.: USDA

[45] MNFSR (2019). *Agriculture Statistics of Pakistan 2018-19*. Islamabad: MNFSR

[46] Ayub Agricultural Research Institute, Faisalabad, Government of Punjab (www.aari.punjab.gov.pk/varieties_groundnut); Pakistan Agriculture Research Council and www.parc.gov.pk/index.php/en/csi/137-narc/crop-sciences-institue/728-groundnut)

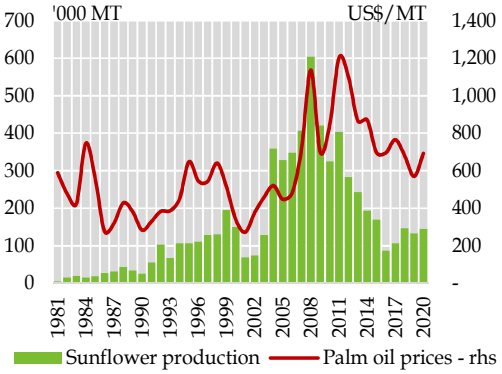
[47] Pakistan Agriculture Research Council (www.parc.gov.pk/index.php/en/csi/137-narc/crop-sciences-institue/727-sesame)

remained restricted to small acreage.[48] Owing to negligible production the combined contribution of these crops to domestic edible oil and meal consumption was close to nil in 2019.[49]

Sunflower, however, was relatively successful and was able to gain area under cultivation. It currently stands as the third highest in acreage and production among all crops that contribute to domestic edible oil production in Pakistan, and second biggest domestic oilseed crop. While sunflower also has high meal extraction ratio of 42 percent,[50] the meal is not particularly nutritious for feed and hence has little demand from feed industry.

While sunflower production remained weak since its introduction, it rose for a brief period from 2001 onward, when international palm oil prices surged, and All Pakistan Solvent Extractors' Association (APSEA) nearly doubled its procurement price to incentivize farmers. However, as international palm oil prices started falling, and edible oil producers shifted back to palm, sunflowers production started tapering off due to reduced acreage (**Figure S1.25**).[51] Currently, oil produced from domestically cultivated sunflower seed contributes only about 1 percent of the total domestic edible oil consumption in 2020, compared to its highest ever share of 7.5 percent in 2008.[52]

Trend in Sunflower Cultivation and International Palm Oil Prices **Figure S1.25**



Source: USDA and World Bank

Overarching challenges to oilseed production in Pakistan

Several factors are behind low production of oilseeds in Pakistan, the fundamental reason of which is the absence of a consistently implemented oilseed policy. This manifests itself in several ways, such as limited research (including on seed and soil) too thinly spread over a large number of institutes; deficiencies in agriculture extension; marketing and procurement challenges leading to weak linkages in value chain; and inefficient oil extraction in villages and small towns. For instance, the absence of support prices and efficient crop marketing and value chain in the case of oilseeds impacts in two ways. At the end, farmers are not incentivized to grow oilseeds, and at the other end middleman have been found to exploit oilseed farmers, such as sunflower, to

[48] M. Aftab, T. Mahmood and H.S Mustafa (2021). *Prospects of Oilseed Crops in Pakistan*. Faisalabad: AARI, Government of Punjab.
[49] According to USDA, sunflower and soybean contributed 11.2 percent to overall edible oil consumption in 2019.
[50] Source: Production, Supply, and Distribution PS&D oilseeds dataset, USDA
[51] Economic Survey of Pakistan 2007-08, 2014-15, and 2015-16
[52] Source: Production, Supply, and Distribution PS&D oilseeds dataset, USDA

paying low price for their produce, making discretionary deductions and delaying payments.[53]

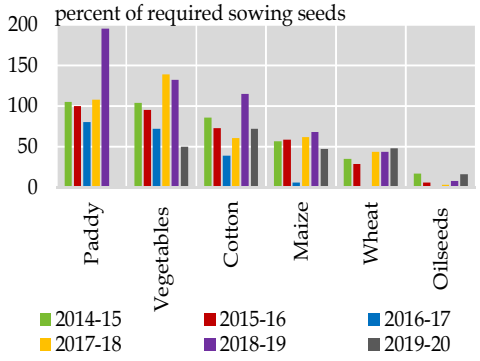
In addition, low farmer profitability amid absence of consistent support price policy for oilseeds and falling prices of palm oil imports have also contributed to falling oilseed production. Lack of policy focus also manifests as limited seed availability, both in terms of varieties suitable to local environment, and the quality seeds available at affordable prices to meet sowing requirements for optimal productivity[54] (**Figure S1.26**).

In addition, there are other constraints to best farming practices, such as critical shortage of oilseed-specific planting, harvesting and threshing machinery, and non-adoption of other recommended production technology.

For instance, in the case of sunflower, use of sub-optimal inputs, such as unbalanced use of fertilizer and cultivation on marginal lands also led to yield decline at a time when falling palm oil prices was leading to lower area under cultivation.[55]

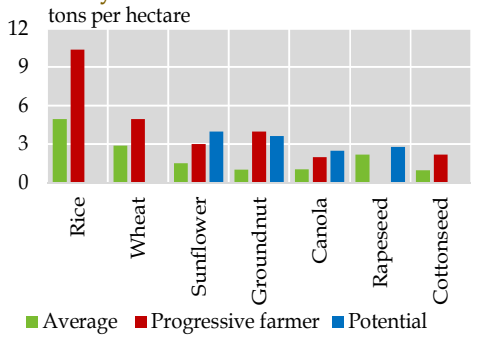
These factors have prevented farmers from achieving the yield potential of oilseeds as tested in trials by various agriculture institutes and the yields achieved by progressive farmers in Pakistan (**Figure S1.27**). Moreover, since different oilseeds compete for land with other crops that are important for food grain sufficiency and exports, the failure to achieve potential yield in major crops present a challenge to oilseeds, as lesser land is available for oilseeds (**Table S1.2**).

Availability of Oilseed and Major Crop Seeds **Figure S1.26**



Source: Federal Seed Certification & Registration Dept.

Average yields achieved compared to progressive farmers' yields **Figure S1.27**



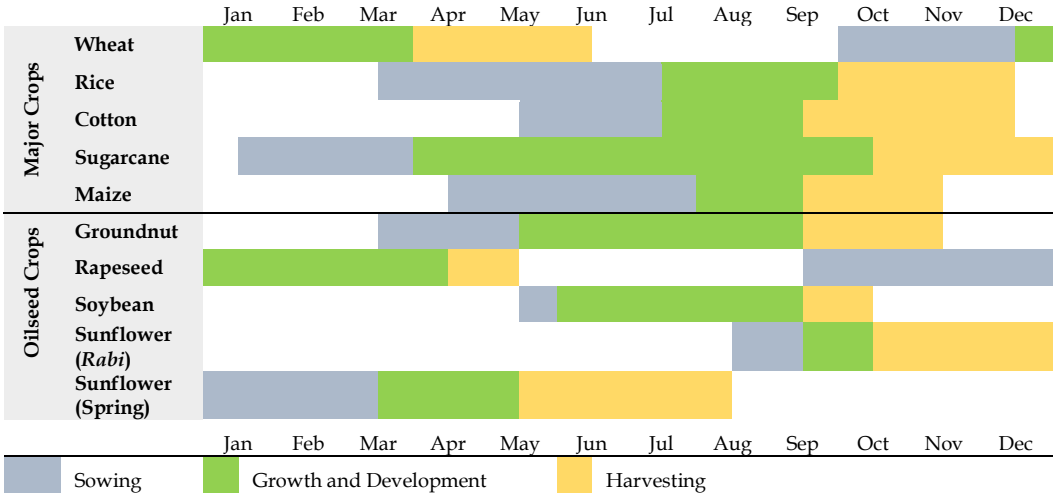
Source: PODB, PARC and Planning Commission

[53] Badar H et al, 2002, Production and Marketing Constraints Limiting Sunflower Production in Punjab (Pakistan), International Journal of Agriculture & Biology.

[54] Source: (a) M. Aftab, T. Mahmood and H.S Mustafa (2021). *Prospects of Oilseed Crops in Pakistan*. Faisalabad: AARI, Government of Punjab; (b) Ministry of Food and Agriculture (1988). *Report of the National Commission on Agriculture* Islamabad: Ministry of Food and Agriculture; (c) Planning Commission of Pakistan (2020). *Rapeseed & Mustard Cluster Feasibility and Transformation Study* Islamabad: Planning Commission of Pakistan

[55] *Ibid*

Crop Calendar of Major Crops and Oilseed Crops **Table S1.2**



Source: National Institute Of Genomics and Advanced Bio-Technology, NARC

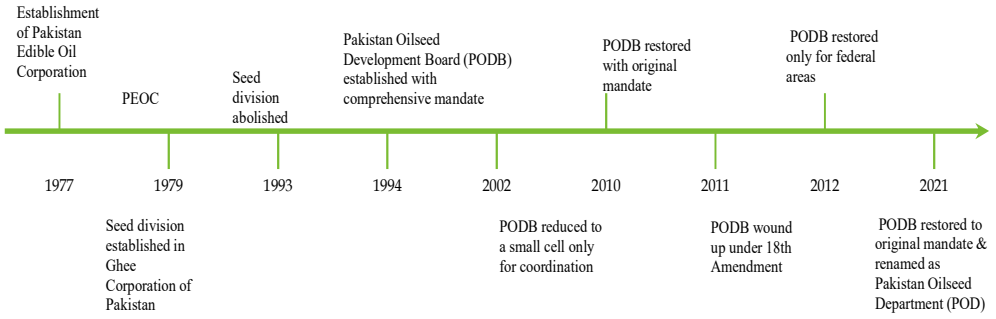
The consistent lack of policy focus on oilseed stems from institutional challenges. The first institution tasked with the development of oilseed crops was Pakistan Edible Oil Corporation (PEOC); which was setup in 1977 but dissolved after two years of spadework. It was replaced by the Seed Division established in Ghee Corporation of Pakistan. The division was abolished in 1993. In 1994, Pakistan Oilseed Development Board (PODB) was set up with a comprehensive mandate to increase oilseed production. After a series of suspension, closure, reduction in mandate[56], and reactivation since 1994, the PODB was restored to its previous status in June 2021, under the new name of Pakistan Oilseed Department (**Figure S1.28**).[57] However, since the 18th Amendment, little support exists to provinces from POD whereas provinces do not have oilseed specific institutions.[58]

S1.4 Prospects of growing palm & soybean in Pakistan

As discussed earlier, Pakistan's growing imports of palm oil and soybean seeds is in line with global consumption pattern where reliance on these two commodities has grown manifold to produce edible oil and oilseed meal purposes. However, so far policy focus on both commodities is lacking.

[56] The mandate included drafting policies, designing projects, raising farmer awareness, encouraging private sector collaboration, training human resources and collaborating with various federal and provincial agriculture departments.
[57] M. Aftab, T. Mahmood and H.S Mustafa (2021). *Prospects of Oilseed Crops in Pakistan*. Faisalabad: AARI, Government of Punjab, and Pakistan Oilseed Department (formerly PODB)
[58] Planning Commission of Pakistan, (2020), Rapeseed & Mustard Cluster Feasibility and Transformation Study

Brief Institutional History of Oilseed Development in Pakistan **Figure S1.28**



Source: M. Aftab et al., (2021), 'Prospects of Oilseed Crop in Pakistan (2nd Edition)', Ayub Agricultural Research Institute and PODB

This section explores the prospects of growing these crops in the country, drawing on surveys, pilot projects and research trials for these crops in Pakistan in the past.

Oil Palm Plantation[59]

To assess the potential of oil palm cultivation in Pakistan, in 1994 the National Agriculture Research Council (NARC) surveyed 3.86 million hectares in Sindh, of which most were coastal districts. The survey assessed the potential on a variety of parameters, including humidity, soil condition, water availability, and existing land usage. The results classified the surveyed area under five main categories, ranging from "well suited" to "not suited" **(Table S1.3).** About 1.65 million hectares were considered suitable for plant production under different degrees of suitability, and the rest of the surveyed area was not recommended.

In light of NARC's survey, the PODB initiated oil palm cultivation in 1998 as pilot project, and by 2007 an estimated 2,200 acres of oil palm was planted in private, public and forest farms located in various areas in Sindh and Balochistan. However, after initial years of promising growth, the pilot project faced various types of management issues and operational bottlenecks. In some cases, the plantations were not maintained or were otherwise neglected; in other areas, seeds were not managed properly at pre-nursery stage. There were also incidents of inadequate fertilizer usage, inefficient water distribution, and attacks by rats. On the whole, the project was not closely monitored, partly because of institutional challenges such as those discussed in previous section.

As a result of these farm management issues, the pilot project was not successful in testing whether or not the theoretical potential

[59] This sub-section is based on discussions with various stakeholders, and draws on four key documents; (a) A. Rashid, M.M. Nizami (1994). *Cultivation of Oil Palm and Coconut in Coastal Areas of Sindh Province.* Islamabad: NARC; (b) A.G. Esnan (2007). *Visit Report on Oil Palm Cultivation in Sindh Province*. Selangor: Malaysian Palm Oil Board; (c) Sindh Coastal Development Authority (2021*). Official presentation on Oil Palm Plantation in the Coastal Zone of Sindh*. Karachi: SCDA; (d) Indian Institute of Palm Oil Research (2015). *Vision 2050* New Delhi: Indian Council of Agricultural Research.

Definition of Suitability Classes (Area Suitability for Palm Plantation in Sindh) **Table S1.3**

	Well suited	Moderately well suited	Moderately suitable	Marginally suited	Not suited
Ratings assigned	4	3	2	1	0
Yield In case of traditional management	High	Moderate to high	Moderate to low	Marginally suited	Little
Soil conditions (physical and chemical characteristics)	Highly Favorable	Favorable	Unfavorable	Unfavorable	Highly unsuited
Fertility level	High	Moderately high	Moderate	Low	Severely low
Drainage	Highly Favorable	Favorable	Unfavorable	Unfavorable	Severely low
Climatic conditions	Highly Favorable	Favorable	Limiting factor	Unfavorable	Severely low
Response to good management	High	Well	Fair	Low	Poor
Yield in case of modern management	Very high	High	Moderate	Low	Poor
Suitable area *(hectares in mn)*	0.00	0.10	0.46	1.09	2.22
Memo: Total area surveyed 3.86 million hectares					

Source: Rashid and Nizami (1994). "Cultivation of Oil Palm and Coconut in Coastal Areas of Sindh Province", PARC

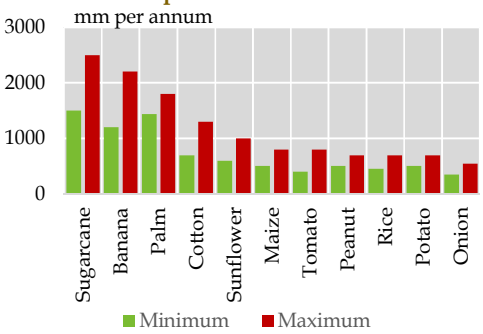
identified by the NARC survey existed in reality. Following their visit to various plantations in Sindh and Balochistan in 2007, the Malaysian Palm Oil Board (MPOB) noted that most trees had slow growth with very low fruiting yield. After making observations of various issues in farm management, the MPOB then concluded that oil palm cultivation in Pakistan was not proven as a commercial crop, using the then existing planting materials and technologies to deal with climate and soil constraints.[60]

However, recent efforts to revive oil palm by Sindh Coastal Development Authority (SCDA) show encouraging results, albeit the SCDA's pilot is on much smaller scale of only 50 acres. The SCDA began the pilot project in 2017, and as of June 2021, the authority has rehabilitated palm plantation on 30 acres and replanted trees in 20 acres. Based on this pilot, the SCDA assesses oil palm as highly successful with fruiting at par with plantations in Malaysia,[61] subject to fulfilment of certain conditions, such as good farm management, and sufficient irrigated water supply, which is a crucial factor in the assessment of palm potential in Pakistan.

Compared to high yielding oil palm regions in Malaysia and Indonesia, which receive an average rainfall of 2,000 mm on annual basis, coastal areas in Pakistan receive 32.1 mm per year on average.[62] However, since the per

[60] Esnan, A.G, 2007, Visit Report on Oil Palm Cultivation in Sindh Province, Malaysian Palm Oil Board.
[61] The pilot's results have also been acknowledged by Malaysian and Chinese experts. Source: Sindh Coastal Development Authority, 2021, Government of Sindh, official presentation on Oilpalm Plantation in the Coastal Zone of Sindh
[62] Source: Salma, S et al.,(2012), ' Rainfall Trends in Different Climate Zones of Pakistan', Pakistan Journal of Meteorology, Vol. 9, Issue 17.

Water Requirement of Different Crops **Figure S1.29**



Source: Irrigation Water Management: Irrigation Water Needs, FAO

acre water requirement of oil palm is lower than that of sugarcane and banana plantations currently grown in Sindh's coastal belt (**Figure S1.29**), the SCDA suggests relying on irrigated water to explore the potential of oil palm plantation. Irrigated water supply is also being harnessed to expand oil palm plantations in India.[63]

In addition to oil palm's potential along the over 200-kilometer coastline in Sindh, up to 500 kilometers of coastline in Balochistan also offers potential for oil palm plantation subject to availability of water through canal system.[64] However, detailed scientific studies with successful pilots to assess the potential in Balochistan have not been conducted. At the same time, the technical assessment for land suitability in Sindh is also outdated. The last assessment was done in 1994 by the NARC, which noted that progress in agriculture techniques (such as introduction of new more resistant varieties in respect of climate and soil) or change in environment (such as water drainage, irrigation water) would necessitate reassessment of land suitability every 10-15 years.[65]

In the absence of updated scientific surveys and pilots, domestic oil palm planation does not seem to have potential in the short to medium term. However, in recognition of Pakistan's growing demand for palm oil in the long term, there is a need for fresh comprehensive technical assessments and surveys of potential areas in consultation with international oil palm.

If results from fresh technical surveys are encouraging, then palm plantation may be piloted at a large scale. However, in order to ensure that pilot projects are able to test the theoretical potential, good farm management would be critical. In addition, a strong palm-specific institutional set up may be needed to work in close collaboration with leading private sector investors, in line with the palm introduction and development strategy adopted by Malaysia and Indonesia (**Box S1.1**). To that end, given China's growing overseas investments in agriculture — including palm — a government-to-government or government-to-business partnership with China may be explored under agriculture collaboration of China Pakistan Economic Corridor, for fresh technical assessment and for large-scale pilot plantations.[66]

[63] Indian Institute of Palm Oil Research, 2015, Vision 2050, Indian Council of Agricultural Research
[64] M. Aftab, T. Mahmood and H.S Mustafa (2021). *Prospects of Oilseed Crops in Pakistan*. Faisalabad: AARI, Government of Punjab
[65] Rashid A, Nizami M.M. 1994; Cultivation of Oilpalm and Coconut in Coastal Areas of Sindh Province, National Agriculture Research Centre
[66] Source: (a) G. Elizabeth and F. Gale (2018), 'China's Foreign Agriculture Investments', EIB-192,

Box S1.1: Brief history of development of oil palm in Malaysia, Indonesia, and India

Oil palm does not have a long history of being a commercially successful native crop in Southeast Asia and South Asia. It was introduced to Malaysia and Indonesia in late 19th and early 20th century,[a] by colonial governments and western companies who brought various palm varieties from West and Central Africa, which at the time were world's leading palm oil exporter. Since the development of palm is a long-term project with long gestation period, it took various types of consistent government-led efforts with private sector involvement in Malaysia and Indonesia to become dominant producers,[b] India has recently started following the same trajectory.

Malaysia[c]

Palm plantations in Malaysia increased in the 1920s as an alternative to rubber plants. However, it wasn't until the government undertook concerted efforts that the country emerged as a leader in palm oil. In 1956, the government formed the Federal Land Development Authority (FELDA) to distribute lands to farmers; connect them with international markets; transform smallholdings into bigger clusters; and incentivize foreign investors and researchers to invest in oil palm. In 1968, the government created the Malaysian Agriculture Research and Development Institute to link Tropical Production Institute in London with local palm researchers and support FELDA in achieving its goals. In addition, companies from Malaysia also actively hired scientists and experts from West Africa to facilitate its transition as a major palm producer.

Indonesia[d]

After some initial success between 1916 to 1938, Indonesia's palm plantations could not grow due to poor farm management. However, with the shift in ownership of farms from the government to semi-public and private entities, production started to rise. In 1978, the government introduced the Nuclear Estate Scheme, with company farms and mills in the centre and periphery farms cultivated by small growers. Companies were responsible for developing farm infrastructure, while the government funded food and housing expenses in the initial years. Also, farmers' credit cooperatives were formed to improve growers to finance at lower cost access and cost of bank credit. In recent years, the government's role in the sector has decreased to providing enabling regulations with private sector taking the lead.

The start of palm cultivation in India[e]

To lessen its palm oil imports, Indian government has been promoting palm cultivation as an irrigated crop by preparing strategies and offering funding for plantation and irrigation with research support from the Indian Institute of Oil Palm Research. Since 1991-92, India's central government has made various interventions at frequent intervals under public and public-private partnership (PPP) modes, each with higher goals for research and production. In 2014-15, a National Mission on Oilseed and Oil Palm was constituted to exclusively focus on increasing the productivity and cultivation of oil palm, under joint funding by central and state governments. Of the 1.93 million hectares currently identified by Indian government as suitable for oil palm cultivation, these measures have resulted in an increase in area under palm cultivation from 8,585 ha in 1991-92 to 0.32 million ha in 2019 in 15 Indian states. Currently, India is aiming to strengthen public-private partnership to increase oil palm production, including in areas of

Economic Research Service, USDA; (b) D. Freeman, et al (2008). Holslag, J. (2009). China's foreign farming policy: can land provide security? *Asia Paper, Vol. 3 (9)* Brussel: Brussel Institute of Contemporary Studies, Universiteit Brussel.

refinement and commercial exploitation of tissue culture technology for better palm varieties; establishment of new seed gardens and processing mills.

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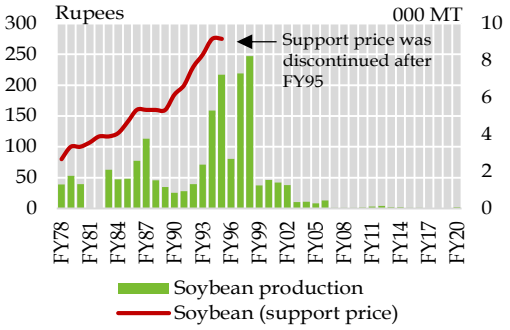
[a] Malaysian Palm Oil Board (www.palmoilworld.org/about_malaysian-industry.html)
[b] Production, Supply and Distribution data from USDA
[c] V. Giacomin (2018). "The Transformation Of The Global Palm Oil Cluster: Dynamics Of Cluster Competition Between Africa And Southeast Asia (c.1900–1970)" *Journal of Global History,* 13 pp. 374-398.
[d] A. Baudoin, P. Bosc, C. Bessou, and P. Levang (2017). Review of the Diversity of Palm Oil Production Systems in Indonesia: Case Study of Two Provinces: Riau and Jambi. Working Paper 219. Bogor, Indonesia: Center for International Forestry Research; and J. F. Mccarthy (2009). "Policy Narratives, Landholder Engagement, and Oil Palm Expansion on the Malaysian and Indonesian Frontiers", *The Geographical Journal*, Vol. 175, No. 2, pp. 112–123.
[e] Indian Institute of Oil Palm Research (2019). *Annual Report.* New Delhi: Indian Institute of Oil Palm Research, Indian Council of Agriculture Research; Department of Agriculture, Cooperation and Farmers Welfare (2016). *Status Paper on Oil Palm*. New Delhi: Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare.; National Food Security Mission (2018). Brief Note on Oil Palm. New Delhi: National Food Security Mission.

These efforts will require long-term planning and execution because if fresh scientific surveys prove oil palm's potential in Pakistan, then even in the most optimistic scenario, palm plantation may not start yielding adequate quantities of oil before 10-15 years. This is because research, trials, setting up of institutions, project planning etc. is a long-term endeavor requiring consistent efforts, where finding the most suitable variety alone can take about 10 years. Palm tree itself, whilst a perennial crop, usually attains maximum fruiting in 4th to 7th year onward, and continues to give fruiting up to 15-30 years depending on a variety of factors. [67]

Soybean Support Price and Production in Pakistan **Figure S1.30**



Source: PBS and Planning Commission of Pakistan

Soybean

While soybean had been informally cultivated in the region previously, the crop was formally introduced in 1969 onwards when various varieties were approved for commercial cultivation. Although policy measures for soybean crop had been recommended since the first five-year plan in 1955, support price for the crop was not announced until 1978. However, despite the introduction of support price, which was discontinued after FY95, the crop's progress remained weak, with highest ever production being limited to only 8,200 metric tons (**Figure S1.30**). This was due to the

[67] Source*: (a)* H. Herdis, H. A. Negoro, N. Rusdayanti and S. Shara (2020). "Palm Oil Plantation and Cultivation: Prosperity and Productivity of Smallholders", *Open Agriculture,* vol. 5, no. 1, pp. 617-630; (b) Indian Institute of Palm Oil Research, 2015, Vision 2050, Indian Council of Agricultural Research

absence of coherent research and production policy for soybean vis-à-vis farmer awareness, non-existent value chain, seed development, production technology and procurement policy.[68]

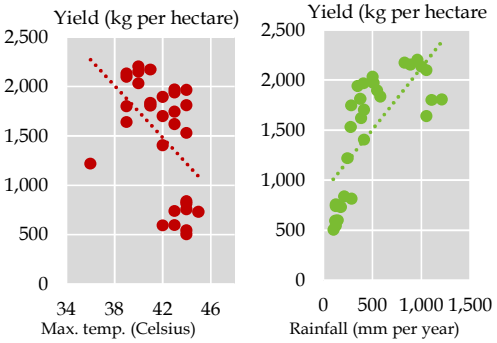
Following the increase in demand for soybean meal by feed industry, the pace of research has recently started to pick up, where the biggest crop-specific challenge is the availability of sowing seeds suitable in Pakistan's climatic conditions.

Soybean is mainly grown in mild climatic conditions with frequent rainfalls and requires low pH soils. On-farm studies carried out in different parts of the Punjab province shows negative relationship between crop yield and temperature, and positive relationship between yield and rainfall (**Figure S1.31**). Cross-country comparison also shows that soybean thrives in milder climate regions.[69] This warrants development of seed varieties that are better suited to the climatic conditions of country's major cultivable regions, particularly south Punjab and Sindh.

In light of this, a heat tolerant variety called Faisal Soybean has been developed and piloted by Oil Research Institute (ORI) Faisalabad in 2018-19. The pilot divided the province of Punjab in to five broader geographical zones, categorized as Eastern North Punjab, Western North Punjab, Central Punjab, Eastern South Punjab and Western South Punjab. While the pilot's results in Eastern and Western South Punjab were not encouraging, those in north and central Punjab are promising (**Figure S1.32**).

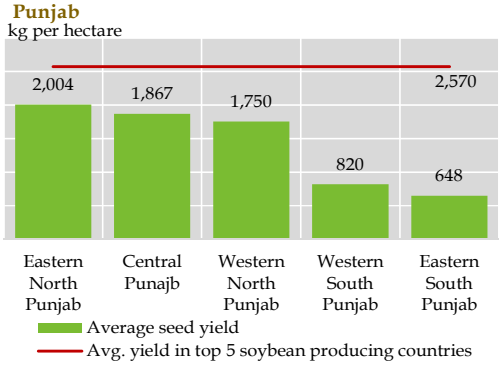
The tested variety in these regions is a 120-day crop, as against 180-day crops in Brazil and the US, which will allow farmers to follow wheat-soybean-wheat cropping rotation in rainfed areas, and rice-soybean-rice or cotton-soybean-rice in irrigated

Correlation of Avg. Soybean Yield in Punjab w.r.t. Temperature and Rainfall **Figure S1.31**



Source: Ayub Agriculture Research Institute

Zone-wise Soybean Yield Achieved in Pilot Projects in Punjab **Figure S1.32**



Source: ARI (2021) and USDA

[68] Hafiz Saad et al., (2021), "Crop Diversification Through Soybean Cultivation in Punjab", Director of Oil Seeds, Ayub Agricultural Research Institute, Government of Punjab

[69] Even in neighboring India, 83 percent of soybean has been produced in milder climate regions of Madhya Pradesh and Maharashtra (Source: The Soybean Processors Association of India).

areas.[70] This is an important development because the previous locally developed varieties had longer duration and were difficult to fit into different cropping pattern.

In addition to above mentioned pilots, the NARC has recently developed a short duration variety (NARC-2020) that matures in 90 days with production potential up to 1000 kg per acre.[71] If marketed successfully, it could also help increase soybean production in the country.

The potential areas of Eastern North Punjab, Central Punjab and Western North Punjab identified by ORI have a total of around 9.5 million hectares (or 23.45 million acres)[72] under cultivation, where a variety of crops are currently grown in these areas including major crops (e.g. wheat and rice), and fruits (e.g. citrus).[73] Similarly, according to NARC's estimates (**Table S1.4**) about 1 million acres of cultivatable area in Pothwar region of Punjab, Khyber Pakhtunkhwa and Gilgit-Baltistan can be potentially used for growing the currently available varieties of soybean in the country, including inter-cropping with maize, which has been tested successfully even in semi-arid areas.[74]

This implies that in the medium term, at conservative estimates of 1 ton per acre grown at only 0.5 million acres out of total suitable areas identified by ORI and NARC, Pakistan can potentially grow 0.5 million tons, which is 20 percent of the country's FY21's soybean import quantity.[75] However, to realize this potential, the overarching challenges to oilseed crops discussed in previous sections would need to be addressed. Particular focus is needed to increase farmer awareness; introduce best farm management practices; efficient

Potential Area for Soybean Cultivation **Table S1.4**

Province	Area/Cropping System	Estimated Area Availability (thousand hectare)
Punjab	Rawalpindi division	202
	Riverine area (Mianwali, Bhakkar, Layyah, Muzaffargarh, D.G. Khan and Rajanpur)	1
Sindh	Lower Sindh (Thatha and Badin, Sangharh etc.)	20
Khyber Pakhtunkhwa and GB	Peshawar, Mardan, Malakand and Hazara Division and Tribal districts	202
Total		**426**

Source: Soybean Promotion for Reducing Soya meal and Edible Oil import in Pakistan, NARC, concept paper

[70] (a) M. Aftab, T. Mahmood and H.S Mustafa (2021). *Prospects of Oilseed Crops in Pakistan*. Faisalabad: AARI, Government of Punjab; (b) M. Amjad (2014). *Oilseed Crops of Pakistan.* Islamabad: Pakistan Agricultural Research Council

[71] Source: National Agricultural Research Council, 2021, Soybean Promotion for Reducing Soya meal and Edible Oil import in Pakistan, Concept Paper, unpublished

[72] Source: Land Utilization Statistics Annual Area by Division & Districts in The Punjab for the Year 2019-20, Crop Reporting Services, Government of Punjab

[73] ORI also recommends other areas to explore soybean potential, including Nawabshah, Hyderabad, Tharparkar and Thatta in Sindh; Mardan, Nowshera, Sawabi, Malakand, Swat, Mansehra and Kohistan in KPK, and Kalat and Khuzdar in Balcohistan

[74] Ali Raza, et al.,(2021), 'Land productivity and water use efficiency of maize-soybean strip intercropping systems in semi-arid areas: A case study in Punjab Province, Pakistan', Journal of Cleaner Production

[75] Memo: Pakistan's total soybean seed import in FY21 was 2.5 million tons

procurement mechanisms; and make oilseed cultivation a profitable endeavor for farmers and other stakeholders. In addition, the availability of desired quality and quantity of soybean's sowing seeds is critical to reap this potential since soybean requires much higher quantities of sowing seeds at the rate of 30-35 kilogram of per acre compared to 2-3 kg/acre in the case of sunflower and rapeseed/ canola.[76]

S1.5 Final Remarks

Pakistan's demand for edible oil more than doubled in the last two decades from 2 million tons in 2001 to 4.7 million tons in 2020. Similar growth was witnessed over the two decades preceding 2000. At this rate, the demand for oilseed can be expected to rise significantly over the next 20 years, driven by rising population, and modernization of poultry, livestock and aquaculture industries to cater to exports and to meet rising domestic meat consumption. Moreover, growth in per capita income can be expected to increase per capita consumption of both edible oil, and of poultry, livestock and aquaculture products. The latter, in turn, will drive the demand for oilseed meals, particularly soybean, whose demand had grown by 7.9 times between 2002 and 2020.[77]

In the short to medium term, a policy focus on increasing the production of canola and sunflower is necessary, and currently in the process of being rolled out. In Punjab, for instance, Oil Seed Promotion Initiative taken in FY18 revolves around preparing crop calendars for sunflower and canola, fixing district wise targets, trainings to master trainers of agriculture extension departments and private seed companies, and provision of subsidies.[78] Moreover, under the federal government's Agriculture Emergency Programme, a National Oilseed Enhancement Programme (NOEP) is in the process of being implemented in collaboration with provincial agriculture department with Pakistan Oilseed Department as execution agency.

Key measures planned under the five-year NOEP are: productivity enhancement of wheat, rice and sugarcane to vacate up to 3.25 million hectare of land for the cultivation of canola, sunflower and sesame; increasing the yield and area under acreage of cotton to produce 15 million bales, which will increase the supply of cottonseed oil; and increasing the yield of sunflower and canola. By achieving the target of 15 million bales in next five years, 0.459 million tons of cottonseed oil will be produced. Similarly, other cultivation related measures under the NOEP are expected to yield another 2.8 million tons of edible oil. This is expected to reduce import bill of edible oil by US$ 584 million.[79]

These initiatives are in line with the National Food Security Policy 2018, which had proposed reducing area under rice, sugarcane and other crops to increase production of oilseeds, pulses and

[76] M. Aftab, T. Mahmood and H.S Mustafa (2021). *Prospects of Oilseed Crops in Pakistan*. Faisalabad: AARI, Government of Punjab
[77] Production, Supply and Distribution datasets of USDA.
[78] M. Aftab, T. Mahmood and H.S Mustafa (2021). *Prospects of Oilseed Crops in Pakistan*. Faisalabad: AARI, Government of Punjab
[79] Source: (a) Pakistan Oilseed Development Board, 2019, Ministry of National Food Security and Research, National Oilseeds Enhancement Program, Umbrella PC-1 for Planning Commission of Pakistan; (b) Pakistan Oilseed Department (formerly PODB), 2021, official presentation on Oilseed situation in Pakistan

horticulture, and introducing support price for oilseeds to promote import substitution rather than subsidizing export of wheat and sugar.

Focus on canola and sunflower is an important solution for the short to medium term, considering the fact that sunflower and rapeseed/canola already have roots in the country. As discussed earlier, palm offers no potential in the short to medium term, whereas the ability to reap soybean's potential over the medium term hinges on a variety of factors, including availability of seed, farmer awareness and adequate procurement policy that prioritizes farmer profitability.

In addition to focusing on sunflower and rapeseed/canola production in the short to medium term, the government may also consider gradual implementation of import and demand management measures. These include customs duty on imported seed and oil, and taxes on ghee aimed at encouraging sourcing of domestic sunflower and rapeseed for edible oil production, albeit price prescriptions are understandably complex, especially when domestic production is unable to meet local demand. Efforts to increase nutritional awareness may also help in reducing overall edible oil consumption in cooking.

However, given Pakistan's rising demand outlook over next 20 years, investments to increase production of sunflower, canola and cottonseed oil should not be expected to contribute significantly to the country's needs in the long-term. The oil and protein yield per hectare of canola, sunflower and sesame are significantly lower than that of palm and soybean, which is an important consideration in light of scarcity of land, water and other resources. Accordingly, the production efficiency of oil palm and soybean have made these the most consumed crops in the world as both oils and meals. Over the long-term, therefore, there is an urgent need to invest in research, development, promotion, production and procurement mechanism for oil palm plantation and soybean crops.

The urgency for long-term planning stems from the fact that significant breakthroughs and sufficient production of newly introduced crops requires comprehensive planning and execution spreading over years across various aspects of farming. These aspects include research on seed and soil; seed availability; farmer awareness and profitability; agriculture extension; effective farm machinery; farm machinery; and establishment of efficient and reliable procurement and supply chain. In other words, any new crop has to be made successful to attract farmers' interest for long-term organic growth of the crop production.

Agriculture production policy depends on a variety of complex and interwoven factors. These include nutritional requirements; diverse agro-ecological zones and production systems; climate, soil, water and other sowing conditions; and dietary preferences, which are also affected by culture and history. These factors imply that no country can become completely self-sufficient in all agriculture commodities, nor can any country grow all the crops it consumes. While being cognizant of these factors, the realities of growing edible oil imports warrant concerted deliberations among federal and provincial governments, and related stakeholders from private and public sector to assess whether or not Pakistan has the potential of growing palm and soybean. If indeed there is potential to grow palm and soybean, then unlike attempts in the past, consistent policy and institutional support needs to be provided to make that transition successful.

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:

$$\text{Period average inflation } (\pi_{Ht}) = \left(\frac{\sum_{i=0}^{t-1} I_{t-i}}{\sum_{i=0}^{t-1} I_{t-12-i}} - 1 \right) \times 100$$

$$\text{YoY inflation } (\pi_{YoYt}) = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

$$\text{Monthly inflation } (\pi_{MoMt}) = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

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 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).

List of Acronyms

A

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
AJK	Azad Jammu and Kashmir
AMDR	Acceptable Micronutrient Distribution Ranges
AMIS	Agriculture Marketing Information Service
AML	Anti-Money Laundering
APCMA	All Pakistan Cement Manufacturers Association
APSEA	All Pakistan Solvent Extractors' Association
ASEAN	Association of South East Asian Nations
ATM	Automatic Teller Machine

B

bbl	Barrel
BCI	Business Confidence Index
BCS	Business Confidence Survey
BEOE	Bureau of Emigration and Overseas Employment
BISP	Benazir Income Support Program
BOI	Board of Investment
BoP	Balance of Payments
bps	Basis points

C

CAA	Civil Aviation Authority
CAB	Current Account Balance
CAD	Current Account Deficit
CBU	Completely Built Unit
CCI	Consumer Confidence Index
CCS	Consumer Confidence Survey
CDMP	Circular Debt Management Plan
CDNS	Central Directorate of National Savings
CFT	Combating the Financing of Terrorism
CIT	Corporate Income Tax
CKD	Completely Knocked Down
CNIC	Computerized National Identity Card
COVID	Corona Virus Disease

CPEC	China–Pakistan Economic Corridor
CPI	Consumer Price Index
CY	Calendar Year

D

DAP	Diammonium Phosphate
DPP	Department of Plant Protection
DNFBP	Designated Non-Financial Business and Professions
DSSI	Debt Service Suspension Initiative

E

ECC	Economic Coordination Committee
EFF	Extended Fund Facility
EFS	Export Finance Scheme
EM	Emerging Market
EPD	Exchange Policy Department
ESP	Economic Stimulus Package
EU	European Union
FAO	Food and Agriculture Organization
FAPMMEC	Food and Agricultural Product Markets Monitoring and Evaluation Committee

F

FATF	Financial Action Task Force
FBR	Federal Board of Revenue
FCA	Federal Committee on Agriculture
FDI	Foreign Direct Investment
FE-25	Foreign Exchange-25
FED	Federal Excise Duty
FELDA	Federal Land Development Authority
FMCG	Fast Moving Consumer Goods
FO	Furnace Oil
FPA	Fuel Price Adjustment
FPI	Foreign Portfolio Investment
FRDLA	Fiscal Responsibility and Debt Limitation Act
FRR	Fixed Rental Rate
FTA	Free Trade Agreement
FWO	Frontier Works Organization
FX	Foreign Exchange
FY	Fiscal Year

G

GAIN	Global Agricultural Information Network
GB	Gilgit-Baltistan
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GIDC	Gas Infrastructure Development Cess
GoP	Government of Pakistan

	GSM	Global System for Mobile
	GST	General Sales Tax
	GSTS	General Sales Tax on Services
H		
	H1	First Half
	H2	Second Half
	HIES	Household Integrated Economic Survey
	HS	Harmonized System
	HSD	High Speed Diesel
I		
	ICT	Information and Communications Technology
	IDA	International Development Association
	IDB	Islamic Development Bank
	IFEM	Inland Freight Equalization Margin
	IFI	International Financial Institution
	IGC	International Growth Centre
	INR	Indian Rupee
	IMF	International Monetary Fund
	IPPs	Independent Power Producers
	ISIC	International Standard Industrial Classification
	ITC	International Trade Center
K		
	KCR	Karachi Circular Railway
	KERO	Kerosene Oil
	KG	Kilogram
	KHI	Karachi
	KM	Kilometer
	KNOMAD	Global Knowledge Partnership on Migration and Development
	KP	Khyber Pakhtunkhwa
	KSA	Kingdom of Saudi Arabia
	KSE	Karachi Stock Exchange
	kWh	Kilowatt-hour
L		
	LDO	Light Diesel Oil
	LFS	Labor Force Survey
	LIBOR	London Inter-Bank Offered Rate
	LNG	Liquefied Natural Gas
	LPG	Liquefied Petroleum Gas
	LSM	Large scale manufacturing
	LT	Long-term
	LTFF	Long-term Financing Facility
M		
	mma	12 month moving average
	mmBtu	metric million British thermal unit

MMT	Million Metric Ton
MNFSR	Ministry of National Food Security and Research
MoC	Ministry of Commerce
MoF	Ministry of Finance
MoM	Month on Month
MPC	Monetary Policy Committee
MPOB	Malaysian Palm Oil Board
MRTBs	Market-related Treasury Bills
MT	Metric Ton
MTBs	Market Treasury Bills
MTN	Medium-Term Note
MVT	Motor Vehicle Tax
MW	Megawatt

N

NARC	National Agriculture Research Council
NDA	Net Domestic Assets
NDMA	National Disaster Management Authority
NEER	Nominal Effective Exchange Rate
NEPRA	National Electric Power Regulatory Authority
NFA	Net Foreign Assets
NFDC	National Fertilizer Development Center
NFNE	Non-food-non-energy
NGDS	Natural Gas Development Surcharge
NHA	National Highway Authority
NITB	National Information Technology Board
NLC	National Logistics Cell
NOEP	National Oilseed Enhancement Programme
NPL	Non-performing Loans
NPPO	National Plant Protection Organization
NSS	National Savings Scheme
NTC	National Tariff Commission
NTDC	National Transmission and Dispatch Company
NTP	National Tariff Policy
NTR	Non Tax Revenue

O

O/N Rate	Overnight Rate
OCAC	Oil Companies Advisory Council
OECD	Organization for Economic Cooperation and Development
OGRA	Oil and Gas Regulatory Authority
OMC	Oil Marketing Company
OMO	Open Market Operation
OPEC	Organization of Petroleum Exporting Countries
OPEC+	Organization of Petroleum Exporting Countries Plus

ORI	Oil Research Institute
OTC	Over-the-Counter
OTEXA	Office of Textile and Apparel (US Department of Commerce)
OZ	Ounce

P

PAMA	Pakistan Automotive Manufacturers Association
PB	Prize bond
PBS	Pakistan Bureau of Statistics
PDL	Petroleum Development Levy
PEDL	Public External Debt & Liabilities
PEOC	Pakistan Edible Oil Corporation
PFL	Pakistan Investment Bond Floating Rate
PFM	Public Financial Management
PHPL	Power Holding Private Limited
PIB	Pakistan Investment Bond
PKR/Rs.	Pakistan Rupee
POD	Pakistan Oilseed Department
PODB	Pakistan Oilseed Development Board
POL	Petroleum, Oil and Lubricants
POS	Point of Sales
PPA	Pakistan Poultry Association
PPP	Public-private partnership
PPRO	Plant Protection Release Order
PR	Policy Rate
PRA	Pest Risk Analysis
PRI	Pakistan Remittance Initiative
PSDP	Public Sector Development Program
PSE	Public Sector Enterprise
PSM	Pakistan Steel Mills
PSMA	Pakistan Sugar Mills Association
PTA	Pakistan Telecommunication Authority
PTCL	Pakistan Telecommunication Limited

Q

Q1	First Quarter
Q2	Second Quarter
Q3	Third Quarter
Q4	Fourth Quarter
QoQ	Quarter over Quarter

R

REER	Real Effective Exchange Rate
RIC	Regular Income Certificate
RNG	Renewable Natural Gas
ROA	Return on Assets
ROE	Return on Equity

	RPI	Relative Price Index
S		
	SAR	Saudi Arabian Riyal
	SBP	State Bank of Pakistan
	SCDA	Sindh Coastal Development Authority
	SDGs	Sustainable Development Goals
	SDR	Special Drawing Rights
	SIM	Subscriber Identity Module
	SNGPL	Sui Northern Gas Pipeline Limited
	SOPs	Standard Operating Procedures
	SPS	The Agreement on the Application of Sanitary and Phytosanitary Measures
	SPDC	Social Policy and Development Centre
	SRO	Statutory Regulatory Order
	SSGC	Sui Southern Gas Pipeline Limited
	ST	Short-term
	ST	Sales Tax
	SUPARCO	Space and Upper Atmosphere Research Commission
T		
	T-bills	Treasury bills
	TCP	Trading Corporation of Pakistan
	TERF	Temporary Economic Refinance Facility
	TOP	Tomato, Onion and Potato
	TOC	Technical and Operational Coordination
	TT	Telegraphic Transfer
U		
	UAE	United Arab Emirates
	UN	United Nations
	UK	United Kingdom
	USA/US	United States of America
	USD/US$	US Dollar
	USDA	United States Department of Agriculture
V		
	VRR	Variable Rental Rate
W		
	WALR	Weighted Average Lending Rate
	WAONR	Weighted Average Overnight Rate
	WHO	World Health Organization
	WHT	Withholding tax
	WTO	World Trade Organization
Y		
	YoY	Year on Year